





SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(Deemed to be University)



















Revered Founder Chancellor's Message

Dear students!

Be like The star which never wavers from the crescent but is fixed in sleady faith. When the sun is over your head There will be no shadow; so loo when faith is sleady in your heart; it should not cast any

shadow of doubt.

Do not take ill of others; take only of the good in Them; all are good; if you see bad in Them, it is because There is bad in you; if you do not like some one, do not mix with him. Brace is the sun light which will ripen The fruit; sadhana is The sap which rises from earth Both are needed by the tree in order that it may yield fruit. Will Blessings

Buk.





VICE-CHANCELLOR'S INTRODUCTION

Prof. J Shashidhara Prasad

It is heartening to mention with confidence and sincerity how our beloved Swami, the Divine Founder Chancellor has been guiding the destiny of this University, which is reflected by the great strides made over the years and the impact across the globe. We, in the administration firmly believe that we are mere instruments of the all-pervading universal consciousness – Bhagawan Baba.

It is envisaged that the optimum student strength of all the campuses put together should be around 2000 with the faculty strength as prescribed by the University Grants Commission. The student strength has increased by 4% and the staff strength by 13% over the last academic year. The teacher-student ratio and the student to computer ratio are still by far the highest in the country. As per the vision of our Revered Founder Chancellor, to strengthen the research activities, the number of research scholars/fellows has increased by 30%. New programmes viz., M.Tech. in Analytical Methods and Chemical Instrumentation and Master of Financial Management have been introduced.

A good number of workshops have been conducted at the University over the last academic year. These workshops bring together a large number of invited experts and eminent academicians, who, along with visiting faculty from academia and industry, have helped in the enhancement of knowledge and skills of our faculty and inspired the students.

Research has been initiated in interdisciplinary thrust areas involving the Sri Sathya Sai Institute of Higher Medical Sciences by creating a state-of-the-art laboratory for cell culture work at the Hospital. The result of this research is expected to have a great impact in the treatment of diseases of the joints. It is also envisaged that the skills so developed will help in the pursuit of research activities in regenerative medicine. The university has established a collaboration with the Food & Drug Administration (FDA), USA – a prestigious Institution of the US Government – for Nano technology based early diagnosis kits for life-threatening diseases such as Tuberculosis, HIV, Dengue, etc. A number of research grants from funding agencies have been sanctioned to individual faculty members and Departments.

A good number of faculty members have been deputed to participate and present papers in conferences in India and abroad, including talks on Bhagawan and His message.

New infrastructure has been created at the Prasanthi Nilayam and Anantapur campuses. The activities that were initiated by our Beloved Bhagawan have been continued as per the academic calendar, both in letter and spirit. I am sure the University will soar to greater heights worthy of its name, with the Love and Blessings of our Beloved Swami.

Let us pray to Him for His blessings on all of us, to enable us to carry forward His vision and mission.

PROF. J SHASHIDHARA PRASAD

Thathidhan frasad



	CONTENTS	
	Introduction Distinctive Features Educare - The Holistic Foundation of SSSIHL A Sai Student Sri Sathya Sai values-based Integral Education	10 10 12 13 14
	YEAR IN REVIEW Highlights of the year 2012/2013	18
	ACADEMICS Admissions Policy Courses for Admissions Faculties & Departments Research Thrust Facilities Organizational Chart	64 64 66 67 67 71
	ACADEMIC DEPARTMENTS Department of Mathematics & Computer Science Department of Physics Department of Chemistry Department of Biosciences Department of Home Science Department of Management Studies Department of Commerce Department of Economics Department of Education Department of English Language & Literature Sub-Departments and Other Languages Political Science, History & Indian Culture, Philosophy, Telugu Language & Literature, Hindi, Sanskrit, Kannada	72 88 110 124 136 146 162 172 182 188 194
3	APPENDICES A: University Structure B: Science Colloquium 2012/13 C: 32 nd Annual Convocation Speeches D: Gold Medallists & Ph.D. Candidates E: Residential Teachers at SSSIHL Hostels	204 208 210 219 221
	1000 A 200 医300	

1 OVERVIEW



"Education must broaden the heart; it must expand one's love. Fortitude and equanimity belong to the Reality in man. One must reveal this fact in every act."









OVERVIEW

INTRODUCTION

Sri Sathya Sai Institute of Higher Learning (SSSIHL), with its headquarters in Prasanthi Nilayam (Andhra Pradesh) in India, is a visible manifestation of Bhagawan Sri Sathya Sai Baba's vision of education for human transformation. The Institute was recognised as a Deemed to be University by the Government of India in 1981. The National Assessment and Accreditation Council (NAAC) ranks SSSIHL amongst the top ten Universities in India (see page 18).

The University hosts over 1200 students across four campuses:

For Women students:

• Anantapur Campus at Anantapur, Andhra Pradesh

For Men students:

- Prasanthi Nilayam Campus, at Puttaparthi, Andhra Pradesh
- Brindavan Campus, at Whitefield, Bangalore, Karnataka
- Muddenahalli Campus at Muddenahalli, near Chickballabur, Karnataka

Distinctive Features

The key **distinctive features** of the University are:

ADMISSIONS

- Free education for all students
- Merit based open admissions policy for all irrespective of income, religion or region

"Blessed indeed are the students who have had the privilege of going through an education programme which combines deep appreciation of the method of modern science and technology and the ancient Indian knowledge and wisdom accumulated over the centuries. This type of education can be a powerful means of self-perfection and social redemption."



RESIDENTIAL CHARACTER

- Compulsory residential character enabling translation of lessons learnt into practical skills through experiential learning
- Spiritual ambience in an environment of discipline and love
- Teaching faculty, research scholars and students residing in the hostel
- Cultivation of the spirit of self-reliance, brotherhood and sacrifice through mentoring and personal example

ACADEMICS

- Curriculum rooted in Indian culture and universal brotherhood
- Awareness Programmes and Moral Classes reinforcing human values
- Integrated five-year programmes combining Undergraduate and Postgraduate studies for a systematic and graduated learning process
- Professional programmes in Management, Technology and Education
- Research with social relevance
- Favourable teacher-student ratio

INFRASTRUCTURE

- Campuses set amidst peaceful surroundings
- Spacious, elegant and aesthetically designed buildings
- Well equipped, modern science laboratories and Instrumentation centres
- Libraries across campuses with over 1,60,000 volumes
- Computer centres with ultra-high speed broadband internet connectivity
- Well-equipped Multimedia learning centres
- International Centre for Sports and a Cricket stadium

INTEGRAL EDUCATION

- Life lessons learnt through the inspiration and message of the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba
- Application of what is learned in daily life
- Integrating human values with secular knowledge
- Equal emphasis on curricular and co-curricular activities
- Inculcating the spirit of self-reliance and service to society
- Synthesis of science and spirituality for societal benefit

Educare - The Holistic Foundation of SSSIHL

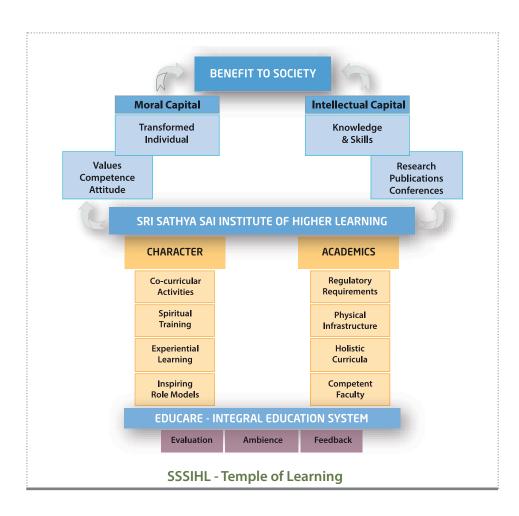
The Revered Founder Chancellor says, "The term education is derived from the Latin term 'Educare', which means 'drawing out'. The idea is to draw out what is already latent. Acquisition of knowledge is a worldly aspect. But what has to be discerned is the divine feeling present in the human heart...

...Secular knowledge is no doubt necessary, but its acquisition must have a fundamental (spiritual) basis. The latent powers in each student have to be brought out."

Right from its inception, the Sri Sathya Sai Institute of Higher Learning has integrated ethics and values as the undercurrent of every subject taught at the University. Combined with academic excellence, the University provides a holistic framework of inter-personal development for its students. Its compulsory residential character trains the mind, body and spirit of the student in an environment similar to the ancient Indian 'gurukula' system of education, in the most modern context.

The University strives at every level to blend the Academic (Secular) aspects of learning with that of Character Building (Spiritual), as depicted in the 'Temple of Learning' diagram. This helps students develop a wholesome and balanced personality, one where academic competence is supplemented with good character.

Students – both women and men – typically spend between two to five years pursuing an education at SSSIHL. Upon graduation, they are well-qualified to find suitable employment related to their academic backgrounds. However, what differentiates them from graduates of other universities is not just the training of their minds, but also the transformation of their hearts.



A Sai Student

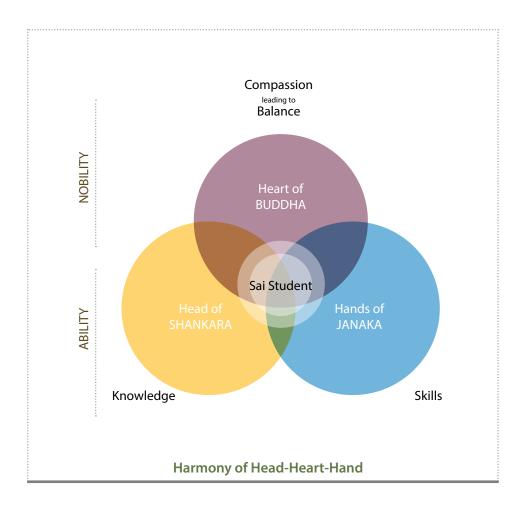
In the words of the former Director General of CSIR-India, Dr. R A Mashelkar, the University strives to develop students with "innovation in the head, compassion in the heart and passion in the belly."

The objective is to achieve a balance between the head, heart and hands along with an ideal blend of ability and nobility.

The Revered Founder Chancellor observes, "Knowledge when skilled, leads to balance, which in turn provides insights about the application of knowledge for the benefit of society."

He therefore desired that students graduating from this University attain:

- the "Head of Shankara" that symbolizes knowledge leading to wisdom
- the "Hands of Janaka" that symbolizes knowledge translated to skills for societal benefit
- the "Heart of Buddha" that symbolizes compassion to balance the head with the hands



OVERVIEW

Sri Sathya Sai values-based Integral Education

"In this University the medium of instruction is discipline. The first, second and third languages are love, service and sadhana (spiritual discipline) ...

...Do you know why you have such a tight schedule in the hostel? This schedule is not structured by the Trust. Swami has personally structured this schedule. I have ordered the syllabus to be tight. Why is it so? The minds of today's children, if given time, will turn into a devil's workshop. When the daily routine is tight, your mind cannot wander here and there."

Bhagawan Sri Sathya Sai Baba Revered Founder Chancellor

Sri Sathya Sai Institute of Higher Learning is a Modern *Gurukula*, a place where teachers and students live and grow together in love and wisdom. The teacher-student interaction occurs in the backdrop of the process of Integral Education that includes the five dimensions of: Intellectual, Cultural, Physical, Service and Devotional.

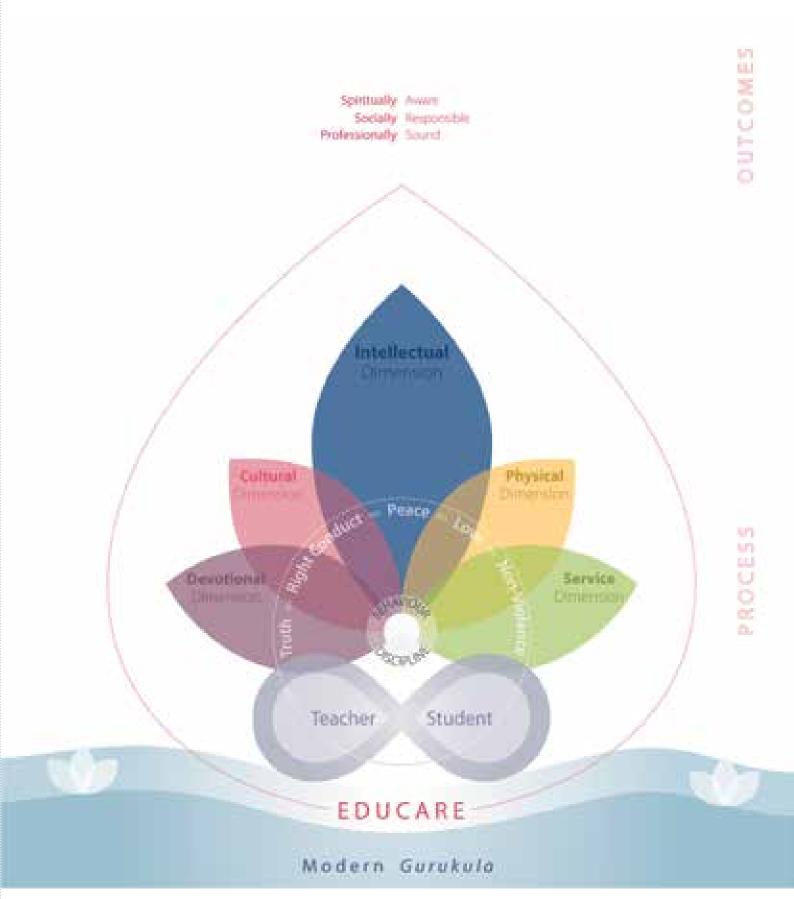
Adherance to discipline and appropriate behaviour are two important aspects that encompass these interactions. The five human values of Truth, Right Conduct, Peace, Love and Non-violence form the undercurrent of all the dimensions of integral education.

The inputs on all these dimensions along with the unique ambience of the Modern *Gurukula* brings to the fore the human values latent in the students and teachers. Following this way of life on a day-to-day basis for two to five years transforms the student into a wholesome personality: professionally sound, socially responsible and spiritually aware.

Activities within the Integral Education Dimensions

The following activities within the five dimensions is representative of the major activities that students participate in, during their time at SSSIHL.

Devotional Dimension	Cultural Dimension	Intellectual Dimension	Physical Dimension	Service Dimension
Bhajans (Sankeertan) Vedic chants Stotrams Meditation & Silent sitting Suprabhatam (Prayer at dawn) Assembly (College prayer) Brahmarpanam (Food prayer) Kshama prarthana (Prayer before sleep)	Celebration of festivals Brass Band Nadaswaram ensemble Panchavadyam ensemble Annual Sports & Cultural Meet Performing Arts: Music programmes Drama Dance Fine Arts: Rangoli Card making Photography Altar making Public Speaking Debates Elocution	Academic studies Research Workshops & conferences Colloquiums Symposiums Talks and discussions during Assembly Awareness class Moral class Study circles Annual Summer Course in Indian Culture and Spirituality	Sports Games Jogging Exercises Yogasanas Annual Sports & Cultural Meet	Self-Reliance departments: Electricals Plumbing Audio-visual General store Dispensary Dietary services Hostel Mess Arts & Crafts Costumes & props Community living Social Work Voluntary work Grama Seva (Annual village service) Prasadam distribution



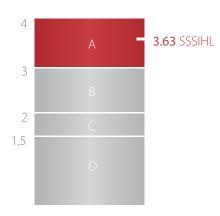
2 THE YEAR IN REVIEW



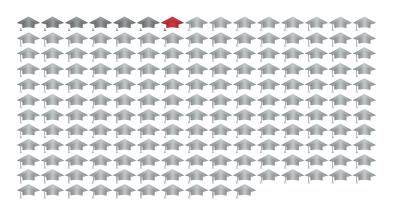
``Why are Sri Sathya Institute of Higher Learning and other educational Institutions''established? By offering worldly education, students are made to come here and they are given, along with worldly education, a wholesome spiritual education." Bhagawan Sri Sathya Sai Baba Revered Founder Chancellor

ACCREDITATION

'A' Grade Re-accreditation by NAAC (National Assessment and Accreditation Council)

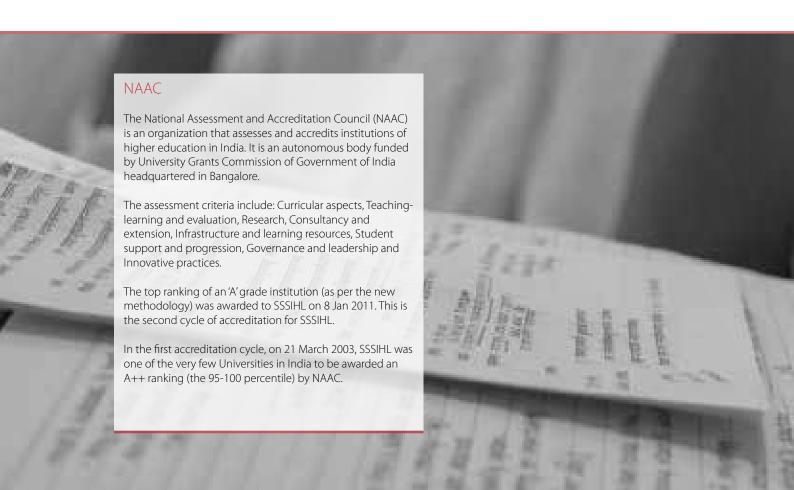


CGPA
Cumulative Grade Point Average



SSSIHL is among the top 4% of 175 Universities accreditated by the National Assessment and Accreditation Council (NAAC) under the new methodology.

Source: NAAC.gov.in, 8 July 2013



16-30 April 2012: Admissions

ADMISSIONS

Applications vs. Admissions



UNDERGRADUATE APPLICATIONS 2012/13

POSTGRADUATE APPLICATIONS 2012/13

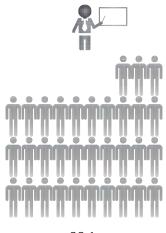


2012

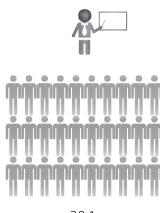
May

Jul

STUDENT - TEACHER RATIO



33:1 National Average



30:1 'A' Grade Institutions*



8:1 SSSIHL

The above reflects full-time faculty.

ANNUAL FACULTY WORKSHOP

28-29 May 2012

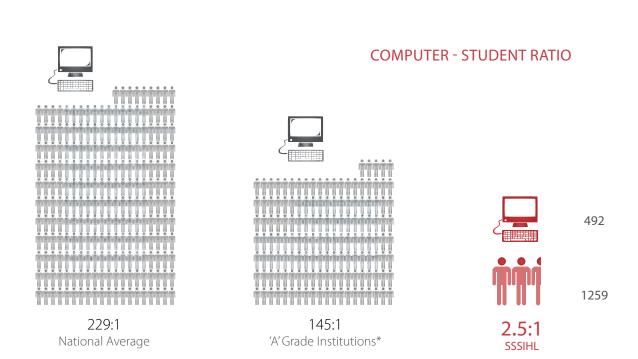
Prior to the start of each Academic year, all academic staff and doctoral research scholars of the University come together for a two-day immersive workshop. The workshop encourages everyone to participate and share ideas, experiences and best practices with respect to the process of character building, which is the cornerstone of the distinctive Integral Education Model of the University.

The core objectives of the workshop are to deliberate on the domains of the Integral System of education of the University, its components, its critical success factors, the role of teachers and the like, as envisioned by the Founder Chancellor, Bhagawan Sri Sathya Sai Baba.

This year, the key sessions included the defining of the Core Purpose of the University, the Founder Chancellor's guidance for teachers and scholars, exercises in recognizing best practices and achievements (appreciative enquiry) and exploring the art and science of mentoring.



^{*}Source: UGC Report on Strategies and Schemes during the Eleventh Plan period (2007-2012) for Universities and Colleges, Jan 2011.



*Source: UGC Report on Strategies and Schemes during the Eleventh Plan period (2007-2012) for Universities and Colleges, Jan 2011.



2012 Mar

Jun

Jul)....

Aug

Sep

Oct)

1 June: Summer Semester begins



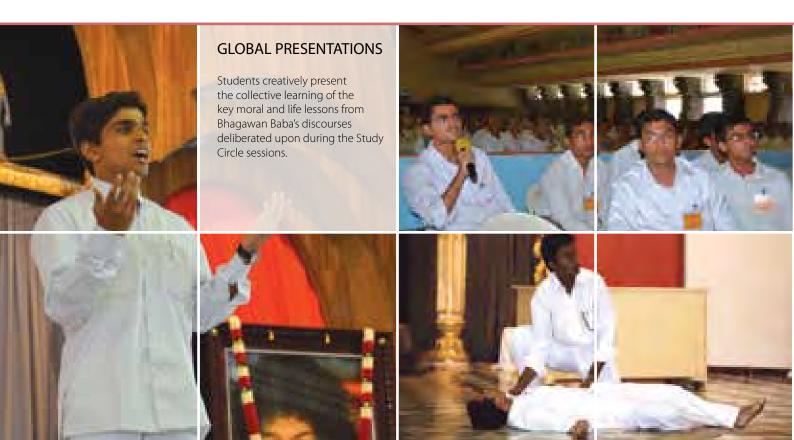
8-10 June: Summer Course in Indian Culture & Spirituality







8-10 Jun Summer Course In Indian Culture & Spirituality

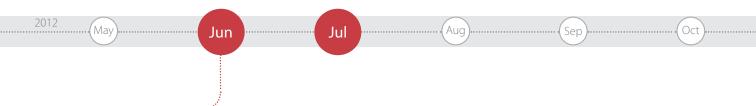






In addition to the University-wide Summer Course in Indian Culture & Spirituality, the Brindavan Campus held a five-day Summer course for men youth from the state of Karnataka, 16-20 April 2012, and the Anantapur Campus conducted a three-day event for women youth from the state of Andhra Pradesh, 15-17 November 2012.

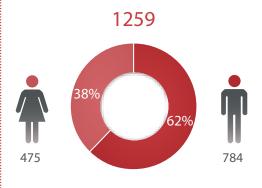




STUDENT STRENGTH 2012/13

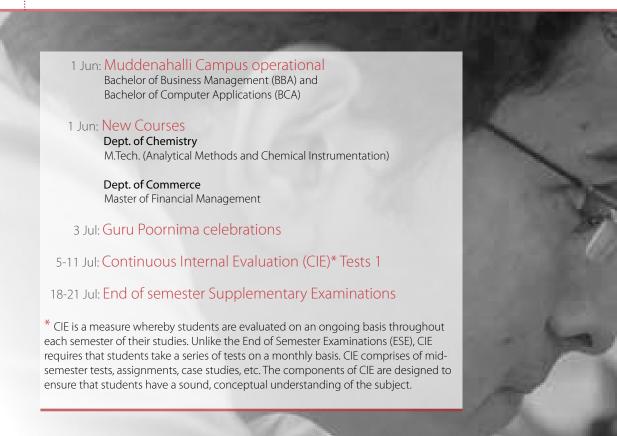
Total Strength

By Programme



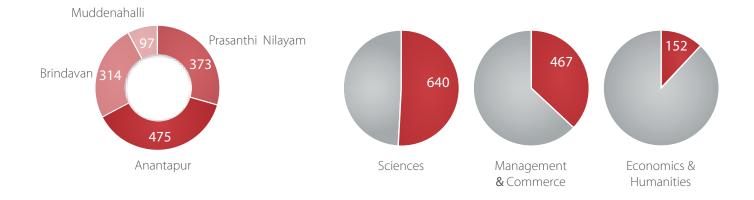
Year-on-year increase by 4% from 1208 to 1259

Professional
Research











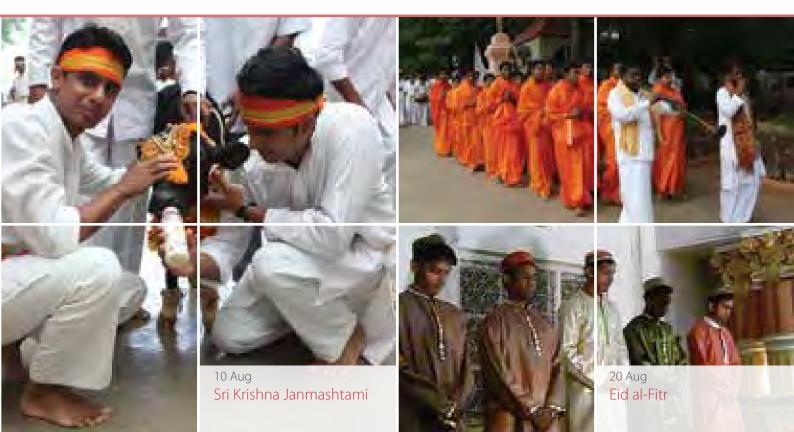




6-13 Aug: Continuous Internal Evaluation (CIE) Tests 2

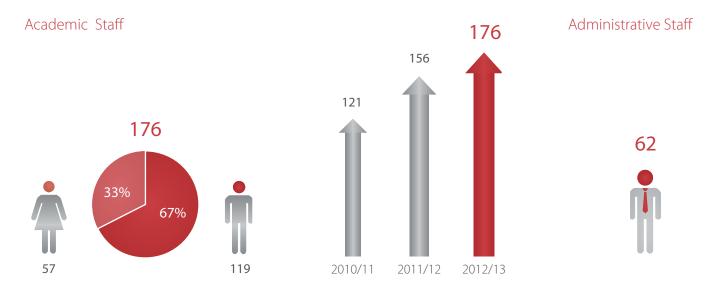








STAFF STRENGTH 2012/13



176 Academic Staff includes: 160 Teaching Faculty & 16 Computer Center, Multimedia Center & Library staff





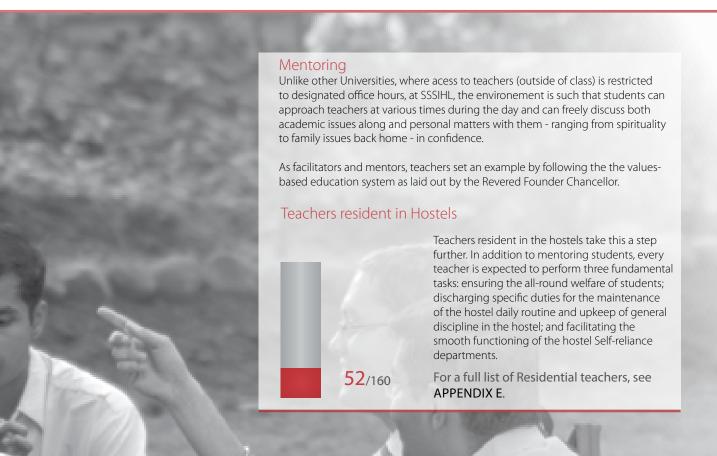
Teaching Faculty Designations

Teachers with Doctoral Degrees





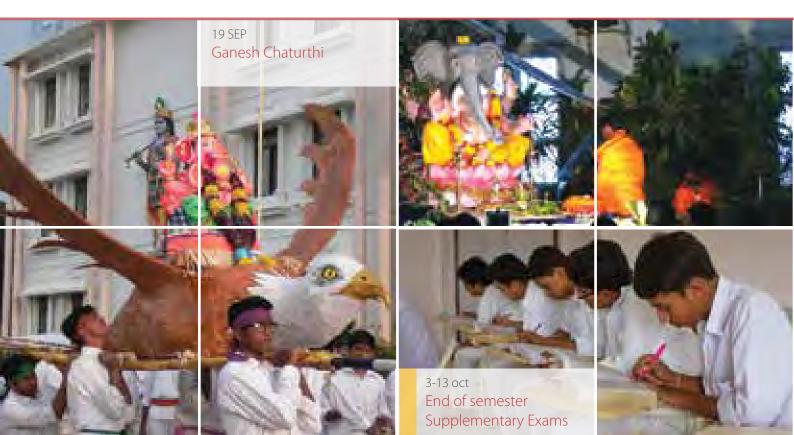
* Additionally, 28 faculty members are currently pursuing their Ph.D.







1-7 Aug: Continuous Internal Evaluation (CIE) Tests 3
19 Sep: Launch of the re-designed university website: **sssihl.edu.in**





2 Oct: Gandhi Jayanthi

Mid-Oct: Online Question Paper Scrutiny Board (QPSB) becomes operational

10 Oct: Open Day at the University

Graduating Students of the Sri Sathya Sai Higher Secondary School visit the University to learn about the academic and research opportunities available to them



RESEARCH PUBLICATIONS

Journal Papers Conference Papers Books / Chapters

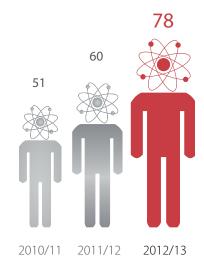
127 119 22 2012/13

111 128 26 2011/12 75 76 12 2010/11





Doctoral Research Scholars



National Average of Research Scholars in Higher Education is **0.7%** per Institution Source: UGC Report, 2011

SSSIHL is 6%



DAE, DRDO, etc.

Socially relevant Research

Who is a Ph.D.? A Ph.D. is one who helps others through his research and develops the country. This is the true objective of doing a Ph.D.

Bhagawan Sri Sathya Sai Baba, Revered Founder Chancellor

The Revered Founder Chancellor constantly emphasises that bookish knowledge must be converted into practical knowledge. The University has always endeavoured to implement this idea..

Multi-disciplinary Research

SSSIHL is investing in Interdisciplinary Translational research to further the research quality of the university. As part of this vision, the Sri Sathya Sai Centre for Advanced Studies - an innovative research center to explore and promote the convergence of basic and translational research in environment, health and energy - is scheduled to be operational by 2015.

This vision for the future is well supported by the Multi-disciplinary Projects that are on-going in the Departments of Biosciences, Chemistry, Physics, Mathematics and Computer Sciences, and those being carried out in collaboration with our sister institution Sri Satya Sai Institute of Higher Medical Sciences (SSSIHMS), besides other world-renowned institutions (see Page 53).

(Jun)-----

(Jul).....

(Aug)-----

Sep

Oct

GRAMA SEVA 2012 FACT FILE

- 3,00,000 People served
- 2,91,200
 Food packets distributed
- 46,260 Sarees distributed
- 42,305Dhotis distributed
- 1259 Students involved
- 450 Sevadals (volunteers) involved
- 160 Teachers involved
- 153Villages served
- 52 Vehicles & Drivers involved

ALL STAFF & STUDENTS
PARTICIPATE IN THE
GRAMA SEVA
FOR ALL 9 DAYS



...... 16-24 Oct: Grama Seva / Village Service







16-24 Oct: Grama Seva
Planning & Co-ordination | Food Preparation | Food & Clothes Packing |
Communications | Loading | Vehicles Maintenance | Distribution | Serving





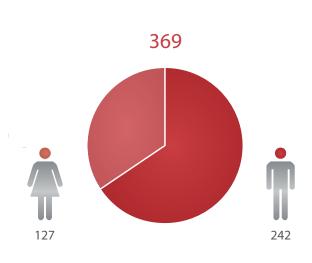
18-24 Oct: Prasanthi Vidwan Mahasabha & Dasara Celebrations 24 Oct: Summer Semester ends 25 Oct - 8 Nov: Winter Vacation





(Jun)------(Jul)-----

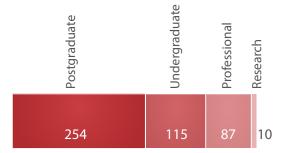
GRADUATES 2012/13



Ph.D.s awarded to 3 Graduates

For a complete list of all Ph.D. awardees and Gold Medallists, see APPENDIX D

Graduates by Programme



Gold Medallists







VISITING FACULTY

97

























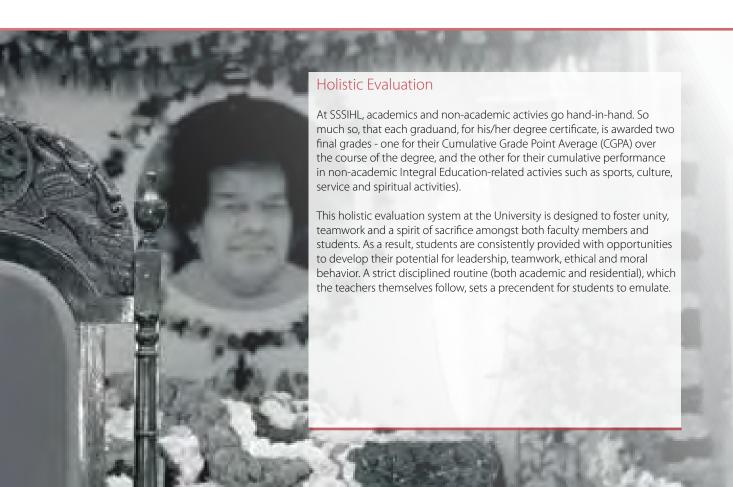








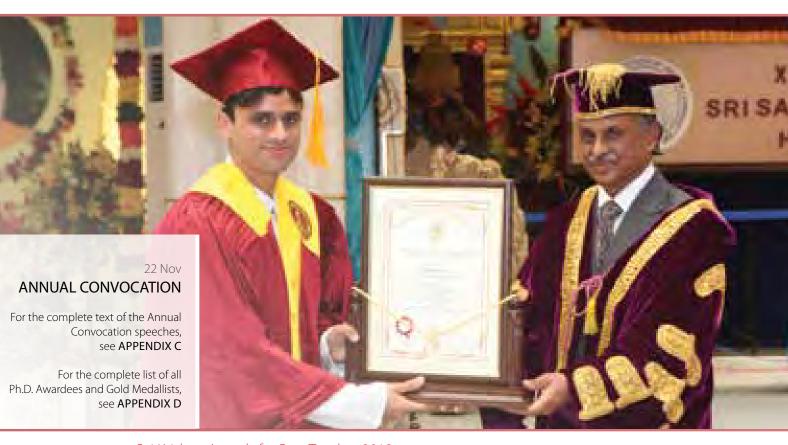
The above is a partial list of the Institutions / Corporate Organizations from where eminent academicians and senior corporate executives visit SSSIHL.



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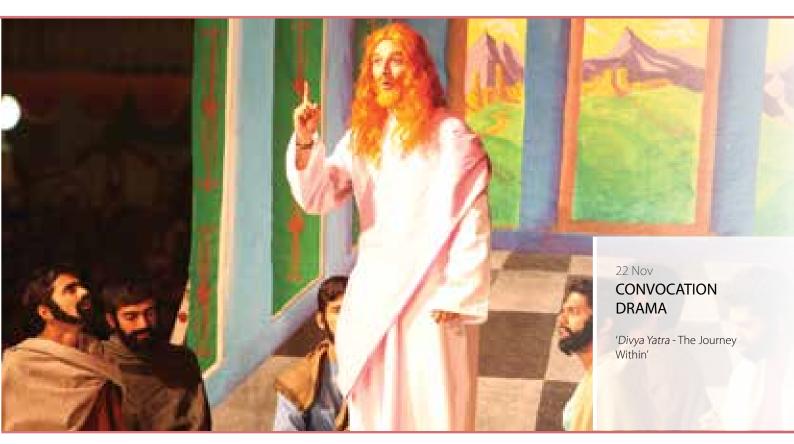


Sai Krishna Awards for Best Teacher 2012

For excellence in teaching and contributions to the Sri Sathya Sai System of Integral Education

Anantapur Campus: Miss U Suma, Asst. Professor, Dept. of Commerce Prasanthi Nilayam Campus: **Dr. Gowrishankar R**, Asst. Professor, Dept. of Physics Brindavan Campus: Sri Ruchir Desai, Associate Professor, Dept. of Commerce





Best All-round Student Awards 2012

For outstanding performance in all dimensions of the Sri Sathya Sai System of Integral Education

Prasanthi Nilayam Campus: **Sri Aditya Prakash**, Il M.Tech. (Computer Science)

Anantapur Campus: Kum Lalitha V, II M.Sc. (Biosciences) Brindavan Campus: **Sri Arjun N**, III B.Com. (Hons.)



Dept. of Physics (1 of 10 University

Departments to be supported in the next five years)

2012 (May) (Aug) (Aug)

RESEARCH FUND for Gamma Camera Board of Research in Nuclear Science sanctioned 770 Lakhs to revive & optimize the performance of a Gamma Camera for medical diagnosis FIST Funding for Infrastructure in Science & Technology

9 Nov: Winter Semester begins 10-11 Nov: Global Akhanda Bhajans



Dec

2013 (Feb) (Mar)



25 Nov: Muharram 6-12 Dec: Continuous Internal Evaluation (CIE) Tests 1



2012 (May) (Sep) (Oct





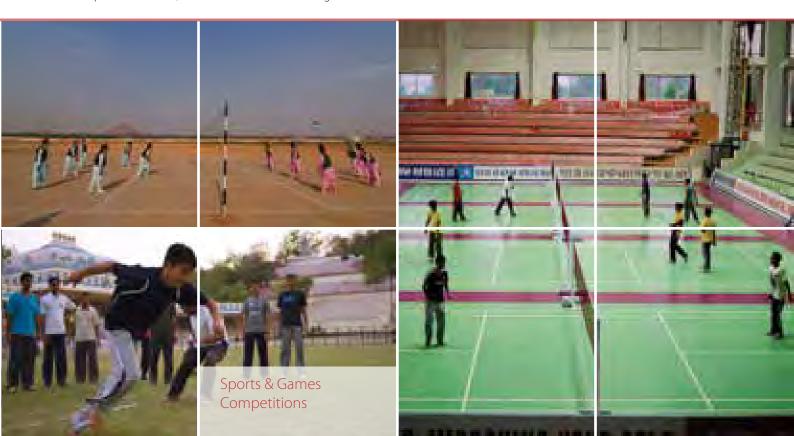
Jan



SSSIHL & FDA (USA) Collaboration

Investigation of Nano technology-based diagnosis for TB, HIV, Influenza and other life-threatening diseases

- Visit of Dr. Indira Hewlett & her associates (FDA, USA) 18-24 Sept 2012
- $Dr.\ B\ E\ Pradeep,\ Asst.\ Professor,\ Dept.\ of\ Biosciences\ and\ Sri\ L\ A\ Avinash\ Chunduri,\ Doctoral\ Research\ Scholar,$ Dept. of Biosciences, visited the FDA labs for training.



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Aug

Sep

Oct)

SPORTS & CULTURAL MEET 2013

Campus Presentations

• Prasanthi Nilayam

Sports

Bungee ropes, trampoline basketball, Silent Drills, Colours of Life (medley of dance & music)

Cultural

Drama on the life of Sri Adi Shankara

Anantapur

Sports

Rhythmic Gymnastics, Structure, Aerial ropes, balancing events, Lightsaber show, Grand Finale

Cultural

Musical Programme

Brindavan

Sports

Dhollu Kunitha (dance), Aplomb (synchronised marching), *Djembe* drums, Motorcycle display

Cultural

Drama on the life of Chaitanya Mahaprabhu

Muddenahalli

Sports

Sambhavaami Yuge Yuge, a thematic presentation on the Avatars of God (formations depicting the advent of the ten Avatars of God)

Jan

11-15 JAN: ANNUAL SPORTS & CULTURAL MEET

We, the children of Sai, swear that, we shall take part in the Annual Sports & Games of Sri Sathya Sai Institutions, in fair competition; respecting and abiding by the rules which govern them and with a desire to participate in the true spirit of sportsmanship, for the honour of our country, the glory of sport and our beloved Mother Sai.

Sports Meet Oath, Sri Sathya Sai Educational Institutions

The preparations begin a month in advance of the grand display at the Sri Sathya Sai Hill View Stadium on 11 January every year. The performance routines are perfected, the skills are honed, the band and march past practice attains perfection, the props are made from scratch, and final touches to each presentation are made.

This culmination of the enormous effort by students, their coaches and teachers is not in their personal glory, but in the deep sense of satisfaction that they make the Revered Founder Chancellor happy and proud.

The grand display of physical items on 11 January is followed by cultural programmes in Sai Kulwant Hall. Each campus of the University performs a drama or musical presentation.

This four-day Sports & Cultural Meet culminates with the Prize Distribution ceremony for sports and cultural events, accompanied by the University Brass Band, Vedic chanting, speeces and the Divine message of the Revered Founder Chancellor.



2012 (May) (Sep) (Oct)

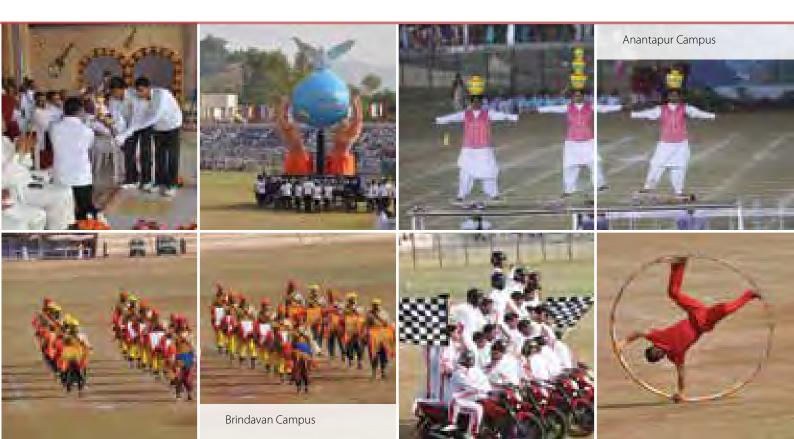




Jan



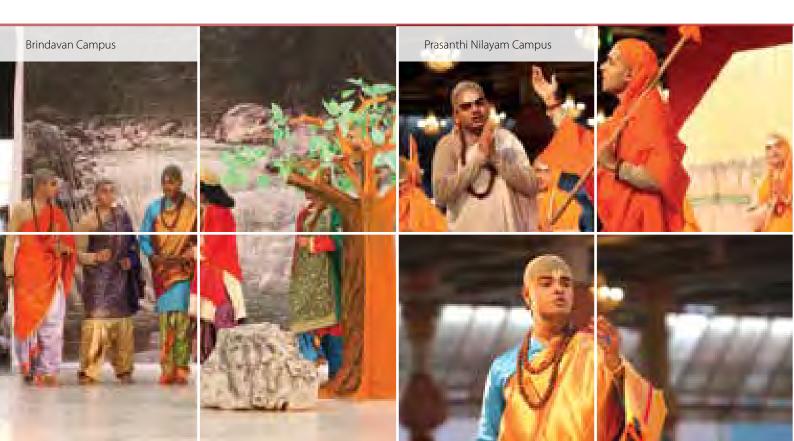








12-13 Jan: Cultural Programmes







14 Jan: Annual Sports Valedictory Function







14-20 Feb: Continuous Internal Evaluation (CIE) Tests 2 24 Feb: Prasanthi Dance Group performance





23 Mar: Department of **MANAGEMENT STUDIES:**

WORKSHOP on Ideal Values Centered Leadership – Man Management

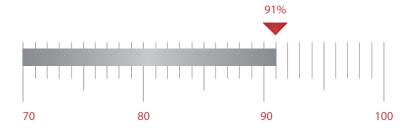
8-15 Mar: Continuous Internal Evaluation (CIE) Tests 3

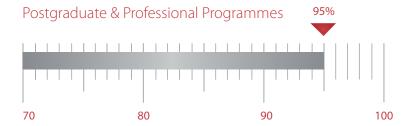




EXAMINATIONS PASS PERCENTAGE

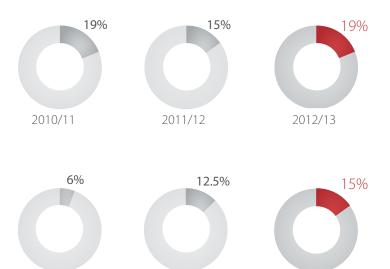
Undergraduate Programmes







EXAMINATIONS PERFORMANCE IN NATIONAL EXAMS



This data pertains to final year Postgraduate students who are eligible

2010/11

GATE/JEST

GATE: Graduate Aptitude Test in Engineering JEST: Joint Entrance Screening

CSIR-UGC/NET

CSIR: Council of Scientific & Industrial Research) UGC: University Grants Commission

NET: National Eligibility Test

to write the above exams.

2011/12

Examinations System

The Sri Sathya Sai Institute of Higher Learning follows the semester system of education for all its programmes - Undergraduate, Postgraduate & Professional. The examination system is designed to help in the learning process of the students by providing timely feedback to the students and the teachers regarding actual performance against set expectations. This constitutes the continuous internal evaluation (CIE) which spreads across the entire semester and the End of semester Examination (ESE) which is conducted at the conclusion of a semester. The Institute has adopted an Absolute Grading System with a ten-point scale.

Continuous Internal Evaluation (CIE)

2012/13

CIE is a measure whereby students are evaluated on an ongoing basis throughout each semester of their studies. Unlike the End of Semester Examinations (ESE), CIE requires that students take a series of tests on a monthly basis. CIE comprises of mid-semester/monthly tests, assignments, case studies, etc. The components of CIE are designed by the faculty to ensure that students have a sound and conceptual understanding of the subject.



Chondrocyte Cell Culture Lab:

The 1st cartilage tissue was extracted from a patient on 15 Nov 2012

The Lab will help studies that will explore the possibilities treating knee cartilage defects. It will aid the quality of health of patients by avoiding joint replacement surgeries and the symptoms and costs associated with it.





Department of PHYSICS

2-18 Apr XLVII REFRESHER COURSE in Experimental Physics by the Science Academies

Department of **PHYSICS**

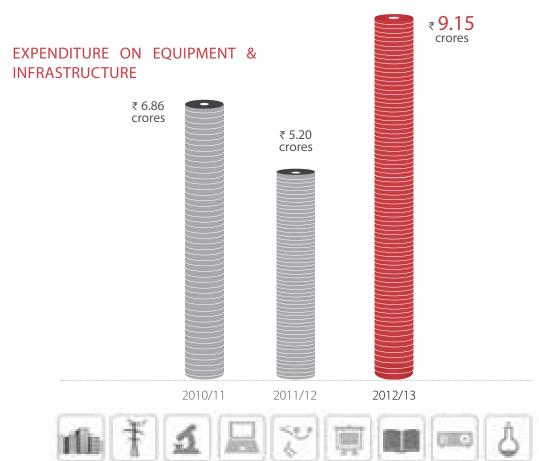
15-16 Mar NATIONAL CONFERENCE on Networking and Communication

29 Mar: Good Friday

15 Apr: Winter Semester ends 20 Apr: Sri Ramanavami

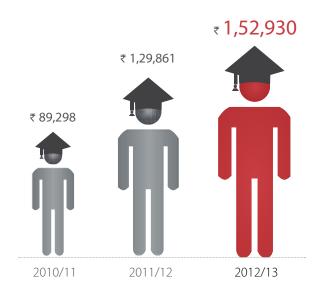


2012 (May) (Sep) (Oct)





EXPENDITURE PER STUDENT PER YEAR



COST TO STUDENT



SRI SATHYA SAI PHILOSOPHY OF **FREE EDUCATION**

As a matter of philosophy, the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba insisted on providing education totally free to all students. Indeed this was the practice in ancient Bharath, where Vidya (knowledge) and Vaidya (health) were never treated as commodities for sale but were regarded as most sacred gifts to be offered free to all mankind.

Bhagawan Baba says, "Educational institutions, which are supposed to be Saraswati Mandirs (centres of learning) have turned into Lakshmi Mandirs (centres of money). Provide free education to the children and they will be good. Education which is purchased can lead only to agitation."

Bhagawan Baba further says, "We must strive to revive the ancient system of free education. Today such a sacred approach to education is lacking among students, parents, teachers and the authorities. There must be a change in the moral climate of the educational system. Only then the educational institutions can turn out young men and women of character."

Thus, in addition to the sanctity and nobility of education and knowledge as institutions of transformation, another reason for providing education free is the sense of obligation and gratitude that it instills in the minds of students, inspiring them to willingly and voluntarily follow the discipline and adhere to values that should truly form the undercurrent of an ideal education system.

Highlighting the success of such a model, many years later, Bhagawan declared, "In the Sai Educational System, there are no problems of student unrest because education is free. Our students are happy. All of us are also happy. Because of free education, the students' behaviour is exemplary. All students feel spontaneously: 'Here we are getting free education. We must conduct ourselves well to show our gratitude to all concerned.' Opportunities must be provided for students to develop such an attitude towards their alma mater."

Above all, the Sri Sathya Sai Institute of Higher Learning (Deemed to be University) is a visible manifestation of the Divine love of Bhagawan Baba for humanity at large and students in particularly. In a talk to students Bhagawan Baba said, "Who is giving free to whom? You are all Mine, and I am yours. I give my children what I want to give; is it proper to describe this as a free offering? You must appreciate this bond of unity between Swami and yourself – I and you are one."









ADMISSIONS POLICY

Sri Sathya Sai Institute of Higher Learning (Deemed to be University) has a merit-based admissions policy open for all.

The University adopts the Government of India Policy for students from the Scheduled Castes (SCs), and the Scheduled Tribes (STs). This is applicable to all programmes – Undergraduate, Postgraduate, Professional and Research.

The admissions procedures are designed to provide an equal and fair chance for all suitable candidates to secure admission. Selected students are from various parts of India and this diversity contributes to a rich and stimulating learning environment that brings out the best in students and prepares them for the professional challenges after graduation.

As envisioned by the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba, education is provided free to all at Sri Sathya Sai Institute of Higher Learning.

The **medium of instruction** at Sri Sathya Sai Institute of Higher Learning for all courses is **English**.

COURSES FOR ADMISSIONS

SSSIHL offers several courses for admissions (Undergraduate, Postgraduate, and Professional programmes) for applicants.

At the Postgraduate level, only a limited number of courses are open for direct admissions. The remaining postgraduate courses are integrated programmes whereby students graduating in certain undergraduate programmes automatically qualify for Masters programmes, provided they get the required Cumulative Grade Point Average (CGPA) at the Undergraduate level.





The following is a full list of degree Programmes for admissions to SSSIHL for the Academic Year 2012/13:

Programmes for Women

Undergraduate Programmes (Duration: 3 years)

Bachelor of Arts

Bachelor of Commerce (Hons.)

Bachelor of Business Management

Bachelor of Science in Home Science

Bachelor of Science (Hons.) in Mathematics / Physics / Chemistry

Bachelor of Science (Hons.) in Biosciences (leading to a Master of Science in Biosciences)

Postgraduate Programmes (Duration: 2 years)

Master of Arts in English Language & Literature

Master of Science in Food Science and Nutrition

Master of Science in Food Technology

Professional Programmes (Duration: 1 year)

Bachelor of Education (B.Ed.)

Master of Education (M.Ed.)

Programmes for Men

Undergraduate Programmes (Duration: 3 years)

Bachelor of Arts

Bachelor of Arts (Hons.) in Economics

Bachelor of Commerce (Hons.) leading to Master of Financial Management

Bachelor of Business Management

Bachelor of Computer Applications

Bachelor of Science (Hons.) in Economics

Bachelor of Science (Hons.) in Mathematics / Physics / Chemistry / Biosciences (leading to Postgraduate Programmes in respective subjects)

Postgraduate Programmes (Duration: 2 years)

Master of Arts in Economics

Master of Science in Nanoscience and Nanotechnology

Professional Programmes (Duration: 2 years)

MBA

MBA (Finance)

Master of Technology in Computer Science

Master of Technology in Applied Optics

Master of Technology in Analytical Methods and Chemical Instrumentation

Master of Technology in Nuclear Medicine

The University has a twin modular research programme. Students can enrol for a Master of Philosophy (**M.Phil.**), leading to a Doctoral Research (**Ph.D.**) programme. Students who have qualified in the UGC-CSIR JRF examination, are eligible to directly join the Doctoral Research (**Ph.D.**) programme.

FACULTIES & DEPARTMENTS

There are **three academic Faculties** and **ten Departments** at the Sri Sathya Sai Institute of Higher Learning. Each Faculty has a full-time Dean and all departments have a full-time Head.

All views and recommendations of the respective Departments are forwarded by the Department Heads and Faculty Deans to the Directors of the Campuses, and these in turn are sent to the Vice-Chancellor for review and necessary action. Directions on administrative policies are issued by the Board of Management. The Boards of Studies take note of the proposals from the concerned departments for introduction of new courses, revision of syllabi and other such matters, and forward their recommendations to the Academic Council for consideration and approval. In this manner, there are rigorous quality checks and control over all academic matters.

In line with the University's philosophy of Integral Education, each academic department of SSSIHL ensures that the curriculum is embedded with measures to induce the all-round development of students' personalities. To take an example, the research thrust of the University is conceptualised with societal benefit in mind, and all research projects, regardless of department or subject area, incorporate this. This re-orients the focus of both the faculty and the students of that department towards the achievement of both academic excellence and social relevance.

The pages in this section give an overview of each Department of SSSIHL, including a list of courses offered, teaching and visiting faculty, thrust areas of teaching and research, facilities, workshops & conferences organized, projects and dissertations completed (during the last academic year) and special achievements.

Integrated five-year Programmes

The University, since its inception, has provided for integrated five-year programmes combining undergraduate and postgraduate studies for a systematic coverage and graduated learning process. Students receive their Bachelor's degree after three years, and those who choose to pursue their Masters degree are awarded one at the end of five years of study.

Such an integrated programme avoids duplication and redundancy of subjects covered and makes the learning process graduated and stimulating. It helps teachers to orient their teaching in a manner that inspires young students to get much more out of their chosen field of study than a conventional undergraduate programme.

RESEARCH THRUST

The Research being carried out at the University has seen a significant rise in the past few years. The number of doctoral research scholars has seen a 30% increase from sixty in 2012 to seventy-eight in 2013. The number of Doctoral Research Scholars represents over 6% of the current student population at SSSIHL, a figure far above the national average. New Research collaborations between the University and renowned institutions like the FDA (USA), and collaboration on multiple research projects with the Sri Sathya Sai Institute of Higher Medical Sciences are a testimony to rise in quality of research being undertaken by the University.

In line with the vision of the Revered Founder Chancellor, all research at the University ultimately leads to societal benefit. Thus, the topics for Doctoral Research across all departments are chosen with great diligence, leading to directed basic research or translational research.

Multi-disciplinary Research

Reiterating its commitment to bolster research facilities, the University is in the process of setting up a state-of-the-art the Sri Sathya Sai Centre for Advanced Studies - an innovative research center to explore and promote the convergence of basic and translational research in environment, health and energy. The Sri Sathya Sai Centre for Advanced Studies is scheduled to be operational by 2015.

In September 2012, experts from the Food & Drug Administration (FDA), USA visited the University and a subsequent partnership was established for the investigation of Nano technology-based diagnostics for TB, HIV/AIDS, Influenza and other life-threatening diseases.

The University is also partnering with its sister institutions - the Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS) - super-specialty hospitals that offer highest quality tertiary care free of cost to all. In 2012, a Chondrocyte Cell Culture Lab of the University was inaugurated at SSSIHMS, Prasanthigram. The research thrust at this facility will explore the possibilities of chondrocyte cell culture in treating knee cartilage defects. It will therefore aid the quality of health of patients by avoiding joint replacement surgeries and the symptoms and costs associated with it.

These research collaborations between the University and renowned institutions is paving the way for fostering an environment for high-end cutting edge research.

In order to foster this ambience for inter-disciplinary research, an Inter-disciplinary Science Colloquium has been initiated to provide an opportunity for Doctoral research Scholars and the Teaching Faculty across all departments to share their research experiences with fellow researchers. A variety of topics have been shared and discussed in these weekly Interdisciplinary Science Colloquiums. For a full list of all the Science Colloquium sessions for the Academic Year 2012/13, see Appendix B.

FACILITIES

The Institute, though having some of its campuses in a rural setup, houses advanced infrastructural facilities that contribute to both the academic and co-curricular domain of the students' personal development process.

Each Campus has well-equipped and immaculately maintained facilities that present a holistic environment, conducive for a high quality education and all-around student development.





Buildings and Grounds

All the campuses of the University have spacious, beautiful and artistically designed buildings which stand out for their simplicity and elegance. In order to facilitate effective teacher-student interaction, the classrooms are designed to handle optimal sizes of thirty students each. Supplementing these are the seminar halls and conference rooms with multi-media facilities. The sprawling lawns and well-maintained grounds give each campus its own character and feel.

Auditoriums

Three out of four campuses of SSSIHL have auditoriums that can accommodate about 900 people each. The auditoriums are used for daily prayers, Moral Class sessions on Thursdays, speeches and cultural events.

Labs and Computer Centres

The University has well-equipped laboratories in the fields of Physics, Chemistry, Biosciences, Nanosciences, Artificial Intelligence and Information Technology. The University has 1Gbps Internet connectivity under the aegis of the National Knowledge Network (NKN), for academic and research pursuits of staff and students. All the campuses of the University are interconnected via 2Mbps leased lines. SSSIHL is also one of the few Universities in the country to have English Language Labs.

The modern Computer Centres at the campuses provide around 492 computers for use by the students. As a result, the student to computer ratio of the University now stands at 2.5:1.

Multimedia Facilities

The Air-conditioned Multimedia Learning Centres, with a seating capacity of over 100 participants at each campus, typically host national and international seminars, conferences and workshops. They are equipped with the latest Audio / Video conferencing facilities which enable active and real-time collaborations among staff and students of the three campuses of the University.

The Computer Centres and the Multimedia Learning Centres, the UMS (University Management System) and the Labs are being managed by the following members of staff:





Name	Designation	Qualification
Dr. Ramaier Sriram	Honorary Senior Manager, UMS	B.Sc., M.Eng., Ph.D.
Sri R Renju	Information Scientist, Computer Centre, Prasanthi Nilayam Campus	B.E., M.B.A.
Ms. Amita Devgar	Information Scientist, Computer Centre, Anantapur Campus	B.Tech., Dip. H&E Eng., PgCert
Sri S Sathyanarayanan	Information Scientist, Computer Centre, Brindavan Campus	M.Sc, M.S. (Software Systems)
Sri Srivarun Vallampatla	Deputy Manager (Computer Lab), Dept. of Mathematics & Computer Science	B.B.M., M.I.T.
Dr. S Bhaskaran	Honorary Administrator, Bioinformatics Lab, Dept. of Biosciences, Prasanthi Nilayam Campus	B.Sc., M.Sc., Ph.D., Dip. B.A.
Dr. Sanjay Mahalingam	Deputy Manager (Systems), Prasanthi Nilayam Campus	B.Info. Tech., M.B.A., Ph.D.
Sri Neelratna R Chowbal	Assistant Manager (Computer Lab), Prasanthi Nilayam Campus	M.B.A.
Sri C Udayakiran	Assistant Manager (Systems), Department of Mathematics & Computer Science	B.E. (Computer Science), M.S. (Software Systems)
Sri R E V Raghuram	Assistant Manager (Technical), Multimedia Learning Centre, Prasanthi Nilayam Campus	M.Sc.
Ms. M Thabusum	Technical Assistant, Multimedia Learning Centre, Anantapur Campus	B.A.
G V Venkata Raju	Technical Assistant, Multimedia Learning Centre, Brindavan Campus	SSLC, ITI (Electrical)

Library Facilities

Each of the campuses of the Institute has got a well-established library. The Central Library located at the Prasanthi Nilayam Campus, with an initial collection 15,000 volumes, has now swelled to 160,000 across all four campuses. The libraries house latest books and journals in diverse academic fields and spacious facilities for reading.

The Libraries receive about 250 periodicals, both National and International, that include an extensive collection of the back volumes of Journals. Audio, Video and CD-ROM collections, as well as Theses, Dissertations, Quick Reference Books, and other materials (including maps) are also available.

Other services offered in the University libraries include Photocopying, Inter-library Loans, etc. The libraries are managed by the following staff members across the Campuses:

Name	Designation	Qualification
Dr. K Tata Rao	Librarian, Prasanthi Nilayam Campus	M.Com., M.L.Sc., Ph.D.
Ms. Pushpa Ramanna	Honorary Librarian, Anantapur Campus	
Sri M G Nandagopal	Asst. Librarian, Brindavan Campus	M.Com., B.L.Sc.
Sri Sundarajan Mohan	Honorary Librarian, Muddenahalli Campus	B.Tech., PG Diploma

Sports Facilities

All campuses of the University are well equipped with sports facilities - from cricket grounds to indoor stadiums, from playing fields to basketball courts.

Each campus has a Physical Instructor who oversees the sports activities for students at that campus.

Name	Designation	Qualification
Sri K P Gopinath	Physical Instructor (Hon.), Brindavan Campus	B.A.
Sri R N Ravindra Kumar	Asst. Director of Physical Education, Prasanthi Nilayam Campus	B.Sc., M.P.Ed.
Mrs. K Hemalatha	Asst. Director of Physical Education, Anantapur Campus	M.A., M.P.Ed., M.Phil.
Sri Narasimha Murthy N	Physical Instructor (Part-time), Muddenahalli Campus	B.A., M.P.Ed.

Two of the main sports facilities available for students are:

Sri Sathya Sai International Centre for Sports

A state of the art Olympic-standard multi-discipline indoor stadium was inaugurated on 22 November 2006, by the then President of India, Honourable Dr. A P J Abdul Kalam.

With facilities for Basketball, Volleyball, Tennis, Squash, Table-tennis, Badminton, Gymnastics and Yoga/Aerobics, this stadium - measuring 100 metres by 60 metres on a 4.8 acre site, is amongst the largest open-frame space domes in the country. It has a spectator capacity of 4,000.

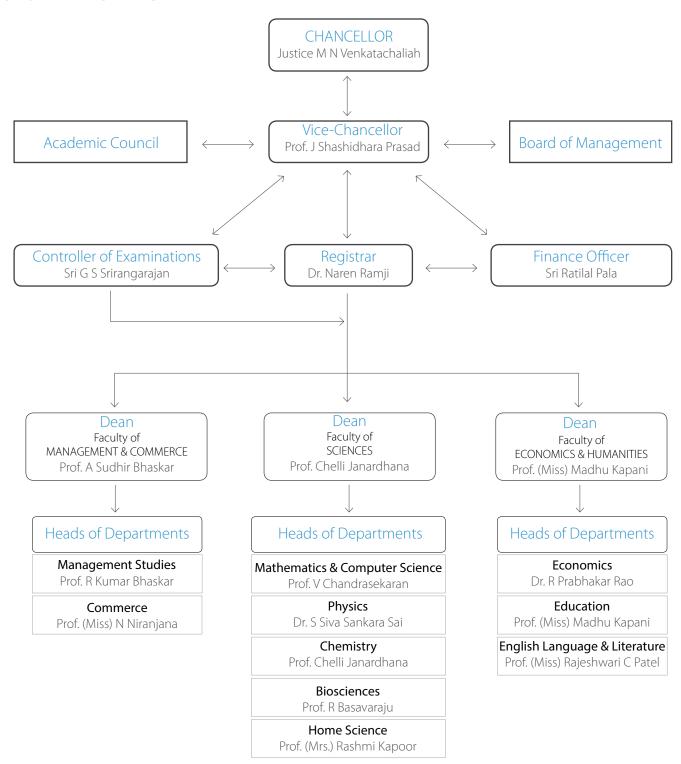
Sri Sathya Sai Hill View Stadium

A multi-purpose outdoor stadium, the Sri Sathya Sai Hill View Stadium was constructed for the purpose of conducting the Annual Sports and Cultural meet of all Sri Sathya Sai Educational institutions (an annual event on 11 January).

The stadium overlooks an array of imposing structures and statues symbolizing different religious faiths. On occasions, the stadium hosts International sports events. It boasts a viewers gallery that can accommodate over 25,000 people.

REVERED FOUNDER CHANCELLOR BHAGAWAN SRI SATHYA SAI BABA

ORGANIZATIONAL CHART



The Sri Sathya Sai Institute of Higher Learning (Deemed to be University) has been established by the Sri Sathya Sai Institute of Higher Learning (Public Charitable Trust), which in turn has been established by the Sri Sathya Sai Central Trust. Bhagawan Sri Sathya Sai Baba is the Founder of these Trusts.







COURSES OFFERED

Undergraduate	B.Sc. (Hons.) in Mat	hematics	
	Bachelor of Computer Applications (BCA)		
Postgraduate	(a) Pure Mathemati	M.Sc. Mathematics with specialization in either: (a) Pure Mathematics (b) Applied Mathematics, or (c) Computer Science	
Professional	M.Tech. in Computer Science		
Research	M.Phil.	Ph.D.	

Teaching Faculty

Head of Department: Prof. V Chandrasekaran

Name	Designation	Qualification
Prof. C Jagan Mohan Rao	Professor (Hon.)	M.Sc., Ph.D.
Prof. V Chandrasekaran	Professor (Hon.)	M.Sc., Ph.D.
Dr. K S Sridharan	Professor (Hon.)	M.E., Ph.D.
Dr. (Mrs.) Rita Gupta	Associate Professor	M.Sc., Ph.D.
Sri R Subramanian	Associate Professor	M.Sc.
Dr. Pallav Kumar Baruah	Asst. Professor	M.Sc., Ph.D.
Dr. (Ms.) Y Laxmi Naidu	Asst. Professor	M.Sc., M.Phil., Ph.D.
Dr. R Raghunatha Sarma	Asst. Professor	M.Sc., Ph.D.
Sri N Uday Kiran*	Asst. Professor	M.Sc., M.Tech.
Dr. S Balasubramanian	Asst. Professor	M.Sc., M.Tech., Ph.D.
Sri D Hanumantha Rao Naidu*	Asst. Professor	M.Sc., M.Tech., Ph.D.
Sri Sai Shyam*	Asst. Professor	M.Sc., M.Tech.
Dr. Krishna Kiran Vamsi Dasu	Asst. Professor	M.Sc., M.Phil., Ph.D.
Sri V Bhaskaran	Asst. Professor	M.Sc, M.Tech.
Sri Srikanth Khanna*	Asst. Professor	M.Sc., M.Tech.





Sri B V K Bharadwaj*	Asst. Professor	M.Sc., M.Phil.
Sri Darshan Gera	Asst. Professor	M.Sc., M.Tech.
Sri Ajith Padyana*	Asst. Professor	M.Sc., M.Tech.
Sri Devi Sudheer Kumar C*	Asst. Professor	M.Tech., Ph.D.
Ms. Saranya C R *	Asst. Professor (Part-time)	M.Sc., M.Phil.

^{*} also pursuing Doctoral Research

Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Dr. Ramesh Sharma	Dept. of Mathematics, University of New Haven, USA	Geometry and Manifold Theory	14 Jun to 13 Aug 2012
Dr. Viswanath Poosala	Head, Bell Labs, Alcatel-Lucent, Bangalore	Discussions on research collaboration and project monitoring	21 Jun 2012
Prof. S Panchanathan	Director, Centre for Cognitive Ubiquitous Computing (CUBIC) and Senior Vice-President, Office of KED, Arizona State University, USA	Research discussions with students and faculty. Also guided students for M.Tech. Projects	21 Jun to 1 Jul 2012
Prof. K B Chandran	Lowell G Battershell Chair and Professor, Dept. of Biomedical Engineering, University of Iowa, USA	Research discussions with students and faculty	27 Jun to 14 Aug 2012
Sri Shakti Kapoor	Senior Technical Staff Member, IBM, USA	Research discussions with students and faculty	17-20 Aug 2012
Sri M Narayana Swamy	Accomplished Broadband Engineer	Full software lab course for M.Tech. students	Nov-Dec 2012
Prof. Ravi Mukkamala	Dept. of Computer Science, Old Dominion University, West Virginia, USA	Course in Distributed systems	21 Nov to 23 Dec 2012

76

Dr Girish Suryanarayana	Technical Staff, Siemens, ISL, Bangalore	Talk on Design patterns for M.Tech students	1 Dec 2012
Dr. Raghavendra	Member Technical Staff, Siemens, ISL, Bangalore	Talk on Design patterns for M.Tech students	2 Dec 2012
Prof. S Sadayappan	Dept. of Computer Science and Engineering, Ohio State University, USA	Computer Science 1202	22-26 Dec 2012
Prof. N S Umanath	Professor of Information Systems, University of Cincinnati, USA	Database, Ex Model, Indexing & Hashing	20 Jan to 3 Feb 2013
Dr. Vijay M Patankar	Asst. Professor, International Institute of Information Technology, Bangalore	Research discussions with students and faculty	8-9 Mar 2013
Sri Sadanand Gulwadi	ARM, Bangalore	Tutorial on ARM Embedded programming	13 Mar 2013

WORKSHOPS & CONFERENCES CONDUCTED

Workshop 1

Title: International Workshop on Computer Vision and Machine Learning (IWCVML)

Dates: 20-23 Dec 2012

Venue: Multimedia Learning Centre, SSSIHL, Prasanthi Nilayam Campus

Keynote Address:

22 Dec 2013: Plenary Talk by Prof. Bhabhatosh Chanda, ISI, Kolkata on Single frame super resolution using topic model based on probabilistic latent semantic analysis.

23 Dec 2013: Plenary Talk by Prof. P J Narayanan, IIIT, Hyderabad on Recovering 3D Structure using Modern Structure from Motion.

Theme of the Conference:

The main focus of Computer vision is to enable technology that can endow machines with human vision capability. It is concerned with the theory, design and implementation of algorithms that can by far automatically process the data from visual scene to detect and recognize objects, track and recover their shape and spatial relationships.

'Learning' has become one of the important research areas in computer vision today. Machine learning technology has lot of potential to chip in the development of robust and faster vision algorithms that will improve the performance of practical vision systems.

From the standpoint of computer vision systems, machine learning can offer practical methods for building effective visual models that can easily adapt to dynamic environments. From the standpoint of machine learning systems, computer vision can provide interesting and challenging problems with regard to designing evaluation criteria for the quality of learning processes in computer vision systems.

The International Workshop on Computer Vision and Machine Learning is an endeavour to bring together the experts from academia, industry and practitioners in the field of Computer Vision (CV) and Machine Learning (ML) under one umbrella to discuss the emerging trends that address the current research challenges.

List of External Speakers

Name	Designation	Торіс
Prof. Bhabhatosh Chanda	Image Processing Laboratory Electronics and Communication Sciences Unit, Indian Statistical Institute, Kolkata	Single frame super resolution using topic model based on probabilistic latent semantic analysis
Prof. P J Narayanan	Dean, R&D, Centre for Visual Information Technology, IIIT- Hyderabad, India	Recovering 3D Structure using Modern Structure from Motion.
Dr. Arun Hampapur	Distinguished Engineer & Director, Business Analytics and Math Sciences, Thomas J Watson Research Centre, IBM, USA	Talk 1: Building system with computer vision technology Talk 2: Machine learning and data mining
Prof. P Nagabhushan	University of Mysore, Mysore, India	Talk 1: Incremental Machine Learning under very large data conditions such as in image / video frames-Part I. Talk 2: Incremental Machine Learning under very large data conditions such as in image / video frames-Part II.
Dr. Jagannadan Varadarajan	Advanced Digital Sciences Center (ADSC). University of Illinois, Singapore	Activity Analysis from Long Term Video Recordings: A Topic Model Approach
Dr. Vineeth N Balasubramanian	Arizona State University, Arizona, USA	Advanced Computational Methods for Human Behaviour Understanding and Assisted Living
Prof. Manjunath V Joshi	Dean, Dhirubhai Ambani Institute of Information and Communication Technology (DA- IICT), India	Statistical - optimization models for Computer Vision
Prof. P Viswanath	Dean, R&D (Electrical Sciences), Rajiv Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh	Clustering: Is it possible or impossible?
Mrs Neeta Trivedi	Head, Aerial Image Exploitation Unit, ADE, DRDO, Bangalore	Image Processing and CV in Intelligence, Surveillance and Reconnaissance
Dr. S Venkataraman	Group Director, SEG, Advanced Data Research Institute (ADRIN), Department of Space, Hyderabad, India	Case-based Reasoning in Image Understanding

Departmental Colloquium

The Department of Mathematics and Computer Science (DMACS) regularly hosts colloquium talks by the teachers, research scholars and external experts in the areas of Mathematics and Computer Science. The details of the colloquium are provided below.

Date	Presenter	Designation	Topic
16 June 2012	Dr. D Yogeswaran	Post Doc., Technion-Israel Institute of Technology, Israel.	How many times should you shuffle a deck of cards?
14 Jul 2012	Sai Hareesh A	Doctoral Research Scholar and INSPIRE Fellow, DMACS, SSSIHL	Computational Photography
28 Jul 2012	Sri Srikanth Khanna	Asst. Professor, DMACS, SSSIHL	IRIS-Image Pre-processing Using Fractional-Derivative Filters
28 Jul 2012	Sri Viswanath Poosala	Head, Bell Labs, Alcatel-Lucent, India	The Future of Innovations and a Recipe for coming up with Big Ideas
4 Aug 2012	Prof. K B Chandran	Lowell G Battershell Chair and Professor, Dept. of Biomedical Engineering, University of Iowa, USA	Computational Simulations in the Human Cardiovascular System
20 Aug 2012	Prof. V Chandrasekaran	Head, DMACS, SSSIHL	Overview of DMACS and Research Activities
1 Sep 2012	Sri Sai Shyam Sharma	Asst. Professor, DMACS, SSSIHL	Mathematical Puzzles
15 Sep 2012	Dr. R Raghunatha Sarma	Asst. Professor, DMACS, SSSIHL	Clustering Techniques and Their Applications
15 Sep 2012	Dr. S Balasubramanian	Asst. Professor, DMACS, SSSIHL	Linear Algebra behind Computer Science
28 Jan 2013	Prof. V Chandrasekaran	Head, DMACS, SSSIHL	Mathematics- Queen of Engineering Discipline – A Computer Vision and Machine Learning Perspective
16 and 23 Feb 2013	Sri N Uday Kiran	Asst. Professor, DMACS, SSSIHL	Rotating Needle Problem
23 Feb 2013	Sri M S Srinath	Doctoral Research Scholar, JRF, DMACS, SSSIHL	Rational Solutions to Diophantine Equations
23 Feb 2013	Sri Lalith Srikanth Chintalapati	Doctoral Research Scholar, DMACS, SSSIHL	Image Segmentation and Applications
2 Mar 2013	Prof V Chandrasekaran	Head, DMACS, SSSIHL	Mathematics: Queen of All Sciences
2 Mar 2013	Prof. Shobha Latha	S K University, Andhra Pradesh	Applications of Group Theory
2 Mar 2013	Dr. (Mrs.) Rita Gupta	Associate Professor, DMACS, SSSIHL	Conic Sections and Quadratic Surfaces in Nature
2 Mar 2013	Dr. K S Sridharan	Honorary Professor, DMACS, SSSIHL	Vectors in Science and Human Life
2 Mar 2013	Sri R Subramanian	Associate Professor, DMACS, SSSIHL	Mathematics In Action

2 Mar 2013	Ms. Isha Sai	Asst. Professor, Department of Biosciences, SSSIHL	Applications of Mathematics in Biosciences
2 Mar 2013	Dr. Pratima Tripathi	Asst. Professor, Department of Biosciences, SSSIHL	Nanotechnology and Mathematics: Relation between an object and its shadow
2 Mar 2013	Dr. Raghunatha Sarma	Asst. Professor, DMACS, SSSIHL	Mathematics in Image Processing and Image Mosaicing
9 Mar 2013	Dr. Vijay M Patankar	Asst. Professor, International Institute of Information Technology, Bangalore	Factoring of Abelian Varieties - a new local-global problem
23 Mar 2013	Sri Sai Shyam Sharma	Asst. Professor, DMACS, SSSIHL	Mathematics in Music
23 Mar 2013	Dr. Krishna Kiran Vamsi Dasu	Asst. Professor, DMACS, SSSIHL	Epidemic Modelling: A Brief Overview

Workshops Attended

- Dr. R Raghunatha Sarma attended The University Day organized by Advanced Technology Group, NetApp, Bengaluru, 8 Mar 2013.
- Sri N Uday Kiran delivered a talk on Microlocal Triangularization of Pseudo-differential systems at Tata Institute of Fundamental Research, 15 May 2013.
- Prof. V Chandrasekaran attended the IET International Conference on Image Processing, London, UK, 3-4 Jul 2012.
- Sri Ajith Padyana attended the 2nd IEEE International Conference on Parallel, Distributed and Grid Computing, 6-8 Dec 2012.
- Dr. S Balasubramanian attended the Fifth Science Conclave, Indian Institute of Information Technology (IIIT), Allahabad, Uttar Pradesh, 8-14 Dec 2012.
- Sri Sai Shyam attended Indocrypt 2012, 13th International Conference on Cryptology in India, 9-12 Dec 2012.
- Sri M.S.Srinath attended Indocrypt 2012, 13th International Conference on Cryptology in India, 9-12 Dec 2012.
- Sri Ajith Padyana attended the 19th IEEE International Conference on High Performance Computing, 18-21 Dec 2012.
- Sri Lalith Srikanth Chintalapati attended the 19th IEEE International Conference on High Performance Computing, 18-21 Dec 2012.

Other Information

Industrial Visit:

The students of M.Tech. (Computer Science) undertook an industrial tour in April 2013, visiting the following companies in Bangalore:

IBM- Processor Division, ADE (DRDO)- Aerial Image Exploitation Lab, TVS Motors, ARM, Thomson Reuters, Verifone, and Akshaya Patra Foundation.

Field Trip:

A visit to Hubli Mentally Challenged Children School by Prof. V Chandrasekaran to assess the feasibility of undertaking Computer Science projects that will help the affected children's rehabilitation was undertaken. This has led to fivve students undertaking projects that will help children with autism.

National Mathematics Year Celebrations:

DMACS conducted a series of lectures to UG III year BSc Honours Mathematics students to inspire them to take



- Mathematics. All lectures were held in Brindavan Campus of SSSIHL. The program was conducted over a year. All staff of DMACS actively participated in delivering lectures on special topics of interest.
- DMACS celebrated a Mathematics Festival at the Anantapur Campus. Prof. V Chandrasekaran, Prof. K S Sridharan, Dr. Raghunatha Sarma, Dr. S Balasubramanian, Sri R Subramanian, Dr. (Mrs.) Rita Gupta, along with other Professors from other disciplines (from SSSIHL and outside) delivered talks. The feedback from students was positive and conveyed their inspiration to study and enjoy mathematics.

SPECIAL ACHIEVEMENTS

Prof. V Chandrasekaran

- Organized a Mathematics Festival (and delivered the inaugural address) at SSSIHL, Anantapur Campus, SSSIHL, 23 Feb 2013.
- Delivered an invited talk on 'Mathematics- Queen of Sciences', on National Mathematics Day, at Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Deemed University, Enathur, Kanchipuram, 28 Jan 2013.

Sri Ajith Padyana

• Delivered the Keynote address at a Five-day workshop, Heterogeneous Computing - CPU/GPU HPC Cluster - Algorithms & Performance of Application Kernels (HeGaPa 2012), Univ. of Hyderabad, 16-20 Jul 2012.

Dr. Pallav Kumar Baruah

- R K N Sai Krishna, T J V R K M K Sayi, P K Baruah and R Mukkamala, Best Student research Paper Award, 13th International Conference on Mobile Data Management, 'Privacy-Preserving Data Outsourcing in Mobile Environments: A Novel Approach', IEEE MDM, Bengaluru, 23-26 Jul 2012.
- Delivered an invited talk on 'Modeling Interface problems through Dynamic equations', National Conference on Evolution Equations: Theory, Methods, & Applications, IIT Kanpur, 7-8 Dec 2012.
- Delivered an invited talk on 'Trends in study of Interface problem', National conference on Advances in Mathematical Sciences, Motilal Nehru National Institute of Technology, Allahabad, 6-8 Oct 2012.
- Delivered an invited talk on 'Enabling Video Super Resolution', Heterogeneous Computing CPU/GPU HPC Cluster Algorithms & Performance of Application Kernels (HeGaPa 2012), Univ. of Hyderabad, 16-20 Jul 2012.
- Sairam Ravu, Neelakandan Ramachandran, Mohan Gorai, Ravi Mukkamala and Pallav Baruah, Best Paper Award, Student Research Symposium, A computationally efficient and scalable approach for privacy preserving kNN classification, Annual IEEE International Conference on High Performance Computing (HiPC), 2012, Pune, 18-21 Dec 2012.
- V Sai Ram, M Srinivasa Rao, G Dada Khalandhar, L Srikanth, R Sarma and Pallav Baruah, Best Paper Award (Second place), A Computationally Efficient Parallel Kernel Regression for Image Reconstruction, Student Research Symposium, Annual IEEE International Conference on High Performance Computing (HiPC), 2012, Pune, 18-21 Dec 2012.





- Krishna Prashanth R, Ravi Mukkamala and Pallav Baruah, Best Poster Award (Second place), Student Research Symposium, Employing GPU Accelerators for Efficient Enforcement of Data Integrity in Outsourced Data, Annual IEEE International Conference on High Performance Computing (HiPC), 2012, Pune, 18-21 Dec 2012.
- Award of CUDA Research Centre (CRC) by NVIDIA, Feb 2013.

Dr. R Raghunatha Sarma

Convener for the International Workshop on Computer Vision and Machine Learning, SSSIHL, 20-23 Dec 2013.

Sri Sai Hareesh A

- Reviewer of Journal of Electronic Imaging, SPIE.
- Reviewer for International Conference on Electronics and Optoelectronics, ICEOE 2012
- Reviewer for IEEE Symposium on Industrial Electronics & Applications, ISIEA 2012, 2013

Sri Lalith Srikanth Chintalapati

 V Sai Ram, M Srinivasa Rao, G Dada Khalandhar, L Srikanth, R Sarma and Pallav Baruah, Best Paper Award (Second place), A Computationally Efficient Parallel Kernel Regression for Image Reconstruction, Student Research Symposium, Annual IEEE International Conference on High Performance Computing (HiPC), 2012, Pune, 18-21 Dec 2012.

Achievements in National level exams

Name	CSIR JRF/NET Rank*	GATE Rank**
Shiva Sundar A	NET (LS)	4909 (CS)
M Sai Rajeshwar	NET (LS)	470 (CS)
V Jagannath		10788 (CS)
G Sai Sudheer		3390 (CS)
Sandeep Kumar		281 (Math)
KT N Verma	NET (LS)	
Sairam Ravu	NET (LS)	
N Sampath	NET (LS)	
Aditya Prakash	NET (LS)	
Dinesh Majeti	NET (JRF)	

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test) | LS (Lectureship)

^{**} Graduate Aptitude Test in Engineering | All ranks are national (All India Rank)

Special collaborations of the department with external agencies

NVIDIA has recognized DMACS as one of their CUDA Teaching Centres and CUDA Research Centres.

RESEARCH

Research Projects - New

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
ISRO-RESPOND	Prof. V Chandrasekaran	Nov 2012 to Oct 2015	₹17.7 lakhe
	Elliptic Curve Cryptography	140V 2012 to OCt 2015	X17.7 IUNII3

Scope:

Work on Elliptic Curve Cryptography:

- Investigate the existence of a deterministic message embedding technique on elliptic curves.
- Carryout research in the direction of designing compact ECC systems for mobile devices.
- Focus on developing cryptosystems based on multipoint DLP.

Work on Other Abelian Varieties:

• Investigate the properties of Abelian surfaces. Due to its increased dimensionality, a surface defined over Fpm contains more points than a curve over the same field. This is believed to increase the search space for cryptanalyst and hence making the cryptosystem more secure. More generally, since Abelian varieties of higher dimension have more points, a brute force attack should take about qd/2 steps. This means that it may be possible to use them as the basis of a secure cryptographic scheme with a smaller value of q.

Deliverables:

Research outcomes in terms of publications:

• Availability of qualified scientists for absorption in Indian Industries and Institutions & implementation assistance to Advanced Data processing Research Institute (ADRIN).

Social Relevance:

Research in 'Information Security' has acquired a major boost due to unprecedented attacks on sensitive installations and loss of vital information leading to disastrous consequences worldwide. So the mathematicians and computer scientists together are working towards the development of computationally secure compact cryptographic systems. In the context of Indian Space Research, it is mandatory that all vital data and communications be handled in a secure manner to ward-off any potential external threats to the success of space programme. This will ensure Indian mastery over space in line with our targeted plans. Our aim is also to enhance India's capabilities to provide a safe and secure information and communication exchange systems and protocols in a variety of smart devices through advanced research in the area of Elliptic Curve Cryptography

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. Pallav Kumar Baruah		
DAE/ NBHM	Qualitative study of solutions of Nonlinear Coupled Ordinary Differential Equations	2010 to 2013	₹1.9 lakhs

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
DRDO ER & IP, Delhi, India	Dr. S Balasubramanian Dr. R Raghunatha Sarma An Ensemble of Image Segmentation Algorithms for Medical and Aerial Images	1 Sep 2011 to 31 Aug 2014	₹41.4 lakhs

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Sri Devi Sudheer Kumar C	Topology and Routing Aware Mapping on Parallel Processors	Prof. Ashok Srinivasan, Florida State University, USA
Sri D Hanumantha Rao Naidu	Context-Based Speech Enhancement	Prof. G V Prabhakara Rao & Dr. Sriram Srinivasan
Sri Srikanth Khanna	Fractional Calculus in Image Processing	Prof. V Chandrasekaran
Sri Uday Kiran	Propagation and regularity problems of Partial differential equations	Dr. B R Nagaraj, TIFR Centre for Applicable Mathematics, Bangalore
Sri B V K Bharadwaj	Qualitative Study of Nonlinear Coupled BVPs	Dr. Pallav Kumar Baruah
Sri Ajith Padyana	I/O Throughput Performance Enhancement in High Performance Computing Applications	Dr. Pallav Kumar Baruah & Dr. Ashok Srinivasan, Dept. of Computer Science, Florida State University, USA (Joint Supervisor)
Sri Srinath M S	Cryptography using Elliptic Curves and Other Abelian Varieties	Prof. V Chandrasekaran & Dr. Vijay M Patankar, Asst. Professor, International Institute of Information Technology, Bangalore (Joint Supervisor)
Sri Sai Hareesh A	Real-time Video Super Resolution	Prof. V Chandrasekaran
Sri Sai Shyam	Lattice-based Cryptography	Prof. V Chandrasekaran
Sri Lalit Srikanth C	Spectral Clustering Techniques for Image Segmentation	Dr. R Raghunatha Sarma
Mrs. Saranya C R	Non-Commutative Algebraic Cryptography	Prof. V Chandrasekaran

Projects & Dissertations Completed

M. Tech. Dissertations

Name	Project Title	Supervisor(s)
Aditya Prakash	Eigen Vector Relevance-based Spectral Clustering for Image Segmentation	Dr. S Balasubramanian
Arka Ghosh	Machine Learning-based Kernel Specific Models for Selection of Tile Sizes	Dr. S Balasubramanian
Behara V Nagendra Prasad	Simulation of Packet Data Convergence Protocol (PDCP) Layer for Long Term Evolution (LTE) Wireless Broadband Technology in OMNET++ Simulator Using MiXiM Framework	Dr. R Raghunatha Sarma & Prof. Krishna M Sivalingam, Dept. of Computer Science & Engineering, IIT, Madras
Kali Uday Balleda	Parallel Implementation of DNA Multiple Patter Recognition Algorithm on Compressed Space	Dr. Pallav Kumar Baruah
Dinesh Majeti	Analytical and Numerical Approximations for Posterior Distributions in Markov Random Field-based Image Segmentation	Dr. S Balasubramanian
D Satyanvesh	High Performance Implementation for Aligning Compressed DNA Sequences	Dr. Pallav Kumar Baruah & Sri Ajith Padyana
Gooty Dada Khalandhar	A Feature-based Approach to Vehicle Segmentation and Tracking using Low-Angle Off-Axis Camera	Dr. Raghunatha Sarma
Krishna Prasanth R	Enforcing Efficient Data Integrity of Outsourced Data	Dr. Pallav Kumar Baruah & Prof. Ravi Mukkamala, Old Dominion University, USA
Mahendrakar Srinivasa Rao	Optimization of Communication in Multi-core Cluster Environment with Topology Aware Mapping	Dr. Pallav Kumar Baruah & Sri Devi Sudheer Kumar C
Neelakandan P R	Effectiveness of Perturbation Methods in Preserving Privacy for Outsourced Data-Mining Applications	Dr. S Balasubramanian & Dr. R Raghunatha Sarma
Padisetty Kranthi Kumar	Optimization of Collectives on Multi-cores Using Distance Aware Framework	Dr. Pallav Kumar Baruah & Sri Devi Sudheer Kumar C
Sairam K M Menon	Analysis of Structural and Epidemiological Characteristics of Large Social Networks	Dr. Pallav Kumar Baruah
Sai Ram Ravu	Privacy Preserving Frequent Itemset Mining in Vertically Partitioned Data	Dr. Pallav Kumar Baruah & Prof. Ravi Mukkamala, Old Dominion University, USA
Sampath Kumar NVSSP	Dynamic Data Management and Communication Optimization for Multiple GPU Architectures	Dr. Pallav Kumar Baruah
T N Varma Karuparthi	Simulation of Medium Access Control (MAC) Layer for Long Term Evolution (LTE) Wireless Broadband Technology in OMNET++ Simulator Using MiXiM Framework.	Dr. R Raghunatha Sarma & Prof. Krishna M Sivalingam, Dept. of Computer Science & Engineering, IIT, Madras
Ummetela Sai Krishna	Missing Data Prediction Using Novel Hybrid Techniques for Model Estimation	Prof. V Chandrasekaran
V Sai Ram	A Unified Framework for Geometry and Exemplar- based Image Inpainting	Dr. Raghunatha Sarma

M.Sc. (Mathematics) Dissertations

Name	Project Title	Supervisor(s)
Dandu Rajeev	Hidden Markov Model based Speech Enhancement	Sri D Hanumantha Rao Naidu
Deep Narayan Pradhan	Understanding Hadoop and Dryad along with study of kNN Classification Algorithm	Sri D Hanumantha Rao Naidu
Goruganthu V S S Aditya	Performance Study of Web-Caching Algorithms	Dr. R Raghunatha Sarma
Goturu Sai Sudheer	Power Law Modeling of Internet Topology and Spectral Analysis	Dr. R Raghunatha Sarma
Ivaturi Aditya	A Study of Third, Fourth, and nth Order BVPs Associated with Singular Interface Problems on Time Scales Using Fixed Point Theorems	Dr. Krishna Kiran Vamsi Dasu
V Jagannath	Using MFCC Vector in Speech Enhancement	Sri D Hanumantha Rao Naidu
K N V S D Dwarakanath	A Study of Third, Fourth, and nth Order IVPs Associated with Singular Interface Problems on Time Scales Using Fixed Point Theorems	Dr. Krishna Kiran Vamsi Dasu
M Sai Rajeshwar	Study on Manifold Clustering	Dr. S Balasubramanian & Dr. R Raghunatha Sarma
Rampelli Karthik	Understanding Hadoop and GraphLab Architecture along with study of K-Means Clustering Algorithm	Sri D Hanumantha Rao Naidu
Sandeep Kumar	Cahn-Hilliard Equation: A Theoretical And Numerical Approach With Its Applications in Image Process ing and Biofilms Formation	Dr. Pallav Kumar Baruah
Siva Sundar A	A Study on Scalable Spectral Clustering for Image Segmentation	Dr. S Balasubramanian & Dr. R Raghunatha Sarma
Y Sri Sai Krishna Manoj	A Study on the Performance of Statistical and Soft Computing Methods in Stock Price Forecasting	Dr. R Prabhakar Rao

RESEARCH PUBLICATIONS

Journal Papers

- Uday Kiran N (2013) Simultaneous Triangularization of Pseudo-Differential Systems. Journal of Pseudo-Differential *Operators and Applications*, 4(1), 17.
- Uday Kiran N, Nagaraj B R (2013) A note on a class of Fuchsian Operators. Journal of Pseudo-Differential Operators and Applications, 4(3), 17.
- Vamsi D K K, Dwarakanath K N V S D and Baruah P K (2013) Existence and Uniqueness of Solution for a Third Order Initial Value Problem associated with Nonlinear Singular Interface Problem. Advances in Theoretical and Applied Mathematics, Accepted for publication.
- Vamsi D K K, Dwarakanath K N V S D, Aditya I and Baruah P K (2013) Existence and Uniqueness of Solution for a nth Order Initial Value Problem associated with Nonlinear Singular Interface Problem. Advances in Fixed Point Theory, Accepted for publication.
- Sudheer C D, Krishnan S, Srinivasan A and Kent P R C (2013) Dynamic Load Balancing for Petascale Quantum Monte Carlo Applications: The Alias Method. Computer Physics Communications, 184(2), 284-292.



- Sai Hareesh A and Chandrasekaran V (2013) Exemplar Based Color Image Inpainting: A Fractional Gradient Function Approach. *Pattern Analysis and Applications*, DOI-10.1007/s10044-012-0316-4, In Press.
- Tripathi R K, Raich V V and Sai Hareesh A (2013) The determinant of an Interval valued fuzzy matrix with respect to t-norm and t-conorm. *International Journal of Fuzzy Mathematics and Systems*, 3(2), 109-112.
- Sai Hareesh A and Akella P (2013) Relation between neutral element and annihilator in absorption equation. *Fuzzy Sets and Systems,* In Press.
- Vamsi D K K and Baruah P K (2012) Existential Results for Nonlinear Sturm-Liouville Singular Interface Problems. *International Journal of Mathematics Research*, 4(1), 1-14.
- Vamsi D K K and Baruah P K (2012) Existential of Multiple Positive Solutions Localization of Eigen Values for a Non-local Boundary Value Problem Involving a Pair of Second Order Dynamic Equations with a Singular Interface. *Advances in Theoretical and Applied Mathematics*, 7(3), 281-294.
- Vamsi D K K and Baruah P K (2012) Existential of Positive Solutions and Eigenvalue Intervals for Nonlinear Sturm Liouville Problems with a Singular Interface. *Electronic Journal of Differential Equations*, (53), 1-12.
- Vamsi D K K and Baruah P K (2012) Existential of Multiple Positive Solutions Localization of Eigen Values for Nonlinear Sturm Liouville Problems with a Singular Interface using the Green's Matrix. *International Journal of Mathematical Analysis*, 6 (39), 1891-1910.
- Naidu H R D and Srinivasan S (2012) Speech enhancement using a generic noise codebook. *Journal of the Acoustical Society of America*, 132(2), EL161-EL167.
- Naidu H R D, Srinivasan S and Rao P G V (2012) Speech enhancement using a structured codebook. *Journal of the Acoustical Society of America*, 132(4), EL329-EL335.

Conference Papers

- Sayi T J V R K M K, Sai Krishna R K N, Baruah P K and Mukkamala R (16-18 Apr 2012) Data Outsourcing in Cloud Environment: Privacy preserving approach. 9th International Conference on Information Technology: New Generations, IEEE ITNG 2012, Las Vegas, Nevada, USA, Book title: ITNG '12: Proceedings of the 2012 9th International Conference on Information Technology - New Generations, ISBN: 978-0-7695-4654-4, p.361-366, DOI: http://dx.doi.org/10.1109/ ITNG.2012.91, IEEE Computer Society, Washington, DC, USA.
- Khanna S, Chandrasekaran V (3-4 July 2012) Fractional derivative filter for image contrast enhancement with order prediction. *IET Conference on Image Processing (IPR 2012)*, London, UK., pp1-6 E-ISBN: 978-1-84919-632-1
- Sai Krishna R K N, Sayi T J V R K M K, Baruah P K and Mukkamala R (23-26 Jul 2012) Privacy-Preserving Data
 Outsourcing in Mobile Environments: A Novel Approach. *IEEE MDM*, 13th International Conference on Mobile Data
 Management, Bangalore, India, Book title: MDM '12: Proceedings of the 2012 IEEE 13th International Conference
 on Mobile Data Management (MDM 2012), ISBN: 978-0-7695-4713-8, pp167-175, DOI: http://dx.doi.org/10.1109/
 MDM.2012.47, IEEE Computer Society, Washington, DC, USA.



- Sai Krishna R K N, Sayi T J V R K M K, Baruah P K and Mukkamala R (3-5 Aug 2012) Efficient Data Distribution in Outsourced Environments: A Fragmentation-based Approach. ACM ICACCI 2012, *International Conference on Advances in Computing, Communications and Informatics,* Chennai, India, ISBN: 978-1-4503-1196-0, p.589-595, DOI: http://doi.acm.org/10.1145/2345396.2345492, ACM, New York, NY, USA.
- Sayi T J V R K M K, Sai Krishna R K N, Baruah P K and Mukkamala R (8-10 Aug 2012) Privacy-preserving Data
 Management in Outsourced Environments: A Clustering based Approach. *IEEE DIM 2012: IEEE International Workshop on Data Integration and Mining,* Las Vegas, Nevada, USA, Book title: IRI, Year: 2012, ISBN: 978-1-4673-2282-9, Pages: 215-223, EE: http://dx.doi.org/10.1109/IRI.2012.6303013, IEEE, Crossref: DBLP:conf/iri/2012.
- Naidu H R D and Srinivasan S (4-6 Sep 2012) Speech enhancement using emotion dependent codebooks. International Workshop on Acoustic Signal Enhancement (IWAENC 2012), Aachen, Germany.
- Padyana A, Sudheer C D, Baruah P K and Srinivasan A (6-8 Dec 2012) High Throughput Compression of Floating Point Numbers on Graphical Processing Units. *Second IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC-2012),* Waknaghat, Solan, Himachal Pradesh.
- Padyana A, Sudheer C D, Baruah P and Srinivasan A (6-8 Dec 2012) High Throughput Compression of Floating Point Numbers in Graphical Processing Units. *Second IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC-2012),* Waknaghat, Solan, Himachal Pradesh. IEEE Catalogue number: CFP1234K-ART; ISBN: 978-1-4673-2925-5.
- Sudheer C D, Srinivasan A (18-21 Dec 2012) Optimization of the Hop-Byte Metric for Effective Topology Aware Mapping. *Annual IEEE International Conference on High Performance Computing (HiPC)*, 2012, Pune.
- Sai Ram V, Rao M S, Khalandhar G D, Srikanth L, Baruah P K and Sarma R R (18-21 Dec 2012) A Computationally Efficient Parallel Kernel Regression for Image Reconstruction. *Annual IEEE International Conference on High Performance Computing (HiPC)*, 2012, Pune, Maharashtra.
- Prakash A, Majet D, Balasubramanian S, Baruah P K (18-21 Dec 2012) Parallel Cosegmentation via Submodular Optimization on Anisotropic Diffusion. Student Symposium Section, *Annual IEEE International Conference on High Performance Computing (HiPC)*, 2012, Pune, Maharashtra.





HOLMARC



COURSES OFFERED

Undergraduate	B.Sc. (Hons.) in Phy	B.Sc. (Hons.) in Physics	
Postgraduate		M.Sc. Physics with specialization in either: (a) Photonics (b) Nuclear Physics, or (c) Electronics	
M.Sc. Nanoscience and Nar		and Nanotechnology	
Professional	M.Tech. in Applied	M.Tech. in Applied Optics	
Research	M.Phil.	Ph.D.	

Teaching Faculty

Head of Department: Dr. S Siva Sankara Sai

Name	Designation	Qualification
Prof. K Venkataramaniah	Professor (Hon.)	M.Sc., Ph.D.
Prof. Debendranath Sahoo	Professor (Hon.)	M.Sc., Ph.D.
Dr. (Mrs.) Dwaraka Rani Rao	Professor (Hon.)	M.Sc., M.Phil., Ph.D.
Dr. S Siva Sankara Sai	Associate Professor	M.Sc., Ph.D.
Dr. K S Umesh	Associate Professor	M.Sc., Ph.D.
Sri Rajkumar Jain	Associate Professor	M.Sc.
Dr. (Miss) Deepa Seetharaman	Asst. Professor	M.Sc., Ph.D.
Dr. Gowrishankar R	Asst. Professor	M.Sc., Ph.D.
Dr. K Vijay Sai	Asst. Professor	M.Sc., Ph.D.
Mrs. C Prathibha*	Asst. Professor	M.Sc., B.Ed., M.Phil.
Dr. V Sai Muthukumar	Asst. Professor	M.Sc., M.Phil., Ph.D.
Sri Denny Melkay M George	Asst. Professor	M.Sc., M.Tech.
Sri Muralikrishna Molli*	Asst. Professor	M.Sc.
Dr. R Dharmaraj	Asst. Professor	M.Sc., M.Phil., Ph.D.
Dr. Shailesh Srivatsava	Asst. Professor	M.Sc., Ph.D.





Prof. M Mukunda Rao	Adjunct Faculty	M.Sc., Ph.D.
Dr. (Mrs.) Tanu Rattan	Associate Professor (Part-time)	M.Sc., Ph.D.
Ms. V Subhashini	Part-time Faculty	B.Sc., MCA

^{*} also pursuing Doctoral Research

Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Prof. P C Sood	Dept. of Physics, Benaras Hindu University, Varanasi	Research guidance to Research Scholars of the Dept.	Academic Year 2012/13
Dr. Ramesh Sharma	Dept. of Mathematics, University of New Haven, USA	Tensor Analysis	15 Jun to 12 Aug 2012
	Software/Technology	Core Java Programmes	9, 16, 23, 30 Jun 2012, 7, 14, 21, 28 Jul 2012, 4, 11, 18, 25 Aug 2012, 1, 8, 15, 22, 29 Sep 2012
Sri M Srinivasan Prof	Professional and Industry Consultant	Java programming and guidance to M.Tech. Students 16, 17, 29-30 Nov 2012, 7-8, 14 15, 21-22 Dec 2012, 18-19, 25-18 Jan 2013, 1-2, 15-16 Feb 2013, 9, 16 Mar 2013.	16, 17, 29-30 Nov 2012, 7-8, 14- 15, 21-22 Dec 2012, 18-19, 25-26 Jan 2013, 1-2, 15-16 Feb 2013, 3, 9, 16 Mar 2013.
Senior Engineering Manager	Lectures in Elective course: Signal processing to I M.Tech. students	15-16, 22, 23, 28-29 Jun 2012, 6-7, 13, 14, 20-21 Jul 2012, 3-4, 10, 11, 17-18 Aug 2012, 7-8, 14, 15, 21, 22, 28-29 Sep 2012	
Sri S Sivaramakrishnan	Analog Devices India Pvt. Ltd. (ADI), Bangalore	Lectures for I M.Tech. (Applied Optics) students on topic Digital Communication course	17, 26-27 Nov 2012 1, 7-8, 14-15, 22 Dec 2012, 19, 26 Jan 2013, 2, 9, 16, 23 Feb 2013, 2, 16, 23 Mar 2013.

Prof. Krishna M Sivalingam	Dept. of Computer Science and Engineering, Indian Institute of Technology, Chennai	Research discussions with faculty and lectures in Computer Network course for I M.Tech. students	19 Jun to 1 Jul 2012
Prof. Jyoti Dhar	Head, Dept. of Physics, Shoolini	Lectures on Simulations in Nanoscience – Seista software – Part -I	27 Jun to 10 Jul 2012
Sharma	University, Solan, Himachal Pradesh	Lectures on Simulations in Nanoscience – Seista software – Part II	13-17 Nov 2012
Prof. K N Sharma	Principal, DM College of Science, Manipur	Lectures on Nanophotonics & Nanoscience	5 Jul to 3 Sep 2012
Dr. S Balasubramanian	Lucent Technologies, Holmdel, New Jersey, USA	Delivered lectures on Computer Networks	9-28 Jul 2012
Sri Bhaskar Bulusu	Enterprise Security Team, Reliance ADA Group, Mumbai	Lectures on Network Security	13-14 July 2012, 3-4, 17-18, 30- 31 Aug 2012, 7-8 Sep 2012
Dr. M Sainath	Director, Research Programs, Mahaveer Institute of Science and Technologies, Hyderabad	NMR Spectroscopy	27-29 Aug 2012
Sri Prabhakar Yellai	CISCO Systems, Bangalore	Latest trends in Optical Networking for M.Tech. students	1-2 Sep 2012
Ms. V Subhashini	Head, Dept. of Physics, Sai Maheswara Degree College, Anantapur and Part-time faculty, SSSIHL	Microprocessor Lab and Project Work for III B. Sc. (Hons.) Physics students	10 Oct 2012 to 31 Mar 2013
Prof. Sundaresan	Professor Emeritus, Dept. of Physics, Carleton University, Canada	Research discussions with students and faculty and teach topics in Statistical Physics course.	16 Nov 2012 to 10 Mar 2013
Prof. D V G L N Rao	Dept. of Physics, University of Massachusetts Boston, Boston, USA	Research discussions with M.Sc. students and faculty, and lecture on Trends in Bio-Photonics Research.	16-20 Jan 2013
Dr. M Narayan Murthy	Professor in Physics, National Institution of Science and Technology, Berhampur, Odisha	Lectures on Semiconductor Physics and Devices	27 Jan to 13 Feb 2013

WORKSHOPS & CONFERENCES CONDUCTED

National Conference

Title: National Conference on Networking and Communication

Dates: 15-16 Mar 2013

Venue: Multimedia Learning Centre, SSSIHL, Prasanthi Nilayam Campus

Keynote Address:

Prof. Krishna M Sivalingam, Department of CSE, IIT Madras, Chennai.

Theme of the Conference

This was a national conference that addressed the advances in Networking and Communications systems. The objective of the conference was to create a gathering of experts from industry and academia, for the exchange of ideas and thus bridging the gap between industrial requirements and academic interests. This was stimulated through talks by invited speakers and panel discussions.

The prime areas covered in this conference include:

- **Optical Networks**
- Mobile Networks
- **Network Security**

List of External Speakers / Invited guests:

Name	Designation	Topic
Mr. C Vanniarajan	Deputy General Manager, HCL Technologies, Chennai	Design of Tactical Networks (A centrality based approach)
Mr. Bhaskar Bulusu	Reliance ADA Group, Mumbai	Regulatory Requirements that a Telecom Service Provider needs to comply
Mr. Daaman Hejmadi	Vice President of Engineering, Qualcomm, Bangalore	Combined presentation on Technology Convergence-
Mr. Sachidanand Varadarajan	Senior Director of Engineering, Qualcomm, Bangalore	advent of the smart phone
Mr. Sarath Kumar	Head, Product Management function, Tejas Networks, Bangalore	Infrastructure SDN: Bringing OTTS and Telecom SPs together
Mr. Vikas Dhingra	Light Radio System Architect, Alcatel Lucent, Bangalore	Advances in Wireless Communications
Mr. G Vigneswaran & Mr. Ramalingam	IT centre, SSSCT, Prasanthi Nilayam	Combined presentation on SAI-WAN-Connecting Sai
Mrs. Visalakshi Rawat & Mr. Chella Chalapathi	Tata Communications, Hyderabad	Institutions
Mr. Vimal Kumar	Product Line Manager, Fixed Networks Division Alcatel Lucent, Chennai	GPON based Fiber Broadband Networks – An Overview





Mr. Ramyang Pandya	Vice President, Service Management-Tata Communications, Mumbai	Data Centre Networks
Dr. T Ashok Kumar	Technical Project Lead, Huawei, Bangalore	WAN optimization
Mr. G Prasanna	Product Manager, Cisco Systems, Bangalore	Cisco's optical product portfolio and its vision
Sri Devi Sudheer Kumar C	Asst. Professor, DMACS, SSSIHL	Network topologies and routing methods used in latest supercomputers and multi-core processors
Mr. Y Prabhakara	Overall lead for the Service Enablement architecture and development, Cisco Systems, Bangalore	SDN: Technology, Interfaces and Usecases
Mr. Pradip Kumar Mandal	Additional Vice-President and head-Presales & Solutions Design & delivery, Tata Teleservices, Hyderabad	Mobile Market Trends in India

Refresher Course

Title: Science Academies' XLVII Refresher Course in Experimental Physics

Dates: 2-18 Apr 2013

Venue: Department of Physics, SSSIHL, Anantapur Campus

Inaugural Address: Prof. J Shashidhara Prasad, Vice-Chancellor, SSSIHL

Theme of the Refresher Course:

The Refresher Course in Experimental Physics was held exclusively for Undergraduate and Postgraduate women Physics teachers. The Refresher course was jointly sponsored by SSSIHL and three science academies — The Indian Academy of Sciences, Bangalore, The Indian National Science Academy, New Delhi, the National Academy of Sciences, India, Allahabad, and SSSIHL. Sixteen women physics teachers from local as well as outstation colleges participated in the course and successfully completed it.

The course aimed to familiarize the participant teachers with a set of twenty-five new experiments that were developed as a low cost kit by the Indian Academy of Sciences to cater to the B.Sc. (Physics) and M.Sc. (Physics) laboratory courses. Through lectures, discussions and laboratory sessions, the course helped the participants to hone their skills in experimental physics.





Prof. R Srinivasan, (Former Professor of Physics, IIT Madras; Former Director of UGC-DAE CSR, Indore and Fellow of the Indian Academy of Sciences, Bangalore) who has the distinction of being one of the pioneers of refresher courses in experimental physics in India and who is instrumental in developing the experiments kit for the Indian Academy of Sciences, was the Course Director. At the end of the course, the Science Academies gifted the Department experiments kit worth ₹65,000.

This is the first time that the Dept. of Physics has conducted a 15-day refresher course in any subject for the benefit of teachers from other universities/colleges.

List of Resource Persons

Lectures and Laboratory sessions

- Prof. R Srinivasan (Course Director), Fellow of the Indian Academy of Sciences
- Dr. T G Ramesh, Honorary Scientist, National Aeronautical Laboratories, Bangalore
- Dr. T Pramila, Associate Professor, Dept. of Physics, Christ Church College, Kanpur
- Dr. Deepa Seetharaman, (Course Coordinator), Assistant Professor, Dept. of Physics, SSSIHL
- Mrs. C Prathibha, Asst. Professor, Dept. of Physics, SSSIHL
- Ms. G V K Gayatri, Ravenshaw University, Cuttack, Odisha

Special Lectures

- Fundamental Constants in Physics by Dr. (Mrs.) Dwaraka Rani Rao, Professor (Hon.), Dept. of Physics, and Director, SSSIHL, Anantapur Campus
- Climate Change and its Impact on Public Health and Agriculture by Prof. R Rama Krishna Reddy, Professor Emeritus, Dept. of Physics, Sri Krishna Devaraya University, Anantapur
- Lasers and their Applications by Dr. S Siva Sankara Sai, Associate Professor and Head, Department of Physics, SSSIHL
- Nano Medicine What? Why? How? by Dr. S. Sivasubramaniyan, Head of the Dept. of Nuclear Medicine, Radiation Safety Officer, Sri Sathya Sai Institute of Higher Medical Sciences, Puttaparthi

96

Departmental Colloquium

The Department of Physics holds colloquium talks by students, teachers, research scholars and external experts in the frontiers of Physics and Nanoscience every Friday. The details of the colloquium held during 2012-2013 are provided below.

Date	Presenter	Designation	Topic
15 Jun 2012			Marvels of Nature – 6*
22 Jun 2012			Marvels of Nature – 7*
29 Jun 2012			Marvels of Nature – 8*
06 Jul 2012	Prof. G Venkataraman	Director (Retd.) Anurag, DST & Former Vice-Chancellor, SSSIHL	Marvels of Nature – 9*
13 Jul 2012		Torrier vice-charicellor, 333ITE	Marvels of Nature – 10*
20 Jul 2012			Marvels of Nature – 11*
02 Aug 2012			Marvels of Nature – 12*
01 Sep 2012	Sri Sai Krishna	Analog Devices India, Bangalore	Trends in VLSI & Back-end IC Development
08 Sep 2012	Dr. T Thayaparan	Defence Research and Development Canada (DRDC), Canada	Fourier Transforms for Radar Applications
01 Feb 2013	Prof. G Venkataraman	Director (Retd.) Anurag, DST & Former VC of SSSIHL	Marvels of Nature – 13*
14 Feb 2013	M K Sundaresan	Carleton University, Canada	Divine Grace

^{*} The continuation of the series of lectures by Prof. G Venkataraman seeks to offer a broad overview of the progress of science in modern times, especially in the twentieth century. The Objective of these lectures is to help to appreciate better the nuances of science, create a climate for an inter-disciplinary culture and help shape some of our research programs.

Workshops Attended

- Mrs. C Prathibha attended the Science Academies' XLIII Refresher Course in Experimental Physics, Indian Academy of Sciences, Bangalore, 15-30 Nov 2012.
- Sri Denny Melkay M George attended the 5th Bangalore Nano Conference, Vision Group on Science and Technology, Bangalore, 5-7 Dec 2012.
- Sri Denny Melkay M George attended the Science Academies' Refresher Course in Statistical Physics, Nehru Science and Arts College, Kanhangad, Kerala, 8-21 May 2013.
- Dr. R Dharmaraj attended the 5th Bangalore Nano Conference, organized by Vision Group of Science and Technology, Department of Information technology, Biotechnology and Science & technology, Govt. of Karnataka, Bangalore, 5-7 Dec 2012.
- Dr. Gowrishankar R attended a BRNS Workshop on Evaluation of Nuclear Structure and Decay Data (ENSDD 2012) at Variable Energy Cyclotron Centre (VECC), Kolkata, 26-29 Nov 2012.
- Dr. K Vijay Sai attended a BRNS Workshop on Evaluation of Nuclear Structure and Decay Data (ENSDD 2012), Variable Energy Cyclotron Centre (VECC), Kolkata, 26-29 Nov 2012.
- Dr. V Sai Muthukumar attended a Workshop on Nanosurf AFM/STM for hands on training on Nano lithography, highresolution image, spectroscopy and electrical measurements by using AFM & STM, Bangalore, 31 Jan to 1 Feb 2013.
- Dr. V Sai Muthukumar was one of three faculty members (and one Doctoral Research Scholar) selected for and participated in Fifth Science Conclave - An Interaction Meet of Young Scientists/Students/Teachers with Nobel Laureates/Eminent Scientists organized by MHRD, Govt. of India at IIIT, Allahabad, Dec 2012.

Sri Muralikrishna Molli attended a Workshop on Nanosurf AFM/STM for hands on training on Nano lithography, highresolution image, spectroscopy and electrical measurements by using AFM & STM, Bangalore, 31 Jan to 1 Feb 2013.

Other Information

Industrial Tour for M.Tech. (Applied Optics) students

A five-day Industrial tour to Bangalore was organized by the Department of Physics for all the I M.Tech. (Applied Optics) students, 16-20 April 2013. The objective of the Industrial Visit is to enable the students to see relevant industries and thus expose them to different/emerging technologies. These visits also give them an opportunity to interact with technical experts, and carry out their final year projects in the areas of current interest to the Industry. It is also aimed at building a bridge between academia and industry.

The companies/Institutions visited included Cisco Systems (India) Pvt Ltd., Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS), TVS Motors, ARM Embedded Technologies Pvt Ltd., Honeywell Technology Solutions Lab (HTSL), Tejas Networks Ltd., Alcatel Lucent Technology India Pvt. Ltd., and Akshya Patra.

SPECIAL ACHIEVEMENTS

Prof. K Venkataramaniah

Invited by University of Giessen, Germany to participate in the collaborative research project on Atomic Masses, Apr-May 2013.

Dr. (Mrs.) Dwaraka Rani Rao

Served as a resource person for the Science Academies' XLVII Refresher Course in Experimental Physics, sponsored by the Indian Academy of Science, Indian National Academy of Science, National Science Academy and SSSIHL, held at the Department of Physics, SSSIHL, 2-18 Apr 2013 - Delivered an Invited talk on 'Fundamental Constants in Physics', 9 Apr 2013.

Dr. S Siva Sankara Sai

- Visited Bharath Electronics Limited (BEL), Machilipatnam for a technical discussion on Photonics Research, 2-3 Nov
- Served as a resource person for delivering a guest lecture at the Science Academies' XLVII Refresher Course in Experimental Physics, sponsored by the Indian Academy of Science, Indian National Academy of Science, National Science Academy and SSSIHL, held at the Department of Physics, SSSIHL, 2-18 Apr 2013.
- Visited S K University, Anantapur, as external end semester practical examiner, 20-21 Dec and 25-26 Apr 2013.

Dr. (Miss) Deepa Seetharaman

- Organized the Science Academies' XLVII Refresher Course in Experimental Physics, sponsored by the Indian Academy of Science, Indian National Academy of Science, National Science Academy and SSSIHL, held at the Department of Physics, SSSIHL, 2-18 Apr 2013.
- Served as a resource person for the Science Academies' Refresher Course in Experimental Physics at the Department of Physics, held at the Department of Physics, SSSIHL, 2-18 Apr 2013. Delivered four lectures during the course and supervised lab sessions on all days of the course.
- Served as a resource person for the In-house Workshop on Software Applications for Data Analysis and Research Writing, held at the SSSIHL, Anantapur Campus, 6-8 Aug 2012. Delivered three lectures during the course.

Mrs. C Prathibha

Served as a resource person for the Science Academies' Refresher Course in Experimental Physics at the Department of Physics, held at the Department of Physics, SSSIHL, 2-18 Apr 2013. Delivered four lectures during the course and supervised lab sessions on all days of the course.

Dr. Gowrishankar R

- Received the 'Sai Krishna Award for Best Teacher', SSSIHL for the academic year 2011/12, 22 Nov 2012.
- Lead contributor to the evaluation of the nuclear structure data of Bi-215, BRNS Workshop on Evaluation of Nuclear Structure and Decay Data (ENSDD 2012) at Variable Energy Cyclotron Centre (VECC), Kolkata, Dec 2012.
- Approved as an editorial member of Webmed Central (an Open Access Biomedical Publisher), June 2012. Also a reviewer for the Webmedcentral online journal.
- Invited to be a part of review panel for the journals from Frontiers Frontiers in Physics (a community-oriented open-access academic publisher).

Sri Suresh Penamati

• Received the Dr. K V Rao Research Award in Physics (for the year 2013) from Dr. K V Rao Scientific Society, Hyderabad, 13 Apr 2013.

Sri Pradyumna Mulpur

• Received 2nd Prize in the Best Poster Presentation Competition for the paper titled Detection of Cd2+ lons Using Surface Plasmon Coupled Emission on Engineered Silver-α Nano Alumina Thin Film Hybrids at the (IWNST 2013) Indo-US International Workshop on Nanosensor Science and Technology, National Institute of Science and Technology, Berhampur, 27 Feb to 1 Mar 2013.

Achievements in National level exams

Name	CSIR JRF/NET Rank*	GATE Rank**
Sri Sugeet Sunder	JRF - 144	
Sri Master Narayan	LS-520	
Sri Santana K V	LS -215	
Sri Aditya Kulkarni		619
Sri Rupesh Kumar		164

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test) | LS (Lectureship)

Special collaborations with external agencies:

Active Collaboration with SSSIHMS

- The faculty members, Prof. D Sahoo, Prof. K Venkataramaniah, Dr. S Siva Sankara Sai and Dr. K Vijay Sai are actively involved in modification of the Gamma Camera that is used in the Nuclear Medicine department of Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS) in collaboration with Dr. Siva Subramanian, Head, Nuclear Medicine, SSSIHMS, Prasanthigram.
- The Physics department has a Collaborative Research Scheme under UGC-DAE Consortium for Scientific Research (UGC-DAE CSR) with IGCAR, Kalpakkam, Tamil Nadu. The total outlay of this scheme is Rs 5.67 lakhs. Prof. K Venkataramaniah and Dr. Gowrishankar R collaborate with the group headed by Prof. B K Panigrahi of Indira Gandhi Centre for Atomic Research (IGCAR) on 'Studies on thermoelectric performance of nanostructured Bismuth Telluride and Lead Telluride Nanocomposites grown via novel solvothermal nanoplating technique'.
- The department has an ongoing collaboration for the last four years in the area of 'Nonlinear optical studies of various Nano structured materials' with Raman Research Institute (RRI), Bangalore. Dr. S Siva Sankara Sai of the Dept. of Physics has collaborated with Dr. Reji Phillip of Light & Matter Physics Group, RRI.

^{**} Graduate Aptitude Test in Engineering | All ranks are national (All India Rank)

- Prof. K Venkataramaniah, an Alexander von Humboldt fellow and a senior Professor of Physics department, visited GSI, Germany on a collaborative project on Atomic Mass evaluation, Apr-May 2013.
- Active research collaboration has been on for the past several years between Department of Physics and Kinard Laboratory of Physics at Department of Physics and Astronomy, Clemson University, SC, USA. Prof. Appa Rao's group of Clemson University collaborates with Prof K Venkataramaniah, Dr. S. Siva Sankara Sai and Dr. V Sai Muthukumar of the Department of Physics in the areas of 'Surface Plasmon Coupled Emission' (SPCE) and 'Nonlinear Optical Properties of Nano materials'.
- The Department of Physics and Dept. of Biosciences, SSSIHL have signed a Memorandum of Understanding (MOU) with Centre for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA), Bethesda, MD, USA. Prof. J. Shashidhara Prasad, Vice Chancellor, Prof. Venkataramaniah K (Dept. of Physics) and Prof. R Basavaraju & Dr. B E Pradeep (Dept. of Biosciences) are collaborating with Dr. Indira K Hewlett & Dr Mohan H of CBER of FDA in the area of 'Rapid Diagnosis of Mycobacterium tuberculosis using europium doped nanoparticles.' To get trained in the frontier areas of nanodiagnostics, a research scholar of the Physics department, Avinash Ch, will be visiting the collaborator's lab in the United States for a period of three months.
- A New Academic program M.Tech (Nuclear Medicine) is being proposed by the department in collaboration with the Dept. of Nuclear Medicine, Sri Sathya Sai Institute of Higher Medical Sciences. The required permission from Atomic Energy Regulatory Board (AERB) and Bhabha Atomic Research Centre (BARC) has been obtained. The curriculum is prepared. The course is expected to start from June 2013. The M.Tech. programme in Nuclear Medicine is designed to train qualified technologists, coupled with value based education needed by various Nuclear Medicine centres in India.

RESEARCH

Research Projects – New

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. S Siva Sankara Sai (HoD)		
DST	FIST (Fund for Improvement of Science & Teaching Infrastructure)	2012 to 2017	₹189 lakhs

Scope:

The Scheme is intended to provide basic infrastructure and enabling facilities for promoting R&D activities in new and emerging areas and attracting fresh talents in universities. The Scheme will provide optimal infrastructure facilities for post-graduate teaching and research, such as, renovation of existing laboratory space, modernization of laboratories involved in PG teaching and research, acquisition of essential equipment, networking & computational facilities including software & databases, maintenance & refurbishing of existing and new facilities. The facilities provided under the FIST Program are intended to support the efforts of faculty members in the Department.

Deliverables:

Development of state-of-the-art infrastructure for doing research in the identified thrust areas of National importance. Improved teaching at the postgraduate level due to the availability of quality equipments and research facilities.

Social Relevance:

Universities are cradles of innovation and knowledge creation. Research at universities can improve the quality of undergraduate & postgraduate education. It is a source of generating high caliber manpower and repositories of national intellectual wealth in Science & Technology (S&T) sector, which if channelized, can lead to socioeconomic development. Fund for Improvement of S&T Infrastructure in Higher Educational Institutions (FIST) by DST aims at rebuilding the Science & Technology infrastructure in the country.

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Prof. K Venkataramaniah Dr. K Vijay Sai		
DAE-BRNS	Modification of a planar gamma camera and its upgradation for supporting education, training and research in medical imaging	2012 to 2015	₹70 lakhs

Scope

Design / modification of the existing Gamma Camera at the Sri Sathya Sai Institute of Higher Medical Science, Prasanthigram for use in Nuclear Medicine Department.

Deliverables:

• A Gamma Camera used in Thyroid uptake system

Social Relevance:

Contribution to the healthcare facilities at the Sri Sathya Sai Institute of Higher Medical Sciences, Prasanthigram.

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
DST	Dr. S Siva Sankara Sai Dr. V Sai Muthukumar Design and Development of Multimodal Optical Microscope using Fourier Optical Image Processing	2012 to 2014	₹29.1 lakhs

Scope:

Optical microscopic investigations have become an essential tool in routine clinical pathology and related research work. Optical Fourier transformation based tuning of spatial frequencies of two-dimensional images has been used in edge enhancement, character recognition, and image correlation. This technique can be used for processing medical images like mammograms, hair-line fractures, etc. Incorporating Phase contrasting optically passive components provides both structural and functional information used for studying live cell dynamics. Addition of fluorescence and edge enhancement filters further improves the image quality in the above module making it highly suitable for clinical pathology, developmental biology, and even study of toxicological effects. The proposed optical microscope encompasses multiple functionalities like Bright Field imaging, Phase Contrasting, Edge enhancement and Fluorescence imaging provided on a single platform. The primary necessity for developing such a device arises from the growing need for affordable diagnostic tools in developing nations.

Deliverables:

• Design and Development of low cost Multimodal Optical Microscope (MOM) using Fourier optical processing technique and study its use in the discipline of developmental biology and pathology departments in the hospitals.

Social Relevance:

Low cost MOM using Fourier optical microscope is expected to have impact as an effective diagnosis tool in pathology department of hospitals and also as a helpful device for interpretation by the developmental biologists. The Areas of study include cellular adaptation to injury, necrosis, and inflammation and wound healing. It will also enable Biology labs in the colleges using various types of microscope techniques.

Research Projects – Ongoing

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Prof. K Venkataramaniah Dr. S Siva Sankara Sai		
DST	Postgraduate Teaching Programme - (M.Sc.) in Nanoscience and Nanotechnology	2012 to 2015	₹162 lakhs

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
VGST, DST & Govt. of	Dr. K S Umesh Sri Rajkumar Jain	2012 to 2015	₹30 lakhs
Karnataka	Research-based reforms in Physics Instruction: Teaching and Laboratory		

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Prof. K Venkataramaniah		
DRDO	Real time Image enhancement and feature extraction of moving targets in ISAR	2012 to 2015	₹24.84 lakhs

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
DAE-BRNS	Prof. K Venkataramaniah Dr. Gowrishankar R	2012 to 2014	₹24.49 lakhs
	Studies on Metal-Semiconductor nanocomposites as high performance thermoelectric materials		





Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Prof. K Venkataramaniah Dr. Gowrishankar R		
UGC-DAE-CSR	Studies on thermoelectric performance of nanostructured Bismuth Telluride and Lead Telluride Nanocomposites grown via novel solvothermal nanoplating technique	2011 to 2014	₹8.13 lakhs

Completed Projects

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Prof. K Venkataramaniah Dr. S Siva Sankara Sai		
UGC	UGC Innovative Teaching Program - Interdisciplinary Programme: Nanoscience and Nanotechnology in M.Sc. (Physics) Curriculum	2007 to 2012	₹34 lakhs

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
DST	Dr. S Siva Sankara Sai Dr. Gowrishankar R Study of Optical Power-limiting Characteristics of Bacteriorhodophsin for the Design of Detector protection Systems	2010-2012	₹27.2 lakhs





Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Sri Muralikrishna Molli	Nanostructured Thermoelectric Materials: synthesis, spectroscopic and thermoelectric properties	Prof. K Venkataramaniah
Sri Benoy Anand	Nonlinear optical properties and ultrafast dynamics of nanostructured materials	Dr. S Siva Sankara Sai & Dr. Reji Philip, Raman Research Institute, Bangalore
Sri Suresh Penamati	Image enhancement, feature extraction and motion compensation using time frequency analysis	Prof. K Venkataramaniah & Dr. Thayananthan Thayaparan, Defence Research and Development Canada (DRDC), Canada
Sri Ch L Adinarayana Avinash	Development of Nanophosphor based Immunoassays for ultrasensitive, specific, rapid and robust diagnosis of infectious diseases	Prof. K Venkataramaniah
Sri Sandeep Patnaik	Nanoformulations for improved therapeutic efficacy of poorly soluble drugs	Prof. K Venkataramaniah
Sri Sai Kiran Aditha	Studies on CZTS: a potential absorber material for sustainable photovoltaics	Prof. K Venkataramaniah
Sri Pradyumna Mulpur	Surface Plasmon Coupled Emission Studies on Engineered Thin Film Hybrids of Carbon Nano Allotropes on silver towards Bio-Sensing	Prof. K Venkataramaniah & Prof. Apparao M Rao, R A Bowen Professor of Physics, Clemson University
Mrs C Prathibha	Studies on Novel Nanocomposites as very promising Fluoride Adsorbents for full-scale drinking water treatment	Prof. K Venkataramaniah

M.Phil. Scholars

Name	Area of Research	Research Supervisor(s)
Avinash KS	Simulations in Nuclear Medicine Instrumentation	Dr. K Vijay Sai (Supervisor) & Prof. Debendranath Sahoo (Co-Supervisor)

Projects & Dissertations Completed

M. Tech. Applied Optics

Name	Project Title	Supervisor
G Bhanu Prakash	Implementation of DBA algorithms for 10g-EOPN	Dr. S Siva Sankara Sai & Prof. Krishna Sivalingam, IIT, Madras
Gummaluri Venkata Sivasree	Design and analysis of efficient lighting systems for the automotive industry	Dr. S Siva Sankara Sai
K N Kartheek	Dense wavelength division multiplexing (DWDM) network design	Dr. Gowrishankar R & Mr. Sai Kishore, Cisco, Bangalore
Murali Ravi	Simulative design of data acquisition system for gamma camera	Dr. S Siva Sankara Sai
Satyabrata Mohanty	A simulation study on interference in 3G/4G wireless networks	Dr. S Siva Sankara Sai & Dr. Sai Shankar N, Tensorcom, USA
Satya Prakash Rout	Study and emulation of 10G-EOPN with triple play	Dr. S Siva Sankara Sai & Prof. Krishna Sivalingam, IIT, Madras
Sowmendran P	Design and development of Checkpoint Service For Application in High Available Systems	Dr. S Siva Sankara Sai & Mr. Y Prabhakara, Cisco, Bangalore
Sumukh Nandan R	Integration of Multi Router Traffic Grapher (MRTG) with apache tomcat web server as a GUI tool for monitoring of the network interfaces	Dr. Gowrishankar R & Mr. Vikram Seshasai, Tejas Networks, Bangalore

M.Sc. (Physics)

Name	Project Title	Supervisor
Aditya Kulkarni	Raman Spectroscopy of Carbon Nanostructures Organic Chromophores and Biological Molecules	Dr. V Sai Muthukumar
B Santhosh Kumar	Phase Unwrapping of an Interferogram using Computational Adaptive Optics	Dr. S Siva Sankara Sai & Dr.Raghavendra Prasad, IIAP, Bangalore
Boggarapu RaviKanth	Interfacing Keithley 2400 Sourcemeter and 2182A Nanovoltmeter with lab View For Van Der Pauw Resistivity Measurements	Mr. M Muralikrishna
Kamalakanta Jena	Study of Long-Lived Isomers In Deformed Nuclei	Prof. P C Sood

Master Narayan	Interfacing and Integrating Energy Ratio meter with the existing Z-Scan setup	Dr. Gowrishankar R
Osho Sai	Fourier Optical Image Processing for Multimodal Imaging Applications	Dr. V Sai Muthukumar
Pusala Aditya	Ab-Initio Computational Study of Electronic Structural Properties of Novel Organic Molecules	Dr. V Sai Muthukumar
PVN M Kaushik	Optical Power Limiting with Bacteriorhodopsin Films	Dr. S Siva Sankara Sai
Rupesh Kumar	Simulation of The Response Function of Nai(Ti) Detector using Monte Carlo Technique	Prof. D Sahoo
S Sugeet	Level Structures in 99 Tc from the Beta Decay 99 Mo	Dr. K Vijay Sai
Sanathana K V	Design and analysis of Efficient Illustration Systems for Indoor and automobile application	Dr. S Siva Sankara Sai
T Ashish	Internal Conversion Coefficient Measurements in the decay of 192 Ir	Prof. K Venkataramaniah
Thokchom Deepakbhushan	Nonlinear Optical Studies on Novel Carbon Nanostructures	Dr. Gowrishankar R

M.Sc. (Nanoscience & Nanotechnology)

Name	Project Title	Supervisor
Golwalker Sangisetty	Nano-formulation of Diclofenac Potassium tablets with casein for controlled release	Prof. K Venkataramaniah & Dr. (Mrs.) Tanu Rattan
Advala Jagadish	Synthesis of pure and crystalline nano V ₂ O ₅ for enhanced TCR in Bolometer	Prof. K Venkataramaniah & Dr. (Mrs.) Tanu Rattan
Ivaturi Siva Ramakoti	Preparation of Cu, Zn, Sn, S thin films for Photovoltaic applications	Prof. K Venkataramaniah & Dr. (Mrs.) Tanu Rattan
Sai Siva Narayan	Single step synthesis of nanosilica using silicone oil	Prof. K Venkataramaniah & Dr. (Mrs.) Tanu Rattan

B.Sc. (Physics) Final Year

Name	Project Title	Supervisor
Amritha Krishna S	Adaptive optics and its applications	Dr. S Siva Sankara Sai
J Adithya and Saiprem Shaji	Optical image processing & Coherence properties of Na source	Dr. K S Umesh
Hemkumar S and K Kaushik	Labview Programming, Automation & Magnetostriction	Dr. K S Umesh
Kamal Saurabh, Devarun dutta	Optical activity, Faraday effect & Rotational Dynamics	Dr. K S Umesh
K S Adithya and G V Sai Manohar	Electrostatic/EM demonstrations	Mr. Rajkumar Jain
T S S Babu and B V Avinash	Frequency Counter for RF Oscillator	Mr. S Nanjundan

N Ganesh and Ruman Dutta	Study of Transducers	Mr. S Nanjundan
Gaurav Verma and Y Ravishankar	Software Simulations	Mr. Denny Melkay
T G Shashidhar and Prakrit Kamra	Nuclear radiation detectors	Mr. Denny Melkay
G Sai Priya, D S Surya Bindu and V M M Saipavitra	Study of Gamma Spectrum of 75Se decaying into 75As	Dr. (Mrs.) Dwaraka Rani Rao
T Sravani, R Pavithra and A K S S V Priyanka	Setting of Constant Deviation Spectrograph and Study on Various Spectra	Mrs. C Prathibha
P Sai Shruti Rao and Indira Mallay	Hostel Management System	Mrs. V Subhashini

RESEARCH PUBLICATIONS

Journal Papers

- Anand B, Molli M, Aditha S, Rattan T M, Siva Sankara Sai S, and Venkataramaniah K (2013) Excited state assisted three-photon absorption based optical limiting in Nanocrystalline Cu2Se and FeSe2. *Optics Communications*, 304, 75-79.
- Muralikrishna M, Sowmendran P, Avinash Ch, Saikiran A, Sai Muthukumar V, Rattan T M, and Venkataramaniah K (2012) Solvothermal synthesis and study of nonlinear optical properties of Nanocrystalline Thallium doped Bismuth Telluride. *Journal of Solid State Chemistry*, 189, 85-89.
- Pradyumna M, Podila R, Lingam K, Vemula S K, Ramamurthy S and Venkataramaniah K (2013) Amplification of Surface Plasmon Coupled Emission from Graphene-Ag Hybrid Films. *The Journal of Physical Chemistry C*, Accepted for publication.
- Suresh P, Thayaparan T, Obulesu T and Venkataramaniah K (2012) Extracting micro-Doppler radar signatures from rotating targets using Fourier-Bessel Transform and Time-Frequency analysis. *IEEE Transactions on Geoscience and Remote Sensing (TGRS-2012-00910.R2)*, Accepted for publication.
- Pfeiffer B, Venkataramaniah K, Cjock U and Scheidenberger C (2013) Atomic Mass Compilation. *Atomic Data and Nuclear Data Tables*, Accepted for publication.
- Vishwanathan A S, Rao G and Siva Sankara Sai S (2012) A novel minimally invasive method for monitoring oxygen in microbial fuel cells. *Biotechnology Letters*, 35, 553-558.
- Rajashekar B, Sowmendran P, Siva Sankara Sai S, and Rao N G (2012) Synthesis, characterization and two-photon absorption based broadband optical limiting in diarylideneacetone derivative. *Journal of Photochemistry and Photobiology A: Chemistry*, 238, 20-23.
- Anand B, Roy N, Siva Sankara Sai S and Philip R (2013) Spectral Dispersion of ultrafast optical limiting in Coumarin-120 by white light continuum Z-scan. *Applied Physics Letters*, 102, 203302.
- Egblewogbe M, Anand B, Podila R, Philip R, Siva Sankara Sai S and Rao A M, (2012) Defect induced changes in the linear and non-linear optical properties of ZnO nanotetrapods. *Materials Express*, 2, 351-356.
- Anand B, Kaniyoor A, Siva Sankara Sai S, Philip R and Ramaprabhu S (2013) Enhanced optical limiting in functionalized hydrogen exfoliated graphene and its metal hybrids. *Journal of Materials Chemistry C*, 1, 2773-2780.
- Deepa S, Vijay Sai K, Gowrishankar R and Venkataramaniah K (2012) Conversion electron measurements and determination of rotational parameters in 177Lu and 177Hf. *The European Physical Journal A (2012 Impact Factor is 2.043)*, 48(9), 126.
- Patnaik S, Molli M, Gowrishankar R, Rattan T M, and Venkataramaniah K (2012) Dissolution Enhancement in Nano/ Micro-Sized Dispersions of Piroxicam with the Novel Polymer Soluplus® and Polyvinyl Pyrrolidone. Research & Reviews: A Journal of Pharmaceutical Science, 2(1).

- Sood P C, Gowrishankar R and Vijay Sai K (2012) Level structures in odd-odd nucleus 154Pm. Journal of Physics G, 39(095107).
- Sood P C, Sainath M, Gowrishankar R and Singh B (2012) Level Structures in 156Pm from 156Nd beta-decay. European Physics Journal, A48 (138).
- Anand B, Podila R, Ayala P, Oliveira L, Philip R, Sai S S S, Zakhidov A A and Rao A M (2013) Nonlinear optical properties of boron doped single-walled carbon nanotubes. Nanoscale, 5, 7271-7276.

Conference Papers

- Patnaik S, Kumar L V, Sai Praneeth T, Pandey R K, Venkataramaniah K (2012) Synthesis of Pd-PANI Nanocomposite films on Gold and Graphite Electrode and its applications for Ethanol and Formic Acid Fuel Cells. National Seminar on Advances in Polymeric Materials, APM-2012, Bangalore, Proceedings of National Seminar on Advances in Polymeric Materials, APM-2012.
- Pradyumna M, Vemula S K, Lingam K, Srinivasan V, Sai Sathish R, Venkataramaniah K and Rao A M (9-12 Dec 2012) Ultra-Amplification of Surface Plasmon Coupled Emission Using an Engineered Graphene Silver Thin Film Hybrid. International Conference on Fiber Optics and Photonics, IIT Madras, OSA proceedings dx.doi.org/10.1364/ PHOTONICS.2012.MPo.41.
- Deepa S, Vijay Sai K and Venkataramaniah K (3-7 Dec 2012) Mixing ratios and rotational parameters in 177 Lu. DAE Symposium on Nuclear Physics, Department of Physics and Astrophysics, University of Delhi, Proceedings of the DAE Symp. on Nucl. Phys., 57 (2012), p.252.
- Deepa S, Vijay Sai K, Sugeeth S and Venkataramaniah K (3-7 Dec 2012) Observation of the high spin 7/2+[404] rotational band in the decay spectroscopy of ¹⁵³Eu. DAE Symposium on Nuclear Physics, Department of Physics and Astrophysics, University of Delhi. Proceedings of the DAE Symp. on Nucl. Phys., 57 (2012), p.254.
- Deepa S, Vijay Sai K, Ashish T, Kailas S and Venkataramaniah K (3-7 Dec 2012) Conversion of the high multipole transition between the 23/2- 3qp state and the 17/2+ rotational state in ¹⁷⁷Lu. DAE Symposium on Nuclear Physics, Department of Physics and Astrophysics, University of Delhi. Proc. DAE Symp. on Nucl. Phys. 57 (2012), p.256.
- Pfeiffer B, Venkataramaniah K, Vijay Sai K, Cjock U and Scheidenberger C (3-7 Dec 2012) Precision and accuracy of the experimental data on Atomic Masses. DAE Symposium on Nuclear Physics, New Delhi, Proc. DAE Symp. on Nucl. Phys. 57 (2012) p.382.
- Vijay Sai K, Deepa S, Madhusudan K, Ashish T and Venkataramaniah K (3-7 Dec 2012) M1-E2 Mixing ratios and B(E2) values for transitions in 131Xe. DAE Symposium on Nuclear Physics, Department of Physics and Astrophysics, University of Delhi, Delhi, Proc. DAE Symp. on Nucl. Phys. 57 (2012) p.384.
- Rajashekar B, Gowrishankar R and Siva Sankara Sai S (Dec 2012) Novel azo derivative for optical power limiting application in both CW and ultrafast regime. International Conference on Fiber Optics and Photonics, IIT Madras, Chennai.
- Aditya P, Sai Muthukumar V, Kumar H, Kumar S, Rajashekar, Molli M, Siva Kumar B, Siva Sankara Sai S and Rao G N (1 Feb 2013) Novel D-Π-A-Π-D type Organic Chromophores For Second Harmonic Generation And Multi-Photon Absorption Applications. International Conference on Recent Trends in Applied Physics and Material Science, RAM-2013, Bikaner, Rajasthan, AIP Conf. Proc. 1536, pp.751-752; doi:http://dx.doi.org/10.1063/1.4810445.
- Anand B, Philip R, Rao A M and Siva Sankara Sai S (1-2 Feb 2013) Nonlinear optical properties of Nitrogen doped bi-layer graphene. International Conference on Recent Trends in Applied Physics & Material Science (RAM-2013), Govt. College of Engineering & Technology, Bikaner, Rajasthan.
- Anand B, Philip R, Rao A M and Siva Sankara Sai S (9-12 Dec 2012) Effects of Substitutional Doping on the Nonlinear Optical Properties of Single-walled Carbon Nanotubes. The International Conference on Fiber Optics and Photonics (PHOTONICS-2012), IIT Madras, Chennai.
- Gowrishankar R, Kamalakanta J and Sood P C (Dec 2012) Distinctive features of isomers in transuranic actinides. DAE BRNS Symposium on Nuclear Physics, Department of Physics and Astrophysics, University of Delhi, Proc. DAE Symp. on Nucl. Phys. 57 (2012) pp.330-331.





- Gowrishankar R, Kamalakanta J and Sood P C (Dec 2012) Multiparticle high-K structures in odd-A rare earth nuclei. *DAE BRNS Symposium on Nuclear Physics*, Department of Physics and Astrophysics, University of Delhi, Proc. DAE Symp. on Nucl. Phys, 57 (2012) 332-333.
- Molli Muralikrishna, Salian G D, Aditha S K, Muthukumar V S, Rattan T M, Amrithapandian S, Panigrahi B K and Venkataramaniah K (20-22 Dec 2011) Vanadium pentoxide nanoparticles based saturable absorbers. *Functional Materials: Proceedings of the International Workshop on Functional Materials (IWFM-2011)*, Berhampur, Odisha, India. AIP Conf. Proc. 1461, pp.233-236; doi:http://dx.doi.org/10.1063/1.4736894.
- Aditya P, Sai Muthukumar V, Sharma J D and Sundaresan C N (1 Feb 2013) Ab Initio Computational Study of 2-Thioureidobenzoxazole Molecule. *International Conference on Recent Trends in Applied Physics and Material Science, RAM-2013*, Bikaner, Rajasthan, Citation: AIP Conf. Proc. 1536, 415 (2013); doi: 10.1063/1.4810277.
- Anand B, Podila R, Lingam K, Philip R and Rao A M (18-22 Mar 2013) All-carbon optical diode. *APS March Meeting-2013*, Maryland, USA.
- Suresh P, Thayaparan T and Venkataramaniah K (7-8 Feb 2013) Separation of nonstationary signals using Fourier Bessel, fractional Fourier and time-frequency analysis. *International Conference on Signal Processing Image Processing & Pattern Recognition (ICSIPR)*, 2013, Coimbatore, DOI: 10.1109/ICSIPR.2013.6497964.
- Chunduri A, Rattan T M, Venkataramaniah K (3-5 May 2012) Synthesis of Mn2+ doped SrAl2O4: A Red Light Emitting Nano phosphor. *National Symposium for Materials Research Scholars and Workshop on Advanced Characterization Techniques*, IIT Mumbai.
- Chunduri A, Sai Malleswar V N R, Rattan T M and Venkataramaniah K (17-19 Oct 2012) One step synthesis of carbon dots from coconut fiber. *International Conference on Advanced Nano Materials*, IIT Madras, Chennai.
- Lakshman Kumar V, Patnaik S, Sai Praneeth T, Janardhana C, Mitra S and Venkataramaniah K (3-5 May 2012) Synthesis and Characterization of Multi Walled Carbon Nanotube- Pt/Pd Nano Hybrids. *National Symposium for Materials Research Products and Workshop on Advanced Characterization*, Indian Institute of Technology, Mumbai.
- Mulpur P, Patnaik S, Rattan T M, Rao A M, and Venkataramaniah K (27 Feb to 1 Mar 2013) Detection of Cd2+ lons Using Surface Plasmon Coupled Emission on Engineered Silver-α Nano Alumina Thin Film Hybrids. *Indo US International Workshop on Nanosensor Science and Technology*, Berhampur, Odisha, India.
- Mulpur P, Rattan T M and Venkataramaniah K (17-19 Oct 2012) Single Step Synthesis of Fluorescent Colloidal Quantum Dots of Iron Selenide and Cobalt Selenide. *4th International Conference on Advanced Nano Materials 2012*, IIT Madras, Chennai.
- Mulpur P, Vemula S K, Lingam K, Srinivasan V, Sai Sathish R, Venkataramaniah K and Rao A M (20 Mar 2013) Ultra-Amplification of Surface Plasmon Coupled Emission in Graphene-Silver Hybrid Films. *Bulletin of the American Physical Society (APS March Meeting 2013)*, Baltimore, Maryland, United States.









COURSES OFFERED

Undergraduate	B.Sc. (Hons.) in Che	emistry
Postgraduate	M.Sc. Chemistry	
Professional	M.Tech. Analytical Methods and Chemical Instrumentation	
Research	M.Phil.	Ph.D.

Teaching Faculty

Head of Department: Prof. Chelli Janardhana

Name	Designation	Qualification
Prof. Chelli Janardhana	Professor (Hon.)	M.Sc., Ph.D.
Dr. S Jagadeeswara Rao	Associate Professor	M.Sc., Ph.D.
Dr. C N Sundaresan	Associate Professor	M.Sc., Ph.D.
Dr. G Nageswara Rao	Associate Professor	M.Sc., Ph.D.
Dr. T Ravikumar	Associate Professor	M.Sc., Ph.D.
Dr. K S Narahari	Associate Professor	M.Sc., Ph.D.
Dr. (Ms.) Rajni Bhandari	Associate Professor	M.Sc., M.Ed., Ph.D.
Dr. (Mrs.) G Pavana Kumari	Asst. Professor	M.Sc., M.Phil., Ph.D.
Dr. (Ms.) Sahida Sharma	Asst. Professor	M.Sc., Ph.D.
Dr. B Sivakumar	Asst. Professor	M.Sc., Ph.D.
Dr. R Sai Sathish	Asst. Professor	M.Sc., Ph.D.
Dr. J Krishna Kiran Kumar	Asst. Professor	M.Sc., M.B.A, Ph.D.
Dr. D Rajesh Babu	Asst. Professor	M.Sc., M.Phil., Ph.D.
Dr. S Prathap Chandran	Asst. Professor	M.Sc., Ph.D.
Dr. (Ms.) Anindita Sarkar	Asst. Professor	M.Sc., Ph.D.





Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Prof. M Narayana Murthy	National Institute of Science and Technology, Berhampur	Mathematics for Chemists (M.Sc. Students)	2 Jul to 21 Jul 2012
Prof. P Natarajan	Professor (Retd.), Madras University, Chennai	Electronic Spectra/ Photochem Reactions (M.Sc. Students)	2-21 Jul 2012, 15-30 Aug 2012, 2-15 Mar 2013
Prof. Ashok Khanna	Dept. of Chemical Engineering, Indian Institute of Technology, Kanpur	Calorimetric Analysis (M.Sc. students)	15-30 Aug 2012
Dr. V Ranga Rao Kanikanti	Senior Expert in Formulation Development at Bayer Health Care AG: Germany	Medicinal and Pharmaceutical Chemistry (M.Sc. and M.Tech Students)	4 Dec 2012 to 7 Jan 2013
Dr. R K M Jayanty	Senior Fellow, RTI International, USA	Environmental Pollution Control/Environmental analytical chemistry	14-15 Dec 2012
Prof. Somenath Mitra	Dept. of Chemistry and Environmental Science, New Jersey Institute of Technology, USA	Research discussions with students and faculty	29 Dec 2012 to 6 Jan 2013
Dr. Vinayak Sinha	Indian Institute of Science Education and Research (IISER) Mohali, Punjab	Analytical Chemistry and Atmospheric Chemistry (M.Tech. Students)	20-24 Feb 2013
Prof. E N Prabhakaran	Asst. Professor, Dept. of Organic Chemistry, Indian Institute of Science, Bangalore	Chemical Biology, Synthetic Organic Chemistry & Protein Biochemistry (M.Sc students)	16-17 Feb 2012

Dr. S Suresh Babu	Senior Manager, Electronic Corporation of India Ltd., (ECIL), Hyderabad	Analytical Techniques and Instrumentation, Demonstration of AAS and related experiments and practicals	2 Mar 2013
Dr. Nanduri Srinivas		Lectures on Organic Chemistry of Natural Products (M.Sc. Students)	23-24 Mar 2013

WORKSHOPS & CONFERENCES CONDUCTED

Conference 1

Title: Global Perspectives and New Trends in Chemical Sciences

Dates: 8-9 Sep 2012

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Keynote Address: Prof. V Lakshminarayanan, Raman Research Institute, Bangalore, on the topic 'Electrochemical Sensors-

Methodology and Instrumentation.'

Theme of the Conference:

Science today has transformed into a rat race for amassing more publications and personal credibility, seldom taking stock of the reason why this power was bestowed unto us. Science was definitely given to man to evolve, explore and entertain a better life, but not at the cost of nature and fellowmen, certainly not at the expense of morality and justice. It is our endeavour to witness insightful presentations from eminent scientists, to draw our plans, inflame our urge to make it there, one day.

List of External Speakers / Invited Guests

Name	Designation	Торіс
Dr. Suneel Kumar	Albany Molecular Research, Hyderabad	Structure based Drug Design
Dr. Shankar Venugopal	Honeywell Tech, Bangalore	How to take our Nanotechnology Inventions from Lab to Market?
Dr. P Manikandan	SABIC Research & Technology Pvt. Ltd, Baroda	Industrial Catalysis: Global Perspectives, Current Challenges & Opportunities
Dr. (Mrs.) Chitra Manikandan	Shell India Projects and Technology Ltd., Bangalore	Multidimensional Fluorescence Spectroscopy
Dr. Girish Rao	Shell India Projects and Technology Ltd., Bangalore	Delivering Energy in a Carbon Constrained World
Dr. R Sai Sathish	Asst. Professor, Dept. of Chemistry, SSSIHL	Research Module in Dept. of Chemistry
V Ramanathan	Post-Doctoral Fellow, University of Stuttgart, Germany	Towards label-free tumour diagnostics using Raman microspectroscopy: Identification of nucleic acid markers.

Prof. V Chandrasekhar	Tata Institute of Fundamental Research, Hyderabad	Molecules to Materials: Single-molecule and Single- ion Magnets
Dr. Sanjeeb Tripathy	Honeywell Technology, Bangalore	Clean Solar Energy: The impact of nano-scale science
Mr. G Sridhar	Symrise India Pvt. Ltd., Chennai	GC-MS: Online sampling techniques

Conference 2

Title: Lecture Program on 'Translational Advances in Analytical Chemistry'

Dates: 2 Feb 2013

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Theme of the Conference:

With respect to the latest developments in Analytical Chemistry, a one day lecture program for the students of Chemistry, especially, the students of newly inducted M.Tech Program (Analytical Methods and Chemical Instrumentation) was organized under the light of the following developments in analytical chemistry: A 'Breath test for identifying bacteria's fingerprint' to diagnose infections such as tuberculosis; A tiny electrode to fuel bandage technology; A temporary tattoo that measures metabolic stress; World's smartest reaction chamber with a mixing volume in femto-litres; A chip of the size of a business card that allows measurement of 50 different parameters in a drop of blood; A camera that can be used to take powerful 3D colour X-ray images, in near real-time, without the need for a synchrotron X-ray source.

Name	Designation	Topic
Dr. K N Reddy	ANGR Agricultural University, Hyderabad	Principles of pesticide residues analysis and impact of pesticide residues on environment and health
Sri P V V R Sarma	Geological Survey of India, Visakapatnam	Applications of analytical chemistry in customs and central excise department and in GSI
Dr. N V R Kiran	Geological Survey of India, Hyderabad	Applications of chemistry in forensic aspects of explosions
Dr. S P Sharma	Geological Survey of India, Hyderabad	General forensic science and analytical chemistry used to detect narcotic drugs

Departmental Colloquium

The Department of Chemistry regularly hosts colloquium talks by the teachers, research scholars and external experts in the areas of Chemistry. The details of the colloquium are provided below.

Date	Presenter	Designation	Topic
16 Jun 2012	Dr. S Pratap Chandran	Post-Doctoral Fellow	Photonic control of surface anchoring on solid colloids dispersed in liquid crystals
07 Jul 2012	Sri Sai Giridhar Sarma Kandanur	Doctoral Research Scholar	Low cost synthesis of NCE's & solid form modulation of API's as novel therapeutic agents





21 Jul 2012	Sri R S Sai Siddhardha	Doctoral Research Scholar	Design and development of gold decorated functionalized graphene for catalytic applications
18 Aug 2012	Sri Abilash Gangula	Doctoral Research Scholar	Fe2+ catalysed in-situ generation of reducing moieties for fabrication of gold nanoparticles: A potential platform for versatile optical sensing
25 Aug 2012	Dr. S Pratap Chandran	Post-Doctoral Fellow	Optical Properties of Plasmonic Metal Nanoparticles: A Brief introduction
16 Feb 2013	Dr. E N Prabhakaran	Asst. Professor, Dept. of Organic Chemistry, Indian Institute of Science, Bangalore	Crystal Structures of High Energy Conformers: Why Proteins (don't) access them?

Workshops Attended

- Dr. K S Narahari delivered a talk on *evaluation procedures* in workshop on evaluation and paper setting, Faculty Devolopment Program, Sri Sathya Sai Institute of Higher Learning, Brindavan Campus, April 2013.
- Dr. B Sivakumar participated in the Winter School on *Introduction to Ab initio Calculations* held in the School of Chemistry, University of Hyderabad, 10-22 Dec 2012.
- Dr. R Sai Sathish attended *Ramalingaswami Fellows Conclave*, Rajiv Gandhi Centre for Biotechnology (RGCB), Trivandrum, Kerala, 20-23 Jan 2013.

SPECIAL ACHIEVEMENTS

Sri Ramakrishna Motamarri

- Received First Prize for an oral presentation at the National Conference on Traditional Medicine: The Untapped
 Treasure in Modern Drug Discovery for his paper Sargassum tenerrimum extract-mediated room-temperature Synthesis
 of Gold Nanoparticles and their Applications in Catalysis, Veltech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering
 College, Chennai, 30-31 Jan 2013.
- Received First Prize for an Oral Presentation at the National Conference on Emerging Trends in Chemical Research 2012 (NCETCR 2012), for his paper *Green Synthesis of Gold Nanoparticles using Turbinaria conoides and Evaluation of their Catalytic Activity*, Department of Chemistry, Gitam Institute of Technology, Visakhapatnam, 7-8 Sep 2012.





Dr. S Prathap Chandran

• Received the Inspire Faculty Award, Dec 2012 (DST, India).

Achievements in National level exams

Name	CSIR JRF/NET Rank* GATE Rank**		Total No. of Exam takers
Sri Y Hari Kumar	16 (JRF)	2	14,835
Sri D S S Sriharsha	42 (LS)	185	14,835
Sri V Dnyanesh		1183	14,835
Sri V Amrit		1665	14,835
Sri V Sandeep		1762	14,835
Sri Manne Anupam Kumar	85		

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test) | LS (Lectureship)

RESEARCH

Research Projects – Ongoing

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
DBT	Prof. Chelli Janardhana Development and validation of an indigenous assay for Lp-PLA ₂ and identifying Indians at risk for early onset of coronary artery disease	Jan 2011 to Jan 2014	₹10.94 lakhs

^{**} Graduate Aptitude Test in Engineering | All ranks are national (All India Rank)





Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. R Sai Sathish		
DBT	Application of plasmonic technologies and microbes- fortified biosorbents for efficient integrated bioprocessing	1 Mar 2011 to 29 Feb 2016	₹74.43 lakhs

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
DST	Dr. R Sai Sathish Application of plasmonic technologies and microbes- fortified biosorbents for a low-cost integrated approach to water treatment	19 Jul 2011 to 18 Jul 2014	₹12 lakhs

Research Projects – Completed

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. C N Sundaresan Dr. G Nageswara Rao	Aug 2008 to Dec 2012	₹8.1 lakhs
	Supramolecular assembly helicates, sub-compotent assembly and dynamic investigations.		

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
UGC	Dr. S Jagadeeswara Rao	1 Feb 2011 to	
	Flourometric and photometric methods to determine transition metals in tracer levels using novel chemosensors	28 Feb 2013	₹0.95 lakhs





Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. G Nageswara Rao	1 Feb 2010 to	
UGC	Antioxidant activity and Nutraceutical potential of indigenous edible mushroom Calocybe indica	1 Feb 2013	₹4.43 lakhs

Post-Doctoral Research Scholars

Name	Qualification	Area of Research
Dr. S Prathap Chandran*	M.Sc., Ph.D.	Colloids (synthesis, surface modification and assembly in to long-range structures or colloidal molecules) and colloid-LC composites
Dr. A Sunil	M.Sc., M.Phil., Ph.D	Novel chemical methods for metal responsive fluorescent sensing, corrosion inhibition and biomedical applications.

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Sri K M Ganesh	Economically viable water quality monitoring system and eco-friendly approach to water treatment in rural areas with special focus on fluoride ion	Prof. Chelli Janardhana & Dr. G Nageswara Rao (Joint Supervisor)
Sri K Naga Sai Visweswar	Biosynthesis and applications of cyclic β-(1 3), (1 6) glucans produced by <i>Bradyrhizobium japonicum</i>	Prof. Chelli Janardhana
Sri Abilash Gangula	Studies on the catalytic and sensing applications of gold nanoparticles	Prof. Chelli Janardhana
Sri Sai Giridhar S	Lp-PLA ₂ : A study of its role in Coronary Artery disease in Asian Indians and Novel detection methods using nano bio-sensors	Prof. Chelli Janardhana & Dr. G Nageswara Rao (Joint Supervisor)
Sri Ramakrishna Motamarri	Studies on Terrestrial and Marine Natural Products	Dr. G Nageswara Rao

Sri Manne Anupam Kumar	Design and development of nanomaterials for sensing and energy device applications	Dr. R Sai Sathish
Sri R S Sai Siddhardha	Synthesis and application of hybrid nanostructured materials for catalysis, sensing and environmental remediation	Dr. R Sai Sathish
Sri Sai Giridhar Sarma Kandanur	Generation of Novel andrographolide & ethionamide analogues of Pharmaceutical promise	Dr. G Nageswara Rao

M.Phil. Scholars

Name	Area of Research	Research Supervisor(s)
Sri S Venkatesh	Fabrication of nanostructures for plasmonic and electrochemical applications	Dr. R Sai Sathish
Sri B Pradeep Kumar	Comparative study on the production of low-cost cellulolytic enzyme system from groundnut shell with the use of solid-state and submerged liquid fermentation techniques	Dr. R Sai Sathish

Projects & Dissertations Completed

M.Sc. (Chemistry) Dissertations

Name	Project Title	Supervisor(s)
Amrit V	Molecular docking approach to evaluate inhibitory activity of isoniazid and its derivatives against enoylacp reductase	Dr. B Sivakumar
Arjun Pavithran	Ecofriendly synthesis of graphene and gold nanoparticles	Dr. R Sai Sathish
Dintakurti Satya Sai Sri Harsha	Gold nanoparticle based novel combinatorial logic gate for multiplex analysis of complex mixtures	Prof. Chelli Janardhana
G Krishna Prasad	Synthesis and characterization of transition metal complexes of novel supramolecular ligands	Dr. G Nageswara Rao
K Nanaji	Catalysis of Suzuki reaction using Pd and Pt loaded functionalised multiwalled carbon nanotubes.	Dr. G Nageswara Rao & Dr. D Rajesh Babu
Kisalay Kishore	Electrochemical Synthesis of Gold-polycurcumin nanocomposite and its enhanced electrocatalytic activity for oxidation of alcohols	Prof. Chelli Janardhana
Madhu Sudan Chaudhary	A Novel and facile gold nanoparticles based biochemical assay for anti-oxidant and pro-oxidant activity	Prof. Chelli Janardhana
Rajesh Sadasivan	A simple gold nanoparticle based colorimetric assay for the detection of highly reactive OH° radicals	Prof. Chelli Janardhana
Sai Ganesh B	Studies on the co-crystallization of diclofenac and insilico interaction studies on 2-aminobenzimidazole scaffold based derivatives as a novel class of antitumour agents	Prof. S S Rajan & Dr. C N Sundaresan

S Sai Nandan	A novel and facile colorimetric assay for monophenols based on production of gold nanoparticles triggered by redox- active metal ions	Prof. Chelli Janardhana
Varun Hari Subramaniam	Docking studies to examine the role of pyrazinamide as an anti-tuberculosis drug	Dr. B Sivakumar
V Siddhartha	Determination of Iron(III) in trace quantities by a catalytic method	Dr. S Jagadeeswara Rao
Dnyanesh Vernekar	Synthesis and catalytic applications of nanomaterials	Dr. R Sai Sathish
V Vaishnav Satyadev	Assessment of bio-accumulation of heavy metals in apple snail:Pila globosa	Dr. D Rajesh Babu
Y Harikumar	Quantum chemical descriptors based quantitative structure activity relationships for aromatic hydrazides as anti-tuberculosis agents	Dr. B Sivakumar
Y Sandeep	Screening of cellulase, xylanase, β-glucosidase producing fungal species and its growth kinetic studies	Dr. R Sai Sathish

RESEARCH PUBLICATIONS

Journal Papers

- Abilash G, Janardhana C, Bukka S, Poonthiyil V, Podila R, Kannan R and Rao A M (2012) Thione-gold nanoparticles interactions: Vroman-like effect, self-assembly and sensing. Journal of Materials Chemistry (Impact Factor: 5.91), 22(43), 22866-22872.
- Abilash G, Sai Nandan S, Madhusudan C, Sri Harsha D S S, Rajesh S and Janardhana C, (2013) A simple gold nanoparticles based colorimetric assay for the detection of highly reactive OH° radicals. AIP (American Institute of Physics) Conf. Proc., (1536), 233-234.
- Krishnaswamy N R and Sundaresan C N (2013) Using a Natural Product to Catch Fish! The Chemistry of Rotenoids. Resonance, 18(4), 428-429.
- Krishnaswamy N R and Sundaresan C N (2013) Hunting with Poisoned Arrows: Story of Curare. Resonance, 18(3), 218-
- Krishnaswamy N R and Sundaresan C N (2013) Colours from Flight: Pigments from Birds Feathers and Butterfly wings. Resonance, 18(1), 12-21.
- Krishnaswamy N R and Sundaresan C N (2012) The Blue of Blue Jeans and Royal Purple. Resonance, 17(11), 1022-1033.
- Krishnaswamy N R and Sundaresan C N (2012) Exotic Red Pigments of Plant Origin. Resonance, 17(10), 928-942.
- Jagadeeswara Rao S and Sunil A (Sep 2012) Sodium dodecylsulphate as a surfactant medium for photometric and fluorometric sensing of nickel (II) using 1-(2-hydroxyphenyl)thiourea. International Journal of Chemical Sciences, 2(3),
- Nageswara Rao G et al. (2012) Synthesis, characterization and two-photon absorption based broadband optical limiting in diarylideneacetonederivative. Journal of photochemistry and photobiology, 238, 20-23.
- Nageswara Rao G et al. (2012) Novel D-π-A-π-D type Organic Chromophores for Second harmonic generation and Multi-Photon Absorption Applications. AIP Conf. Proc. 1536, pp. 751-752, doi:http://dx.doi.org/10.1063/1.4810445.
- Pavana Kumari G & Rao S V (Mar 2013) Simultaneous Determination of Tetracyclines Using First Order Derivative Spectrophotometry. International Journal of Medicine and Pharmaceutical Sciences (ISSN 2250-0049) (Impact Factor: *4.8723)*, 3(1), 85-88.





Conference Papers

- Abilash G, Santosh B, Vivek P and Janardhana C (8-9 Sep 2012) Thione Induced 1-Dimensional Assemblies of Gold Nanoparticles: A Rapid and Sensitive Colorimetric Sensor for Thiourea. *National Conference on Global Perspectives and New Trends in Chemical Sciences*, SSSIHL, Prasanthi Nilayam, Andhra Pradesh.
- Visweswar K N S and Janardhana C (22-23 Mar 2013) Isolation and Preliminary Studies on Characterization of Cyclic β -(1 \longrightarrow 3),(1 \longrightarrow 6)-Glucans produced by Bradyrhizobium japonicum. *UK-India MedChem Congress 2013*, Indian Institute of Chemical Technology, Hyderabad.
- Abilash G, Sri Harsha D S S, Sadasivan R, Madhu Sudan C, Sai Nandan S, Santosh B and Janardhana C (18-20 Mar 2013) Fe2⁺ Catalysed In-situ Generation of Reducing Moieties for Fabrication Of Gold Nanoparticles: A Potential Platform for Versatile Optical Sensing. *International Conference on Nanoscience and Nanotechnology*, S R M University, Chennai.
- Abilash G, Sai Nandan S, Madhu Sudan C, Sri Harsha D S S, Sadasivan R and Janardhana C (1-2 Feb 2013) A Simple Gold Nanoparticles Based Colorimetric Assay for the detection of highly reactive OH°. Radicals. *International* Conference on Recent Trends in Applied Physics and Material Science (RAM 2013), Bikaner, Rajasthan.
- Aditya P, Sai Muthu Kumar V, Sharma J D and Sundaresan C N (2013) Ab initio computational study of 2-Thioureidobenzoxazole molecule. *International conference on Recent Trends in Applied Physics and Material Science (RAM 2013)*, Bikaner, Rajasthan, AIP conference Proceedings, 1535,415.
- Jagadeeswara Rao S and Sunil A (10-14 Jun 2012) Photoluminescence property of 1-(2-hydroxy phenyl)thiourea and its quenching by chromium(VI) ions. *International Conference on Materials Science and Technology (ICMST 2012)*, St. Thomas College, Kottayam, Kerala.
- Nageswara Rao G (Feb 2013) Novel D-π-A-π-D type Organic Chromophores For Second Harmonic Generation and Multi-Photon Absorption Applications. *International Conference on Recent Trends in Applied Physics and Material Science (RAM 2013)*, Bikaner, Rajasthan. http://link.aip.org/link/doi/10.1063/1.4810445?ver=pdfcov.
- Pavana Kumari G and Rao S V (18-19 Dec 2012) Simultaneous Determination of tetracyclines using First order
 Derivative spectrophotometry. International seminar n Current Trends in Environmental Toxicology & Experimental
 Therapeutics, Vikrama Simhapuri University, Nellore, Andhra Pradesh.
- Pavana Kumari G and Rao S V (5-6 Oct 2012) Electrochemical behaviour of Cephalosporins in presence of Cr (VI) and W (VI). *Recent Developments on Electrochemical Techniques*, Sri Krishnadevaraya University, Anantapur.
- Pusala A, Kumar H, Kumar S, Rajashekar, Molli M, Muthukumar V S, Siva Kumar B, Siva Sankara Sai S, and Rao G N (1–2) Novel D- π -A- π -D type organic chromophores for second harmonic generation and multi-photon absorption applications. *International Conference on Recent Trends in Applied Physics and Material Science (RAM 2013)*, Bikaner, Rajasthan, AIP Conf. Proc. 1536, pp. 751-752.
- Mulpur P, Patnaik S, Chunduri A, Rattan T M, Sai Sathish R, Rao A M and Venkataramaniah K (27 Feb to 1 Mar 2013) Detection of Cd2+ Ions Using Surface Plasmon Coupled Emission on Engineered Silver-α Nano Alumina Thin Film Hybrids. *Indo US International Workshop on Nanosensor Science & Technology*, NIST, Berhampur, Odisha.





- Mulpur P, Sai Krishna V, Lingam K, Srinivasan V, Sai Sathish R, Venkataramaniah K and Rao A M (9-12 Feb 2012) Ultra-Amplification of Surface Plasmon Coupled Emission Using an Engineered Graphene-Silver Thin Film Hybrid. *The International Conference on Fiber Optics and Photonics*, IIT Madras, Chennai, OSA 2012, Mpo.41.
- Sai Siddardha R S, Kumar L V, Adarsh K, Ramakrishna P, Muthu Kumar V S, Venkataramaniah K, Ramaprabhu S, Rao A and Sai Sathish R (18 Mar 2013) gold decorated graphene for rapid dye reduction and efficient electro catalytic oxidation of ethanol. *Mar 2013 Meeting of the American Physical Society*, Baltimore, Maryland, Bulletin of the American Physical Society APS March Meeting 2013 Volume 58, Number 1, Session C6, Abstract 00014.
- Ramakrishna M, Gengan R M, Rajesh Babu D, Rao G N and Chandra S (30-31 Jan 2013) Sargassum tenerrimum extract-mediated room-temperature Synthesis of Gold Nanoparticles and their Applications in Catalysis. *Traditional Medicine: The Untapped Treasure in Modern Drug Discovery*, Chennai.
- Ramakrishna M, Gengan R M, Rajesh Babu D, Rao G N and Chandra S (7-8 Sep 2012) Green Synthesis of Gold Nanoparticles using Turbinaria conoides and Evaluation of their Catalytic Activity. *Emerging Trends in Chemical Research 2012 (NCETCR 2012)*, Visakhapatnam, Andhra Pradesh.









COURSES OFFERED

Undergraduate	B.Sc. (Hons.) in Biosciences		
Postgraduate		with specialization in either: or (b) Mycology and Plant Pathology	
Research	M.Phil. Ph.D.		

Teaching Faculty

Head of Department: Dr. R Basavaraju

Name	Designation	Qualification
Prof. T N Lakhanpal	Professor (Hon.)	M.Sc., Ph.D.
Prof. S S Rajan	Professor (Hon.)	M.Sc., Ph.D.
Dr. R Basavaraju	Professor (Hon.)	M.Sc., Ph.D.
Dr. K V Srinivas	Professor (Hon.)	M.Sc., Ph.D.
Dr. B S Vijayakumar	Associate Professor	M.Sc., Ph.D.
Dr. (Ms.) Seethalakshmi Laxmanan	Associate Professor (Hon.)	M.Sc., Ph.D.
Dr. (Miss) Vijeya kumary Vijayaratnam	Associate Professor (Hon.)	M.Sc., Ph.D.
Sri K Srinivasan	Associate Professor (Hon.)	M.Sc., M.Phil.
Dr. A Ashok	Asst. Professor	M.Sc., Ph.D.
Miss Isha Sai*	Asst. Professor	M.Sc.
Dr. B E Pradeep	Asst. Professor	M.Sc., Ph.D.
Sri A S Vishwanathan*	Asst. Professor	M.Sc., M.Phil.
Sri K K Sai Anand	Asst. Professor	M.Sc., M.Phil.
Dr. S Venketesh	Asst. Professor	M.Sc., Ph.D.
Dr. (Ms.) Pratima Tripathi	Asst. Professor	M.Sc., Ph.D.
Miss B Anusha	Asst. Professor	M.Sc.



Prof. Ravi Parkash	Adjunct Professor	M.Sc., Ph.D., D.Sc.
Sri Sai Murali R S*	Teaching Assistant	M.Sc., M.Phil.
Sri P Sujith Kumar*	Teaching Assistant	M.Sc.

^{*} also pursuing Doctoral Research

Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Prof. Anupam Dikshit	Dept. of Botany, University of Allahabad, Allahabad	Plant systematics and conservation, Plant taxonomy, study of plant families and plant classification	2-14 Jun 2012
Prof. Govind Rao	Director, Centre for Advanced Sensor Technology, University of Maryland, USA	Interaction with Ph.D. students	20-22 June 2012
Dr. Arun Sreekumar	Associate Professor and Director of Metabolomics, Dept. of Molecular and Cellular Biology, Baylor College of Medicine, Houston, USA	Research discussions with students and faculty	22-29 Jun 2012
Dr. (Ms.) Renu Swarup	Advisor, Dept. of Biotechnology, Ministry of Science and Technology, Delhi	Talk on Biotechnology and Research discussions with students and faculty	28-29 Jun 2012
Dr. Anuradha Mudipalli	Chemical Manager, IRIS documents, HPAG, NCEA, Research Triangle Park, North Carolina, USA	Interaction with Ph.D. students regarding data	5-8 July 2012
Dr. Srikanth S Nadadur	Health Scientist Administrator, NIEHS, Research Triangle Park, North Carolina, USA	analysis	

Dr. Ganesh lyer	Dept. of Life Sciences, Ramnarain Ruia College, Mumbai	Guest lectures on Life Sciences. Also guided students for their lab practicals at Brindavan Campus.	26-30 Dec 2012
Dr. M Sivakumar	University of Wollongong, Australia	Lectures on Environmental Biotechnology to Postgraduate students and research discussions with students and faculty	23 Jan to 23 Feb 2013
Prof. George Ordal	Dept. of Biochemistry, University of Illinois, USA	Biochemistry - Enzymology to postgraduate students	25 Nov to 25 Dec 2012
Dr. B C Ramanna	Executive Director (Retd.), Brilliant Industries Ltd., Vaccination Division, Hyderabad	Research discussions with students and faculty and consultancy support for the establishment of a Cell Culture Lab	Ongoing consulting
Prof. N. Venkata Rao	Environment Canada, Toronto, Canada.	Lectures on Environmental Biotechnology to Postgraduate students	Dec 2012 to Jan 2013

DEPARTMENTAL COLLOQUIUM

The Department of Biosciences regularly organizes colloquium talks by the teachers, research scholars, external experts and also students in the areas of Life Sciences. The details of the colloquium for the academic year 2012/13 are provided below.

Date	Presenter	Designation	Торіс
14 Jul 2012	Video Presentation	-	Invisible world – Part 1 (BBC)
21 Jul 2012	II M.Sc. students and M.Phil. scholars	Dept. of Biosciences, SSSIHL	Review / Summary of Projects
18 Aug 2012	Video Presentation	-	Regenerative Medicine
25 Aug 2012	Sri Ranjan Devkota, Sri Sashi Harish & Sri Sai Manohar T	II M.Sc. students, Dept. of Biosciences, SSSIHL	Metabolomic profiles delineate potential role for sarcosine in prostate cancer progression (Journal Club) (Group II)
8 Sep 2012	Sri Sai Santosh Shetty, Sri A Sri Sai Aditya, Sri Giresh Bhardwaj & Sri Sai Siranjeevi	II M.Sc. students, Dept. of Biosciences, SSSIHL	Resveratrol Inhibits Cancer Cell Metabolism by Down Regulating Pyruvate Kinase M2 via Inhibition of Mammalian Target of Rapamycin. (Journal Club) (Group III)
17 Nov 2012	Dr. S Venketesh	Asst. Professor, Dept. of Biosciences, SSSIHL	Brief overview of the research work carried out
1 Dec 2012	Dr. B E Pradeep	Asst. Professor, Dept. of Biosciences, SSSIHL	A Brief Update on Human Chondrocyte Culture
15 Dec 2012	Video Presentation	-	The Egg and the Nucleus: A Battle for Supremacy

22 Dec 2012	Prof. George W Ordal	Dept. of Biochemistry, University of Illinois, USA	The Bacillus subtilis Chemoreceptor McpC Senses Multiple Ligands Using Two Discrete Mechanisms
19 Jan 2013	Sri Naresh K N	Doctoral Research Scholar, Dept. of Biosciences, SSSIHL	Structure explains the dual function of invertebrate oxygen carrier proteins - Hemocyanins
2 Feb 2013	Sri Vijaya Sai A	M.Phil. Scholar, Dept. of Biosciences, SSSIHL	Evaluation of Killer cell Immunoglobulin - like receptor genes & their Human Leaucocyte Antigen - C1 & C2 ligands in type 2 Diabetes and their distribution in the population of the Puttapathi region.
9 Feb 2013	Video Presentation	-	Bill Nye - Greatest discoveries: Genetics
23 Feb 2013	Dr. S Venketesh	Asst. Professor, Dept. of Biosciences, SSSIHL	Reductionist Approach to a Holistic Approach: A Shift in Paradigm is the Need of Time. Systems Biology Enters the Foray
2 Mar 2013	Sri Ramakanta Biswal & Sri Sai Manohar T	M.Sc. students, Dept. of Biosciences, SSSIHL	Poster Presentations on the work done on Bioinformatics

Workshops Attended

- Dr. B S Vijayakumar attended and participated in the 1st International Health Care Information Technology End Users Conference implementing to enhance quality of patient care - an orientation course, Sri Sathya Sai Institute of Higher Medical Sciences, Whitefield, Bangalore, 17 Nov 2012.
- Miss Isha Sai attended the 2nd National Workshop on Taxonomy, Ex situ Conservation and Bioprospecting of Fungi, DST- National Facility at Agharkar Research Institute (ARI), Pune, 26 Nov to 10 Dec, 2012.
- Sri A S Vishwanathan attended the 5th National Science Conclave, Indian Institute of Information Technology, Allahabad, 8-14 Dec 2012.
- Sri P Sujith Kumar attended the 6th UGC-NRC-DBS Teacher/Researcher training workshop on 'Basic Immunological Techniques', Indian Institute of Science, Bangalore, 24 Sep to 6 Oct 2012.

SPECIAL ACHIEVEMENTS

Dr. B S Vijayakumar

- Invited as a chairperson to co-ordinate and conduct the oral presentations delivered at the National Seminar, Department of Biotechnology and Applied Microbiology, St. Thomas College, Kottayam, Kerala, 14-15 Jan 2013.
- Invited as a resource person and a speaker and delivered a talk on 'The Role of Biochemistry and Biotechnology in the prevention and management of lifestyle disorders', at the National Seminar, Department of Biotechnology and Applied Microbiology, St. Thomas College, Kottayam, Kerala, 14-15 Jan 2013.

Received a trophy and a certificate for the Best Paper award in the Oral Presentation category for his paper, Involvement of C-terminal β - rich domain in regulating the interaction between phenolic substrates and the active site of molluscan hemocyanins: an in-silico study' at the 4th National Seminar on Computer Aided Drug Design, SVIMS Bioinformatics centre, SVIMS University, Tirupati, 15-16 Feb 2013.

Dr. B E Pradeep

Received a travel grant from 'Care for Rare' foundation to attend the conference 'Days of Molecular Medicine 2012 -The translational science of rare diseases: from rare to care', Vienna, Austria, 8-10 Oct 2012.





- Interacted and discussed potential collaborations with Prof. Anders Lindahl and Prof. Lars Peterson (pioneers and the very first scientists to perform Autologous Chondrocyte Implantation in the world), Sahlgenska University Hospital, Gothenburg, Sweden, Oct 2012.
- Received a summer fellowship under the auspices of Indian Academy of Sciences, Indian National Science Academy and National academy of Science to work under the guidance of Dr. Krishnaveni Mishra, Department of Biochemistry, University of Hyderabad, Apr-May 2012.
- Deputed by SSSIHL to undergo training at the Centre for Biologics Research and Evaluation, United States Food and Drug Administration (FDA) under the guidance of Dr. Indira Hewlett, May-June 2013.

Achievements in National level exams

Name	CSIR JRF/NET Rank*	GATE Rank**
Sri Thota Sai Manohar		Qualified
Miss B Anusha	256 (LS)	

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test) | LS (Lectureship)

SSSIHL & FDA Collaboration

• The Department of Physics and Dept. of Biosciences, SSSIHL have signed a Memorandum of Understanding (MOU) with Centre for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA), Bethesda, MD, USA. Prof. J. Shashidhara Prasad, Vice Chancellor, Prof. Venkataramaniah K (Dept. of Physics) and Prof. R Basavaraju & Dr. B E Pradeep (Dept. of Biosciences) are collaborating with Dr. Indira K Hewlett & Dr Mohan H of CBER of FDA in the area of 'Rapid Diagnosis of Mycobacterium tuberculosis using europium based nanoparticles.'

^{**} Graduate Aptitude Test in Engineering | All ranks are national (All India Rank)





RESEARCH Research Projects – New

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. B E Pradeep		
DST (SERB/FAST TRACK)	Evaluation and characterization of clinically isolated gram negative pathogenic enterobacteriaceae	Jun 2012 to May 2015	₹19.8 lakhs

Scope:

- To Identify and characterize ESBLs from clinically isolated Enterobacteriaceae.
- To study the epidemiology and prevalence of CTX-M, TEM and SHV β -lactamase producing ESBLs amongst the clinical samples received at SSSIHMS and General Hospital.
- To screen ESBLs for novel mutations in the β -lactamase genes and characterization of mutants with respect to enzyme kinetics.

Deliverables:

- The proposed study would help us to monitor the infections caused by *E.coli* and *K.pneumoniae* strains of the family Enterobacteriaceae among the patients hospitalized in Sri Sathya Sai Institute of Higher Medical Sciences, Puttaparthi, Andhra Pradesh.
- Susceptibility testing of clinical isolates to different classes of antibiotics would help in better monitoring and control of ESBL infections.
- β lactamase data and molecular typing results would be used to assess the epidemiological situation of *E.coli* and *K.pneumoniae* in the hospital and hence in the several districts of Andhra Pradesh

Social Relevance:

• This study would provide molecular epidemiological data about extended spectrum beta lactamase resistance among gram negative enterobacteriaceae and would help clinicians to prepare infection controls measures.

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
SSSIHL	Dr. B E Pradeep	2012 to 2017	₹15 lakhs
SSSIFIL	Autologous Chondrocyte Implantation	2012 to 2017	CIDIAKIIS

Scope:

Autologous chondrocyte implantation (ACI – formerly referred to as autologous cartilage transplantation or ACT) is an approach that has been used to treat defined, symptomatic knee cartilage defects. The aim of this treatment is to enable the regeneration of hyaline or hyaline like cartilage, thereby restoring normal joint function. ACI is not used where there is joint instability that cannot be corrected simultaneously or where there is existing osteoarthritis.

Deliverables:

- To Develop a viable protocol to culture chondrocytes in house.
- To be able to apply the ACI to treat patients with osteochondral defects of the knee.

Social Relevance:

The current project aims to help the Department of Orthopaedics, SSSIHMS to be able to provide ACI absolutely free of cost to treat the patients suffering with osteochondral defects of the knee with the highest clinical and research standards.

Research Projects - Ongoing

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
UGC SAP DRS Level II	Dr. R Basavaraju Special assistance program: 1. Plant cell, tissue culture and its applications 2. Immunogenetics	1 Apr 2010 to 31 Mar 2015	₹71.85 lakhs

Research Projects - Completed

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Dr. R Basavaraju		
DST	To strengthen the postgraduate teaching facility in the department	1 Apr 2008 to 31 Mar 2013	₹33 lakhs

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Sri Vennel Raj	Studies in Biodiversity of <i>Aegle marmelos (Linn.)</i> Correa, using morphological traits and molecular markers	Dr. R Basavaraju
Sri VN Sai Malleswar D	<i>Pila globosa</i> (Indian Apple Snail) a sentinel organism to monitor climatic stress in the ecosystem: Mechanisms of adaptation	Dr. R Basavaraju
Sri K N Naresh	Studies on Structure, Spectroscopic properties and Phenoloxidase activity of hemocyanin from <i>Pila globosa</i>	Prof. S S Rajan & Dr. Arun Sreekumar
Sri A S Vishwanathan	Microbial Fuel cells: Indicators of performance	Prof. Govind Rao & Dr. S Siva Sankara Sai
Sri Robin Sharma	Screening optimization and characterization of antioxidant compounds of endophytic fungi from medicinal plants: Aegle mermelos & Ocimum sanctum	Dr. B S Vijayakumar
Sri Sai Murali R S	Application of biological and biotechnological methods to identify elite plant accessions of <i>Adhatoda vasica</i>	Dr. R Basavaraju & G Nageswara Rao
Sri Aswathnarayan	Avascular Necrosis of Femoral Head – Molecular Genetics and Biophysical Characterization.	Dr. Prakash Kanchandani, Consultant Orthopedic Surgeon, Dept. of Orthopaedics, SSSIHMS, Prasanthigram
Miss Isha Sai	Investigations on the nutraceutical potential of some edible mushrooms	Dr. R Basavaraju
Sri P Sujith Kumar	A System Biology approach to Diabetes and associated secondary complication	Dr. S Venketesh & Dr. Anuj Sharma, Junior Consultant, Dept. of Ophthalmology, SSSIHMS, Prasanthigram
Sri Sai Krishna S B	A Systems Biology Approach to aid Biomarker Discovery and Mechanisms of Rheumatoid Arthritis	Dr. Vasuki, Senior Consultant Surgeon, Dept. of Orthopaedics, SSSIHMS, Prasanthigram
Sri Prasanth G	Bio prospecting of ethno botanical plants with antimicrobial activity on the diarrhea causing bacteria in Puttaparthi	Prof. R Basavaraju

M.Phil. Scholars

Name	Area of Research	Research Supervisor(s)
Sri Vijaya Sai A	KIR and HLA – C Genotyping in Type 2 Diabetes subjects from the population of Puttaparthi Region	Prof. R Basavaraju

Projects & Dissertations Completed

M.Sc. (Biosciences) Dissertations

Name	Project Title	Supervisor(s)
Abhishek Gahatraj	Investigating the effects of carbon nanotubes and temperature variations on stress response using <i>Zaprionus indianus</i> as a model species	Dr. B E Pradeep
Achanta Sree Sai Aditya	Tissue Culture studies and Antioxidant properties of Adhatoda beddomei C B Clarke	Prof. R Basavaraju
Girish Bhardwaj	Basic DNA Extraction and protein profiling of endophytic fungi	Dr. B S Vijayakumar
Girish T N	Detection of <i>Mycobacterium tuberculosis</i> in formalin fixed; paraffin- embedded Human tissue samples b using conventional PCR, Nested PCR and RT- PCR - A Comparative Study	Dr. B E Pradeep
Abhinav Nair	Lead toxicity in <i>Pila globosa</i> : Stress proteins response and antioxidant enzyme activity	Sri A S Vishwanathan
Rahul Namdeo	Construction and characterization of a two chambered Microbial Fuel Cell	Sri A S Vishwanathan
Ranjan Devkota	Molecular profiling of extended spectrum beta lactamase (ESBL) genes and Insilico docking study of novel compound with beta lactamase enzyme	Dr. B E Pradeep
Sai Siranjeevi M	Study of the Antimicrobial and Antioxidant activities of select medicinal plants of Puttaparthi	Prof. R Basavaraju
Sashi Harish	Detection and characterization of abnormal Hemoglobins in samples obtained from Sri Sathya Sai General Hospital	Dr. B E Pradeep
Sai Santosh Shetty	Effect of Cadmium Toxicity on <i>Pila globosa</i> : A Biochemical and Antioxidant enzyme study	Sri A S Vishwanathan
Sai Manohar T	Design of Lead Compounds for Positive modulation of GABAA receptor using 3D- QSAR & in silico Docking studies of Flavones with Benzodiazepine binding site	Prof S S Rajan

RESEARCH PUBLICATIONS

Journal Papers

- Reddy J S, Ravikumar N, Gaddamanugu G, Naresh K N, Rajan S S and Anand K S (2013) Synthesis, crystal structure, spectral characterization and fluorescence Studies of salts of α-mangostin with APIs. *Journal of Molecular Structure*, 1039, 137-143.
- Naresh K N, Krupanidhi S and Rajan S S (2013) Purification, spectroscopic characterization and o-diphenoloxidase activity of hemocyanin from a freshwater gastropod Pila globosa. The Protein Journal, 32, 327-336.
- Arvind K, Solomon K A and Rajan S S (2013) QSAR studies of tetranortriterpenoid: an analysis through CoMFA and CPSA Parameters. *Letters in Drug Design & Discovery*, 10, 415-419.
- Arvind K, Solomon K A and Rajan S S (2012) In-silico interaction studies on inhibitory action of tetranortriterpenoids on actin. *International Journal of Pharma and Bio Sciences*, 4(3), 193-203.

- Krishna R S, Krushna N S A, Narayanan R B, Rajan S S and Gunasekaran K (2013) Physicochemical characterization of an aspin (rBm-33) from a filarial parasite Brugia malayi against the important human aspartic proteases, Journal of Enzyme Inhibition and Medicinal Chemistry, doi:10.3109/14756366.2012.710849.
- Vennel Raj J and Basavaraju R (2012) In Vitro nodal experiments propagation of Aegle marmelos (L) Correa, Indian Journal of Innovations and Developments, 1(8), 575-587.
- Sai Murali R S and Basavaraju R (2012) Influence of plant growth regulators on the invitro morphogenetic and callogenetic competence of Adhatoda vasica Nees, Medicinal Plants - International Journal of Phytomedicines and Related Industries, 4(3), 138-142.
- Vennel Raj J and Basavaraju R (2012) Floristic diversity of Puttaparthi mandal A taxonomic overview. International Journal of Current Science, 3, 89-96.
- Nagarajesh G and Vijayakumar B S (2013) Studies on Anti-Oxidant activity of the Endophytic Fungi of Tulasi Plant. The Indian Journal Of Association Of Applied Microbiologists (Accepted For Publication).
- Tripathi P and Pandey S (2013) L-Arginine attenuates oxidative stress conditions during cardiomyopathy, Indian Journal of Biophysics and Biochemistry, 50(2), 99-104.
- Vishwanathan A S, Govind Rao, and Siva Sankara Sai S (2013) A novel minimally invasive method for monitoring oxygen in microbial fuel cells, Biotechnology Letters, 35(4), 553-558.
- Sivaramakrishnan V and Fountain S J (2012) Intracellular P2X receptors as novel calcium release channels and modulators of osmoregulation in Dictyostelium: A comparison of two common laboratory strains. Channels, 7(1), 43-46.

Conference Papers

- Naresh K N, Arvind K and Rajan S S (15-16 Feb 2013) Involvement of C-terminal β- rich domain in regulating the interaction between phenolic substrates and the active site of molluscan hemocyanins: an in-silico study. 4th National Seminar on Computer Aided Drug Design, Sri Venkateswara Institute of Medical Sciences University (SVIMS), Tirupati, Andhra Pradesh.
- Naresh K N, Arvind K and Rajan S S (8-11 Jan 2013) Structure explains the dual function of invertebrate oxygen carrier proteins – hemocyanins. International conference on Biomolecular Forms and Functions, Molecular Biophysics Unit, Indian Institute of Science, Bangalore, India.
- Nagarajesh G and Vijayakumar B S (17-18 Dec 2012) Studies on Antioxidant activity of the Endophytic Fungi of Tulasi plant grown in and around Vidyagiri Campus, Prasanthi Nilayam, Anantapur District, Andhra Pradesh. 10th LAAM National Conference On Exploiting The Potential Of Microbes For Bioscience And Biotechnology And Medicine. The Centre For Environmental Nuclear Research (CENR), SRM University, Chennai, India.
- Biswal R, Kumar A K, Venketesh S (15-16 Feb 2013) In silico screening of NDM-1 Inhibitors using autodock Vina. 4th National Seminar on Computer Aided Drug Design, Sri Venkateswara Institute of Medical Sciences University (SVIMS), Tirupati, Andhra Pradesh.
- Sai Murali R S, Putluri N, Naresh K N, Arvind K, Prasanth G, Nageswararao G, Venketesh S, Sreekumar A and Basavaraju R (15-16 Feb 2013) Quinazoline alkaloids from Adhatoda vasica Nees as novel topoisomerase inhibitors. 4th National Seminar on Computer Aided Drug Design, Sri Venkateswara Institute of Medical Sciences University (SVIMS), Tirupati, Andhra Pradesh.
- Malleswar D and Krupanidhi S (4-7 Sep 2012) Hsp 40 up-regulation: A compensatory mechanism for seasonal stress. The 21st International Congress of Zoology (ICZ), Haifa, Israel.
- Malleswar D and Krupanidhi S (25-29 Sep 2012) Pila globosa (Swainson, 1822): a sentinel organism to monitor climatic stress in the ecosystem. The Eleventh International Congress on Medical and Applied Malacology, Rio de Janeiro, Brazil.
- Malleswar D and Krupanidhi S (3-6 Dec 2012) Protein expression profiles in Pila globosa under aestivation. Molluscs 2012 Triennial Conference, Melbourne, Victoria. Australia.



DEPARTMENT OF HOME SCIENCE



COURSES OFFERED

Undergraduate	B.Sc. Home Science	
Postgraduate	M.Sc. Food Science & M.Sc. Food Technology	
Research	M.Phil.	Ph.D.

Teaching Faculty

Head of Department: Prof. (Mrs.) Rashmi Kapoor

Name	Designation	Qualification
Prof. (Mrs.) Rashmi Kapoor	Professor	M.Sc., Ph.D.
Dr. (Mrs.) B Andallu	Associate Professor	M.Sc., Ph.D.
Dr. (Miss) N Srividya	Asst. Professor	M.Sc., Ph.D.
Miss M Srijaya	Asst. Professor	M.Sc.
Mrs. A Sumana	Asst. Professor	M.Sc.

WORKSHOPS ATTENDED

Mrs. A Sumana

- 78th Orientation Programme, UGC Academic Staff College, University of Hyderabad, Andhra Pradesh, 20 Sep to 17 Oct 2012.
- 3rd Incoftech International Conference on Food Technologies, Workshop on *Challenges and Solutions for Sustainable Food security*, Indian Institute of Crop Processing Technology (IICPT), Thanjavur, Tamil Nadu, 4-5 Jan 2013.
- 3rd Incoftech International Conference, Workshop on *HACCP and GMP for Food Industries*, Indian Institute of Crop Processing Technology (IICPT), Thanjavur, Tamil Nadu, 4-5 Jan 2013.



SPECIAL ACHIEVEMENTS

Prof. (Mrs.) Rashmi Kapoor

- Delivered the keynote address 'Software applications for data analysis and research writing' at the In-house faculty workshop held at SSSIHL, Anantapur during 6-9 Aug 2012.
- Acted as Selection Member for the Selection Committee for the Post of Professors in Food Service Management and Dietetics held on 6 Dec 2012 at Avinashlingam Institute of Home Science, Coimbatore.
- Invited as a Resource Person by Andhra Pradesh Public Service Commission to design syllabi for Home Science during 31 Dec 2012 at APPSC, Hyderabad.

Dr. (Mrs.) B Andallu

- Invited lecture on 'Herbal Remedies for Stress-induced Diseases' on 11 Sep 2012 in Savannah State University, Georgia, United States of America.
- Recipient of 'Talented Scientist Award' in the 4th International Conference on Medicinal Plants & Herbal Products organized at Johns Hopkins University, Rockville, Maryland, United States of America held during 6 -8 Sep 2012.
- Recipient of felicitation for 'Achievements and awards' from Arya Vysya officials and Professionals Association
 (AVOPA), Nellore on 27 May 2012. Delivered lecture on 'Research highlights and their use for common people'
 Delivered lecture on 'Role of women in the welfare of family' as per the vision of Bhagawan Sri Sathya Sai Baba
- Delivered a Keynote address on 'Healing with herbs and spices', Raj Ayu Con 2013. International conference on Ayurveda and complementary systems of medicines, 23-24 Feb 2013, organized by Mission Ayurved, Rajkot, Gujarat, India
- Reviewer for OMICS Publications, Chinese Journal of Integrative Medicine and Food Bioscience.
- Resource person for a workshop titled 'Imbibing teaching abilities/skills in relation to the CIE and ESE Evaluation system at Sri Sathya Sai Institute of Higher Learning for Junior faculty members.

Dr. (Miss) N Srividya

- Reviewer for the following journals:
 - a) Journal of Food Science and Technology, Springer Publications
 - b) Journal of Food Science and Engineering, David Publications, USA
 - c) Critical reviews in Food Science and Nutrition, CRC Press, USA
 - d) Journal of Public Health and Epidemiology
- Conducted an in-house workshop on, Software applications for data analysis and research writing, from 6-9 Aug 2012, at SSSIHL, Anantapur campus, for faculty members and research scholars of various departments.
- Chaired a session entitled 'Bio-composites I' at the 3rd International Conference on Natural Polymers and

- Biopolymers: micro to nano scales on 26 Oct 2012 at Centre for Nanoscience and nanotechnology, M.G.University, Kerala, India.
- Delivered an invited talk entitled, Aloe gel biopolymer-Postharvest, food and nutraceutical applications, at the 3rd International Conference on Natural Polymers and Biopolymers: micro to nano scales at Centre for Nanoscience and nanotechnology, M.G.University, Kerala, India, 26 Oct 2012.

Achievements in National level exams

Name of Candidate	Type of Qualification
Ms. Akiriti Pradhan	UGC Junior Research Fellowship
Ms. Shewta Rani Rai	UGC-NET
Ms. Varkekar Namratha	UGC-NET
Ms. Usha	DRDO Research Fellowship
Ms. Lakshmi Unni	DRDO Research Fellowship

RESEARCH

Research Projects – New

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
UGC	Dr. (Miss) N Srividya Food and Nutraceutical Applications of Aloe Vera Gel	2012 to 2014	₹2 lakhs

Scope:

The proposed study involves investigations of the biopolymer derived from Aloe vera plant. Its abundance, relatively low cost and unusual properties has made Aloe vera a potential source of eco-friendly material for diverse applications in food and health industry. The study aims to develop simple edible coating technology utilizing Aloe vera gel. This is in tune with the current interest and need for the development and marketing of environmental friendly biodegradable packaging. It also explores the possibility of using Aloe gel as a biopreservative, as demand for natural antimicrobials has also been increasing. Though several Aloe gel based products are available, scientific studies on the efficacy of such products is lacking and hence research in this direction is needed. Hence, the proposed study also focuses on evaluating the nutraceutical potential of Aloe gel in food products.

Deliverables:

- Development of Aloe gel based edible coating technology for fruits and vegetables.
- Application of Aloe gel as a natural preservative in foods.
- Formulation of Aloe gel based functional foods.
- Scientific validation of nutraceutical and therapeutic properties of Aloe gel and its products.

Social Relevance:

The coatings / films developed could reduce and / or replace conventional non- biodegradable plastics in many applications. In the food industry, it would result in reduced post-harvest losses, produce less plastic waste and offer protection in few cases after the package has been opened. Establishing the anti-microbial / preservative role of Aloe gel could help replace synthetic chemicals fully or partially in selected food systems. This would help reduce the use of harmful chemical preservatives in food. As diet forms an important mode of treatment as well as prevention of complicated metabolic diseases, investigations on Aloe gel products as anti-diabetic functional foods with antioxidant potential will be useful. These therapeutic food products would be beneficial especially to diabetics as a natural alternative therapy.

Research Projects – Completed

Granting Agency	Principal Investigator & Title of the Project	Time Period	Total Allocation
	Miss M Srijaya		
UGC	Impact of gamma irradiation on shelf life extension of selected fruits and vegetables grown in Anantapur District	Jan 2011 to Mar 2013	₹2 lakhs

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Ms. Tapasya Anand	Studies on phytonutrients and therapeutic potentials of mushrooms	Prof. (Mrs.) Rashmi Kapoor
Ms. Rajeshwari C U	Assessment of therapeutic potential of coriander (Coriandrum sativum L.) seeds in vitro and in vivo	Dr. (Mrs.) B Andallu
Ms. Iyer Shobha Ramamurthy	Nutraceutical potential of aniseeds (<i>Pimpinella anisum L.</i>)	Dr. (Mrs.) B Andallu
Ms. Pushkala Ramachandran	Food and Nutraceutical applications of aloe gel and chitosan	Dr. (Miss) N Srividya

M.Phil. Scholars

Name	Area of Research	Research Supervisor(s)
Ms. Akriti Pradhan	Studies on nutraceutical potentials of probiotic enriched flax seed based products	Prof. (Mrs.) Rashmi Kapoor
Ms. Mekha M S	Evaluation of ajwain (<i>Trachyspermum ammi L.</i>) seeds for in vitro therapeutic potential	Dr. (Mrs.) B Andallu

Projects & Dissertations Completed

M.Sc. (Food Science & Nutrition and Food Technology)

Name	Project Title	Supervisor(s)
Ms. Ramalakshmi P	Evaluation of kokum (<i>Garcinia indica</i>) for its nutraceutical potential.	Dr. (Mrs.) B Andallu
Ms. P Naga Sunanda	Development of intermediate moisture based products	Miss M Srijaya
Ms. Davala Vimala Kumari	Formulation of value added products using certain underutilized green leafy vegetables	Ms. Meera M
Ms. B Shanthi Priya	Impact of gamma irradiation and osmotic dehydration on quality characteristics of guava (<i>Psidium guajava L</i>)	Miss M Srijaya
Ms. Arshina Dave	Effect of pure culture fermentation on chemical composition of corn and pulse blends	Prof. (Mrs.) Rashmi Kapoor
Ms. Arushi Dave	Studies on nutraceutical enriched tomato puree and tomato based functional beverages	Dr. (Ms.) N Srividya
Ms. Kritika Subramanian	Formulation and evaluation of certain baked products using wheat and horse gram (<i>Macrotyloma uniflorum Lam. Verdac.</i>) flour blends	Mrs. A. Sumana
Ms. G Lakshmi lyer	Studies on nutraceutical profile of pure fermented finger millet pulse blends	Prof. (Mrs.) Rashmi Kapoor
Ms. Varkekar Namratha Jagdeo	Evaluation of functional and nutraceutical quality of developed value added tomato powders	Dr. (Ms.) N Srividya
Ms. Yamini Iyer	Development and evaluation of vegetable based soup mixes	Ms. Meera M
Ms. P Madhavi Durga	In vitro assessment of medicinal properties of Piper cubeba	Dr. (Mrs.) B Andallu

RESEARCH PUBLICATIONS

Journal Papers

- Anand T and Kapoor R (2012) Development of herbs enriched low viscosity weaning mix. *Asian Journal of Dairy and Food Research*, 30(4), 111-118.
- Anand T and Kapoor R (2012) Determination of in vitro functional efficacy of fiber isolate from mushrooms. *Asian Journal of Dairy and Food Research*, 31(3), 195-198.
- Anand T and Kapoor R (2012) Glucose lowering effects of pre-cooked instant preparations containing mushroom in non-insulin dependent diabetic and normal subjects. *Asian Journal of Dairy and Food Research*, 31(3), 136-141.
- Rajeshwari C U and Andallu B (2012) Extraction and detection of flavonoids in the methanolic extract of seeds of *Coriandrum sativum L*. by RP-HPLC. *Novus International Journal of Analytical Innovations*, 1(2), 34-39.
- Rajeshwari C U, Siri S and Andallu B (2012) Antioxidant and anti-arthritic potential of coriander (*Coriandrum sativum L.*) leaves. *e-SPEN Journal* (e-spenjournal.org/article/S2212-8263(12)00049-8/fulltext).
- Mekha M S, Rajeshwari C U, Shobha R I and Andallu B (2012) Phytochemical constituents in methanolic extract and various fractions of methanolic extract of ajwain (*Trachyspermum ammi L*.) seeds. *Novus International Journal of Analytical Innovations*, 1(2), 20-33.
- Andallu B, Vinay Kumar A V, Varadacharyulu N Ch. (2012) Oxidative stress in streptozocin-diabetic Rats: Amelioration by mulberry (*Morus Indica L.*) leaves. *Chinese Journal of Integrative Medicine*, 1-6.

- Srividya N and Pushkala R (2012) Quality Evaluation and Antioxidant Potential of Papaya RTS Spiced Beverage. Research Journal of Pharmaceutical, Biological and Chemical Sciences, 3, 460-466.
- Abirami L S S, Pushkala R and Srividya N (2013) Antimicrobial activity of selected plant extracts against two important fungal pathogens isolated from papaya fruit. International Journal of Research in Pharmaceutical and Biomedical Sciences, 4(1).
- Sai Lakshmi M, Pushkala R and Srividya N (2013) Aloe vera gel coating for post harvest quality maintenance of fresh fig fruits. Research Journal of Pharmaceutical, Biological and Chemical Science, 4(1)
- Srijaya M,Parvathi R and Kusuma D L (2012) Impact of gamma irradiation combined with hot water and calcium chloride treatment on shelf life and quality of ber (Zizyphus mauritiana). Indian Food Packer, 66(6) (Nov-Dec), 86-96.
- Shobha R I and Andallu B (2013) Oxidative stress and cancer: Role of anti-carcinogenic herbs and spices in cancer prevention. American Journal of Phytomedicine and Clinical Therapeutics, 1(3), 351-369.
- Rajeshwari C U, Shobha R I and Andallu B (2012) Antihemolytic activity of various fractions of methanolic extract of coriander (Coriandrum sativum L.) leaves and seeds: A comparative study. Pakistan Journal of Food Science, 22(1), 1-6.
- Pushkala R, Parvathy K R and Srividya N (2013) Chitosan based powder-coating technique to enhance phytochemicals and shelf life quality of radish shreds. Post Harvest Biology and Technology, in press.
- Shobha R I, Rajeshwari C U and Andallu B (2013) Anti-peroxidative and anti-diabetic activities of aniseeds (Pimpinella anisum L.). and identification of bioactive compounds. American Journal of Phytomedicine and Clinical Therapeutics, 2013: 1(5); 516-527.

Conference Papers

- Pradhan A and Kapoor R (4-5 Jan 2013) Prebiotic effectiveness of flaxseed by probiotic blends. 3rd International Conference on Food Processing Technologies - Challenges and Solutions for Sustainable Food Security, Indian Institute of Crop Processing Technology, Ministry of Food Processing Industries, Tanjavur. Accepted for publication.
- Kapoor R (12-13 Dec 2012) Development of probiotic enriched soya, fingermillet and flaxseed based products and validation of benefits in type 2 diabetes. Biofest-2012, Leonia Centre for Exhibition, Hyderabad. Accepted for publication.
- Anand T and Kapoor R (20-22 Sep 2012) Mushroom of South India- a source of bioactive components. International Conference on Bioactive Natural Compounds in Nutrition and Health, CMS College, Kottayam. Accepted for publication.
- Pradhan A. Kapoor R (20-22 Sep 2012) Nutraceutical enhancement of flaxseed enriched food through pure culture fermentation. International Conference on Bioactive Natural Compounds in Nutrition and Health, CMS College, Kottayam. Accepted for publication.
- Rajeshwari C U, Krishnasree V and Andallu B (4-5 Jan 2013) Phytochemical constituents in methanolic extract and various fractions of methanolic extract of vanilla pods and essence. 3rd International Conference on Food Technology 2013: 'Food Processing Technologies - Challenges and solution for sustainable food security', Indian Institute of Crop Processing Technology, Thanjavur, Tamil Nadu.
- Shobha R I, Rajeshwari C U and Andallu B (6-8 Sep 2012) Radical Scavenging, anti-peroxidative and anti-inflammatory activities of aniseeds: an in vitro assessment. 4th International Conference on Medicinal Plants & Herbal Products, Johns Hopkins University, Rockville, Maryland, USA.
- Rajeshwari C U and Andallu B (23-24 Feb, 2013) Phytochemical constituents and medicare potential of ethyl acetate fraction of coriander (coriandrum sativum l.) seeds. Raj Ayu Con 2013- International conference on Ayurveda and complementary systems of medicines, Mission Ayurved, Rajkot, Gujarat.
- Shobha R I, Radhika B and Andallu B (23-24 Feb 2013) Ashwagandha (Withania somnifera, Dunal): An overview as a medicinal plant. Raj Ayu Con 2013- International conference on Ayurveda and complementary systems of medicines, Mission Ayurved, Rajkot, Gujarat.
- Andallu B and Rajeshwari C U (23-24 Feb 2013) Healing with herbs and spices. Raj Ayu Con 2013 International conference on ayurveda and complementary systems of medicines, Mission Ayurved, Rajkot, Gujarat, India.
- Rajeshwari CU, Shobha RI, Mekha MS and Andallu B (20-22 Sep 2012) Qualitative, quantitative (RP-HPLC) analysis,





radical scavenging and reducing potential of methanolic extract of coriander (*Coriandrum sativum L.*) seeds. *International Conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*, CMS College, Kottayam, Kerala, India. Proceedings published, pp.210-219.

- Shobha R I, Rajeshwari C U, Mekha M S and Andallu B (20-22 Sep 2012) In vitro radical scavenging, anti-peroxidative and anti-inflammatory activities of aniseeds. *International Conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*, CMS College, Kottayam, Kerala.
- Andallu B, Shobha R I, Rajeshwari C U and Mekha, M S (6-8 Sep 2012) Botanicals in combating oxidative stressinduced diseases. 4th International Conference on Medicinal Plants & Herbal Products, Johns Hopkins University, Rockville, Maryland, USA.
- Poojitha M N, Pushkala R and Srividya N (20-22 Sep 2012) Enhanced calcium extractability and antioxidant nutrients in papaya powder formulated with TCP and Aloe gel. *International conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*, CMS College, Kottayam, Kerala.
- Pushkala R and Srividya N (20-22 Sep 2012) Improved nutraceutical profile of papaya RTS beverage blended with bioactive Aloe gel polymer. *International conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*, CMS College, Kottayam, Kerala.
- Pushkala R, Usha T and Srividya N (4-6 May 2012) Evaluation of chitosan as an anti-staling and bio preservative agent in wheat flour chapati. *World congress on Biotechnology*, Hyderabad.
- Pushkala R, Poojitha M N and Srividya N (4-5 Jan 2013) Effect of anti caking agents on physicochemical characteristics and functional profile of formulated papaya fruit powder. 3rd International Conference on Food Technology 2013: Food Processing Technologies- Challenges and solutions for sustainable food security, IICPT, Thanjavur, Tamil Nadu.
- Pushkala R and Srividya N (26-28 Oct 2012) Enhanced in vitro anti diabetic and anti oxidant potential of papaya fruit powder enriched with Aloe gel biopolymer. 3rd International Conference on Natural Polymers and Biopolymers: micro to nano scales, Centre for Nanoscience and Nanotechnology, M G University, Kerala.
- Parvathy K R, Pushkala R and Srividya N (4-6 May 2012) Chitosan coating: A bio-preservation technique for enhancing shelf life quality of minimally processed carrots. *World congress on Biotechnology*, Hyderabad.
- Pushkala R and Srividya N (26-28 Oct 2012) Influence of chitosan biopolymer fortification on rheological, nutraceutical and shelf life quality of Indian flat bread. 3rd International Conference on Natural Polymers and Biopolymers: micro to nano scales, Centre for Nanoscience and Nanotechnology, M G University, Kerala.
- Srijaya M, Jenny K, Kusuma D L (20-22 Sep 2012) Bioactive potential and quality characteristics of tomato (*Lycopersicum esculentum*) in response to application of gamma irradiation during post harvest storage. *International conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*, CMS College, Kottayam, Kerala. Proceedings published (ISSN NO: 978-81-923850-5-1), pp.73-75.
- Gunavathi S K and Sumana A (4-5 Jan 2013) Physiochemical and sensorial evaluation of sesame seed meal enriched cookies. 3rd Incoftech- 2013, International Conference on Food Processing Technologies for Food Technologies, IICPT, Pudukkottai Road, Thanjavur. Abstract indexed, p.217.





• Sumana A and Aruna M (4-5 Jan 2013) Influence of addition of Agathi (Sesbania grandiflora) leaves on sensorial perception of pizza base. 3rd Incoftech- 2013, International Conference on Food Processing Technologies for Food Technologies, IICPT, Pudukkottai Road, Thanjavur. Abstract indexed, p.260.

Books

• Shobha R I and Andallu B (2013) *Nutraceutical potential of aniseeds (Pimpinella anisum L.): An in vitro assessment.* LAP LAMBERT Academic Publishing GmbH & Co (Germany). ISBN: 978-3-659-3521-3

Chapters in Books

- Andallu B and Srikanthi B L (2012) Effect of mulberry (Morus indica L.) leaves on blood glucose, glycosylated hemoglobin and serum gluconeogenic enzymes in NIDDM patients. In: Phytochemistry, pharmacology and therapeutics, Gupta V.K (ed), Daya Publishing House, New Delhi. Chapter 16, Vol. 2, pp.237-244.
- Rajeshwari C U and Andallu B (2012) Ajwain (*Tracyspermum ammi*) seeds in health promotion and disease prevention. *Traditional and Folk Herbal Medicine: Recent Researches*, Gupta V.K (ed), Daya Publishing House, New Delhi. Chapter 14, Vol. 1, pp.301-314.
- Rajeshwari C U, Shobha R I and Andallu B (2012) Qualitative, quantitative (RP-HPLC) analysis, radical scavenging and reducing potential of methanolic extract of coriander (*Coriandrum sativum L*.) seeds. *Proceedings of International Conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*. CMS College, Kottayam, pp.210-219.
- Shobha R I, Rajeshwari C U and Andallu B (2012) Radical Scavenging, anti-peroxidative and anti-inflammatory activities of aniseeds: an in vitro assessment. *Proceedings of International Conference on Bioactive Natural Compounds from Plant Food in Nutrition and Health*. CMS College, Kottayam, pp.210-219.
- Shobha RI and Andallu B (2013) Aniseed (*Pimpinella anisum L.*): An Overview, *Utilization and management of medicinal plants*, Gupta V.K (ed), Vol 2, Chapter 9, Daya Publishing House, New Delhi. pp.45-260.
- Rajeshwari CU and Andallu B (2013) Phytochemical Analysis of Bioactive Constituents in (*Coriandrum sativum L.*)
 Seeds, In: *Bioactive phytochemicals: Perspectives for Modern Medicine*, Gupta V K (ed), Daya Publishing House, New Delhi. Vol 2. Chapter 21, pp.53-470.









COURSES OFFERED

Undergraduate	Bachelor of Business Management (BBM)	
Postgraduate	MBA (Finance)	
Research	M.Phil.	Ph.D.

Teaching Faculty

Head of Department: Prof. R Kumar Bhaskar

Name	Designation	Qualification
Prof. U S Rao	Professor (Hon.)	M.Tech., Ph.D.
Prof. R Kumar Bhaskar	Professor (Hon.)	M.Com., M.A., Ph.D., PG Dip. T&D
Prof. A Sudhir Bhaskar	Professor (Hon.)	M.Tech., Fellow - IIM-B
Prof. Shiv R Pandit	Professor (Hon.)	M.B.A., Ph.D.
Prof. A Anantha Raman	Professor (Hon.)	B.E. (Mech.), M.B.A., Ph.D.
Sri Viney Thakar	Associate Professor (Hon.)	B.E., M.B.A.
Sri Arvind Hejmadi	Placement Officer (Hon.)	B.E., M.B.A.
Dr. B Sai Giridhar	Associate Professor	M.Com., Ph.D.
Sri H J Bhagia	Asst. Professor (Hon.)	B.E., D.I.M.
Sri R Renju	Information Scientist	B.E., M.B.A.
Mrs. N Jayaprada*	Asst. Professor	M.Com., M.B.A.
Dr. Sayee Manohar K	Asst. Professor	M.Com., M.Phil., Ph.D.
Dr. Deepak Anand	Asst. Professor	M.B.A., Ph.D.
Dr. N Niranjan	Asst. Professor	M.B.A., Ph.D.
Dr. S Subramanian	Asst. Professor	M.B.A., Ph.D.
Sri V N Prakash Sharma*	Asst. Professor	M.Com., M.B.A., ICWA





Sri M S Sai Vinod*	Asst. Professor	B.E. (COMP.), M.B.A., M.Phil.
Sri B Chandrasekhar*	Asst. Professor	B.E. (ECE), M.B.A., M.Phil.
Ms. Shubhra Upadhyaya	Asst. Professor	B.A., M.B.A.
Mrs. Anubhuti Gajjar	Asst. Professor (Part-time)	B.B.A., PGDM
Dr. Ramaier Sriram	Honorary Senior Manager, UMS	B.Sc., M.Eng., Ph.D.

^{*} also pursuing Doctoral Research

Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Sri M Sesha Sai	Distributor, Sony Tablets and Nokia Mobile Phones, Chennai	Practical experience in Sales Management	26 Jun to 24 Oct 2012 and Winter Semester 2012/13
Sri A N Mohanakrishnan	Chartered Accountant	Financial Accounting, Cost and Management	Summer Semester 2012/13
Mr. Mahesh Vellanki	Vice-President and Chief Technical Architect, Redit Risk Technology, Goldman Sachs & Co., New York, USA	Colloquium lectures	11-14 Jul 2012
Sri Jagdish Chawla	Reliance Trends, Bangalore	Colloquium lecture	28 Jul 2012
Sri Vignaraj Sanmughalingam & Sri Y Vasu	Washington, D.C., USA	Research discussions with students and faculty	4-7 Aug 2012
Sri Prakash Chittaranjan	Process Consultant, Global Delivery Centre, Hewlett Packard, Bangalore.	Quality Management	6-8 Aug 2012
Sri Kovai Chelvan	Senior Vice President, TVS Group, Hosur	Industrial Experience	7-8 Aug 2012

Sri Ravindra K Menon	Independent Finance/Forex Consultant	International Banking	24-28 Aug 2012
Sri Siddharth Gopinath	Vice- President, Marketing and R&D, New World Pasta, Pennysylvania, USA	Marketing Management	23-24 Aug 2012
Dr. Samir Parekh	Chartered Accountant	Finance and Risk Management	7-8 Sep 2012
Dr. Devsen Kruthiventi	Tata Chemicals Ltd., Mithpur, Gujarat	Colloquium lecture	22 Sep 2012
Sri Sridhar Swamy	Chartered Accountant & Partner, IAP Investment Banking Pvt Ltd., Mumbai	Industrial experience & Banking	23-26 Sep 2012
Sri Hemant Changkakoty	Marketing - Product and New Business Development at Treetle Inc. and Alumni of the Institute	Colloquium lecture	17 Nov 2012
Sri Anand R Moorthy	Account Planner at Google Inc. & Alumni, SSSIHL	Colloquium lecture	17 Nov 2012
Prof. John D Adams	Faculty Chair - Senior Professor Emeritus, California, USA	Lectures on Values centred Ledership and Research discussions with students and faculty	17-20 Nov 2012
Sri Sundara R Krishnaswami	Senior Energy Industry Executive and CEO, Preeti PetroChem USA, USA	Case discussion and Research discussions with students and faculty	13 Dec 2012
Dr. David Cornsweet	American Psychotherapy Association Fellow, California, USA	Values Centered Leadership	15 Nov to 1 Dec 2012 and 1 Feb to 30 Mar 2013
Sri R R Nair	Independent Consultant & TVS Adviser, Bangalore	Assertiveness Training	22 Jan 2013
Dr Soumya Ray	Assistant Professor, National Tsing Hua University, Taiwan	Lecture on Service Science	2 Feb 2013
Prof. Mette Morsing	Copenhagen Business School, Denmark	Research methods for Managers	28-29 Jan 2013
Sri K Sukumar	CFO, TVS Motors Ltd., Hosur, Tamil Nadu	ABC costing - management implications in TVS Motors	28 Jan 2013
Dr. E V Joshy	Chief of Neurology, SSSIHMS, Whitefield, Bangalore	Colloquium lecture	9 Feb 2013
Sri Ganesh Subramaniam	TCS, Chennai	Colloquium lecture	9 Feb 2013
Sri V M Ramalingam	Certified Consultant for TVS Motors and Human Process Facilitator	Management Finance and Taxation	9-10 Feb 2013
Sri Vivek Kapoor	Vice- President - Agri Marketing Rallis India (Tata Enterprise) and Alumnus of the Institute	Colloquium lecture	9 Mar 2013

WORKSHOPS & CONFERENCES CONDUCTED

Workshop 1

Title: Emerging Trends in Finance

Dates: 18 Aug 2012

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Workshop 2

Title: Ideal Profile of a Manager – Man Management

Dates: 15 Sep 2012

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Keynote Address: Bhagawan Sri Sathya Sai Baba's Divine discourse: 'Ideal Profile of a Manager in Man Management'

(Video)

Workshop 3

Title: Emerging Trends in HRM

Dates: 24 Dec 2012

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Workshop 4

Title: Emerging Trends in Marketing

Dates: 19 Jan 2013

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Workshop 5

Title: Values Centered Leadership - Man Management

Dates: 23 Mar 2013

Venue: Multimedia Learning Centre, Prasanthi Nilayam Campus

Keynote Address: Bhagawan Sri Sathya Sai Baba's video discourse on 'Values Centred Leadership in Man Management'

List of External Speakers / Invited Guests (for the above workshops)

Name	Designation	Topic
Sri Dhiraj Relli	South Head, Retail Banking, HDFC Bank	Emerging Trends in Banking
Sri Mayank Bathwal	CFO, Birla SunLife Insurance Co. Ltd.	Emerging Trends in Insurance
Sri Bala Subramanian A	CEO, Birla SunLife Mutual Fund	Emerging Trends in Capital Markets

Mr. Radhakrishnan Nair	Chief Human Resources Officer, The Federal Bank Ltd., HR Department, Corporate Office, Federal Towers, Ernakulam, Kerala.	Tapping into Employee Passion – Creating Effective HR Processes
Mr. B V M Rao	Head, Human Resources, Shoppers' Stop, Mumbai	Talent Management Today
Mr. Senthil Kumar	Formerly HR TISCO, Chennai	Challenges of Global HRM
Mr. Manoj Ganjawalla	Vice President, Godrej & Boyce	Emerging Trends in Marketing: Current Scenario in India
Mr. Mouli Venkataraman	Marketing Head-South India, Nokia India Ltd.	Challenges Faced in Marketing to Rural Consumers in This Rapidly Changing World
Mr. Ranjan Samanta	Market Research Head, TVS Motors	Identifying Trends Through Market Research in a Diverse Country Like India (With case examples)
Shri Shashidhar	Senior Manager, ST Micro, Bangalore	
Shri Gunaranjan	Director, YouSee, Hyderabad	Experience Sharing by Alumni-Practicing Managers on 'Ideal Profile of a Manager'
Shri Vikas Gupta	Senior Programme Manager, NetApp, Bangalore	on ideal Fronte of a Manager
Mr Amar Vivek	Advocate, High Court of Punjab and Haryana	
Mr Vijay Krishnan	Independent Consultant and Youth Coordinator, Sri Sathya Sai Seva Organization, Salem, Tamil Nadu	Experience Sharing by Alumni-Practicing Managers on "Values Centered Leadership"
Mr Pushkaraj Gumaste	Director, Barclays Bank India	

Workshop 6

Title: Bhagawan Baba's values and its application in Business and Corporate life

Dates: 26-27 Jan 2013 **Venue:** Muddenahalli Campus

List of External Speakers / Invited Guests

Name	Designation	Topic
D Nagasamy	Assistant General Manager, Jamna Auto Industries limited	Why fear when I am here
K R Suresh	Family business	Business Ethics
Vijayakrishnan V	Kavi Investments (Family business)	Ambition & self or Personal Financial Planning
V Suresh	Executive Vice-President and Head Sales, Info Edge India Ltd. (Naukri.com)	Unfolding the secrets of Corporate Success - Learnings from my life so far

Ratna Kumar Jetty	First Generation Entrepreneur & Founder, Divine Earth Holdings	Rural Development through sustainable, clean and zero budget farming
Ravi Chand Koney	Global Operations Director, HCL Technologies	Decision Making
Dr. K Prasanna Sai	Director, Valcon Management Consultants	Journey of a Sai Student in Corporate World
V Sairam	Family biz and network marketing	Trikarnasuddhi
K V Prasanna Kumar	Virtusa India Pvt. Ltd.	Building Teams
H Harihar Krishna	Consultant, Tata Consultancy Services Ltd.	Help Ever
Vidya Shankar	HCL Technologies	
Dr. N Sivakumar	Associate Professor, Dept. of Commerce, SSSIHL	Greatness to Goodness - Human Values in Business
G Sayee Krishnan	Consultant, Tata Consultancy Services Ltd.	Realize your potential

Management Development Programme

Title: Strategic Planning **Dates:** 6-8 Sep 2012

Venue: Dept. of Management Studies, Prasanthi Nilayam Campus.

Theme of the Training Programme:

Conducted exclusively for the senior executives of Burckhardt Compression (India) Pvt. Ltd. by senior faculty memebers and research scholars of the department.

Departmental Colloquium

The Department of Management Studies regularly hosts colloquium talks by the teachers, research scholars and external experts in the areas of Management & Finance. The details of the colloquium are provided below.

Date	Presenter	Designation	Topic
11-14 Jul 2012	Shri Mahesh Vellanki	VP and Chief Technical Architect, Credit Risk Technology, Goldman Sachs & Co., New York, USA	Introduction to the world of investment banking
28 Jul 2012	Mr. Jagadish Chawla	Sr. Vice-President, Buying & Merchandising, Reliance Trends, Bangalore	Strategic issues and emerging trends in retailing in India
7-8 Jul 2012	Mr. Samir Parekh	Owner Proprietor and Chief Consultant, M-4, Mumbai	Importance and role of , Sales function in a company
22 Sep 2012	Dr. Deven Kruthiventi	Head, Knowledge Management, Tata Chemicals, Gujarat	Knowledge management & ITS application case studies in Tata Chemicals, Tata Motors.





	Mr. Anand R Muthy	Account Planner, Google Inc.	For new developments and impact
17 Nov 2012	Mr. Hemant Chagkaktoy	Marketing, Product and New Business Development	of the digital communication world on our professional lives.
2 Feb2012	Dr. Soumya Ray	Asst. Professor, National Tsing Huga University	Service Science – an interdisciplinary area that is at the intersection of management, information, science, emerging and design.
9 Feb 2013	Sri Ganesh Subramanian	Sr. Training Consultant – Investment Banking & Financial Services, Tata Consultant Services	Personal experience in industry
9 Feb 2013	Dr. Joshi E V	Sr. Consultant & Chief of Neurology, SSSIHMS Whitefield	Brain mind and behaviour in the professional world
9 Mar 2013	Mr. Vivek Kapoor	Vice-President, Agriculture marketing Rallis India Ltd. Hyderabad	Indian Rural Scenario & Trends

Workshops Attended

- Sri B Chandrasekhar attended the Faculty Development Programme on Excellence in Management Education, PSG Institute of Management, Coimbatore, Tamil Nadu, 22-23 Feb 2013.
- Mrs. N Jayaprada attended the Faculty Development Programme on Current Financial Issues in Indian Economy, Dept. of Management Studies, Vidya Jyothi Institute of Technology, Hyderabad, Andhra Pradesh, 21 Sep 2012.
- Ms. Shubhra Upadhyaya attended the Faculty Development Programme on Excellence in Management Education, PSG Institute of Management, Coimbatore, Tamil Nadu, 22-23 Feb 2013.
- Sri R Renju attended the 'Supply Chain Role Playing Game' held in NIT Kozhikkode, 21-22 Dec 2012.
- Dr. Shashank Shah participated in a case writing workshop conducted by the Indian School of Business (ISB), Hyderabad in collaboration with the Richard Ivey Business School, Canada at ISB Hyderabad, 30 May to 1 Jun 2012.

Other Information

Industrial Tour for MBA / MBA (Finance) students

• A five-day Industrial tour to Bangalore was organized by the Department for all the MBA / MBA (Finance) I Year students, 16-20 Apr 2013.





SPECIAL ACHIEVEMENTS

Prof. A Sudhir Bhaskar

- Invited to participate for the finals of the Tata Business Leadership awards as a Judge, Mumbai, Jul 2012
- Delivered Inaugural Talk at 18th Diploma Course of the Institute of Sathya Sai Education (India), 7 Apr 2013

Prof. A Anantha Raman

Invited to participate for the finals of the Tata Business Leadership awards as a Judge, Mumbai, Jul 2012

Dr. B Sai Giridhar

 Invited as an external examiner for conducting Viva Voce for MBA students of S V University, Tirupati, 22-23 Jun and 18-19 Nov 2012.

Dr. Shashank Shah

- Selected as Reviewer, Series on Emerging Market Case Studies, Emerald Publishers, UK, Oct 2012.
- Selected as Reviewer, Journal of Human Values, Indian Institute of Management Calcutta, published by Sage Publications, Jun 2012.
- Invited to author a special series of articles on the theme of 'Values-Based Business and Stakeholder Management:
 Case Studies and Interviews' for the Journal of Values-Based Leadership, International Journal of the College of
 Business, Valparaiso University, USA, Sep 2012.
- A paper on 'Hindustan Unilever Ltd.: Meeting Employee Expectations' was selected for publication in the prestigious lvey Publishing Case Study Series at the ISB-Ivey Global Case Competition conducted by the Indian School of Business, Hyderabad in collaboration with the Richard Ivey School of Business, University of Western Ontario, Canada, Jun 2012.
- A presentation on 'Innovation Culture at the Tata Group' at Harvard University, USA in May 2013, was selected by the Chairman of the Innovation Council, Tata Technologies, as the inaugural presentation for the Company's Innovation Hub site inaugurated by Mr. S. Ramadorai, Chairman, Tata Technologies, 21 Jun 2013.
- Interviewed and presented research findings in the areas of Stakeholders Management, Business Ethics and Corporate Responsibility to over twenty-five subject matter experts and senior professors across several universities (including Harvard Business School, MIT Sloan, Darden and NYU Stern), government and other organisations (such as the UN) during a study tour to USA in May 2013, as part of post-doctoral research.

Achievements in National level exams

Name	CSIR JRF/NET Rank*	Total No. of Exam takers
Neelratna Chowbal	UGC NET: Lecturership (LS)	7,78,130 (Dec 2012)
Rohit Chhabra	UGC NET: Lecturership (LS)	7,78,130 (Dec 2012)
	UGC NET: Lecturership (LS)	5,71,627 (Jun 2012)
Mrs. N Jayaprada	Andhra Pradesh State Eligibility Test (APSET): Lecturership (LS)	(Jun 2012)

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test) | LS (Lectureship) | All ranks are national (All India Rank)

RESEARCH

Post-Doctoral Research Scholars

Name	Qualification	Area of Research
Dr. Shashank Shah	B.Com, MBA, M.Phil., Ph.D.	Leadership Perceptions on Business Management and Stakeholder Welfare: A Qualitative Study of Corporate India

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Sri G S S Rangarajan	Spirit at work in India: A study of select organizations	Prof. R Kumar Bhaskar
Sri Bhabani Shanker P	Social entrepreneurship with social orientation: Case studies of selected successful organizations in India	Prof. R Kumar Bhaskar
Sri Amey Deshpande	Strategic Planning and Performance Management Systems in SMEs – Framework Development and Case Study Analysis	Prof. A Sudhir Bhaskar
Sri S Sai Manohar	A study of innovation culture of leading innovative organizations of the world	Prof. Shiv R Pandit
Sri B Chandrasekhar	Micro-savings as a potential component of Indian Microfinance – A mixed method study	Prof. A Anantha Raman
Sri V N Prakash Sharma	Corporate Governance, Financial Performance and Value of a Firm	Prof. M S Narasimhan, Finance & Control, Indian Institute of Management, Bangalore and Dr. B Sai Giridhar
Sri Jhaveri Sunil Aman Priti	Co-evolution of firms and their business environments: A study of select sectors in India	Prof. A Anantha Raman

M.Phil. Scholars

Name	Area of Research	Research Supervisor(s)
Sri Rohit Chhabra	AGILE Organisations	Prof. U S Rao

Projects & Dissertations Completed

MBA Dissertations

Name	Project Title	Supervisor(s)
Amit Prakash	Indian Airline Industry: A Consumer Perception Study of Full Service Airlines	Sri Arvind Hejmadi
Arun L	Visual Analysis of Anomalies in the Indian Stock Markets	Prof. U S Rao & Dr. Subramanian S
C Krishna Das	Prediction of Volatility and Option Price Using Neural Networks and Black-Scholes Model	Prof. U S Rao & Dr. Subramanian S
Gautham Narendran	Study of the Impact of Macroeconomic Variables on the Indian Stock Market	Dr. Subramanian S
Ravi Kiran G	Tertiary Healthcare in India: Models for Universal Access	Prof. U S Rao
V Gokul	Practice of Six Sigma in India: A Study of Select Corporate Organisations	Sri G S S Rangarajan & Dr. Shashank Shah
Harshad Raju Iyer	A Study of Service Quality in Select Indian Health Care Institutions	Sri G S S Rangarajan & Dr. Shashank Shah
Kasichanula V R Krishna	Strategies Adopted by Banks in India to Contain NPA, Increase Financial Inclusion and Sustain Profitability	Sri V N Prakash Sharma
Harish K	To Determine Gen Y's Response Towards Cause Marketing in Terms of Attitudes, Behaviours and Expectations	Sri Arvind Hejmadi
K Nikhilesh	Scenario of Empowerment in India: A Study of Selected IT Organizational Units	Prof. R Kumar Bhaskar
K Harish Arjun	Analysis of Variation in Interest Rates of Fixed Deposits Offered by Banks in India	Prof. U S Rao & Dr. Subramanian S
M Janakiram	Value Based Performance Metrics – A Study of Indian Automobile and Steel Industry	Dr. B Sai Giridhar
Nidhish Rajan	An Exploratory Study of Interactive Digital Signages in India	Sri Arvind Hejmadi
N G Nirmalananth	Study of Global Supply Chains of Multinational Companies	Prof. U S Rao
P V Pramod	Determinants of a Successful Career in the IT/ITES Sector	Sri V K Thakar
Patel Saumil K	Impact of Mergers and Acquisitions on Shareholders Wealth in Indian Pharmaceutical Industry	Dr. B Sai Giridhar
P R Kashyap	Determining factors which motivate people to join and work in NGO's	Sri V K Thakar
Samarth Sharma	Techno-economic feasibility study of a selected Business Opportunity for a Small-Medium Enterprise	Sri V K Thakar
Santhosh Sridhar	A Comparative Study of Numerical Methods for Option Pricing	Dr. Subramanian S

Saurabh Shinde	Developing Brand Identity of an Indian Antivirus Software Company	Sri Arvind Hejmadi
Srihari Sridhar	Option Pricing by Heston Model Using Fast Fourier Transform Algorithm	Dr. Subramanian S
A Subhash	Study of Lifestyle and Behaviour of Consumers in Purchasing an Automobile	Sri Arvind Hejmadi
T Raja	Performance Analysis of Micro Financial Institutions in India	Dr. B Sai Giridhar
Varun S Rao	Business Model for Self Sustaining Training Organization for Skill Development	Dr. Deepak Anand & Prof. U S Rao
Vijaya Rama Sailaesh K	A study on the Impact of Implementation of Basel III on Indian Banks	Dr. B Sai Giridhar
G Vijay Somanath	The Role and Influence of Culture in Advertising Strategies	Sri Arvind Hejmadi
Vishal Kumar	Microfinance in Andhra Pradesh: A Special Reference to Self Help Group – Bank Linkage Programme	

MBA (Finance) Dissertations

Name	ne Project Title	
Bhavesh B Alur	Study of Health Insurance Industry and Health Insurance Policies in India	Prof. U S Rao
Sridhar Narayanan	Multi Asset & International Portfolio Performance – An Empirical Study	Dr. Subramanian S
Manoj Kumar G	A Study of Successful Frugal Innovations of Southern India	Prof. Shiv R Pandit
G Sayee Prasanna	Price Discovery in Agricultural Commodity Futures Markets: An Indian Perspective	Prof. U S Rao & Dr. Subramanian S
M N Srikar	Contrarian Investing as A Method of Wealth Creation	Dr. B Sai Giridhar
Narayana Sai Sharma	Analysis of India's Exchange Rate Under the New Economic Policy Regime	Sri Raghavender Raju
Aditya Charan R	Evaluating Anti-Corruption Strategies in Developmental Projects in India: An Empirical Analysis	Dr. Deepak Anand
Rashmi Ranjan Jena	Predicting Stock Market Crashes Using Modified Hindenburg Model	Prof. U S Rao & Dr. Subramanian S
R Bharathwaj	Executive Coaching in India – A Theoretical and Conceptual Framework	Prof. R Kumar Bhaskar
R Pawan Kumar Raju	Developing a Credit Scoring Model to Appraise the Credit Worthiness of Dairy Cooperatives in India	Dr. Deepak Anand
Sharad Pratap	The Emerging Space of Family Offices in the Indian Private Banking Sector	Sri V N Prakash Sharma
Sharma Nikhil Anil	A Study of Consumer Preference for Perfumes	Prof. Shiv R Pandit
Siddarth Murali	Implications of Legislation on the Financial Performance of Corporate India	Dr. B Sai Giridhar

Srinivas Kandarpa	Assessment of Mobile Banking in India: A Customer Perspective	Prof. Shiv R Pandit
S Sriram	Financial Performance Evaluation of Select Indian Scheduled Domestic Airlines Dr. B Sai Giridhar	
Sudheendra Mohan P	A Test of efficiency of the Modified Garman Kohlhagen Model in the Pricing of INR-USD Options Dr. Subramanian S	
Tophan Mahalik	Prediction of Gold Price Using Neural Networks	Prof. U S Rao
Virendra Singh Chauhan	Investment Valuation: A Tool for Stock Selection	Dr. B Sai Giridhar
V Sai Teja	Performance Evaluation of Exchange Traded Funds in India Dr. B Sai Giridhar	
Yeshwanth Shankar D	Interrelationship Between Spot and Futures of Select Stocks in the Indian Stock Market: An Empirical Study	Dr. Subramanian S

RESEARCH PUBLICATIONS

Journal Papers

- Manohar K S and Ravilochanan P (2012) A study on Identification of the factors influencing the purchase behavior of consumers visiting the malls. International Journal of Marketing and Technology, 2(12),17.
- Chandrasekhar B (2013) A Study on exogenous factors influencing the Indian Microfinance Institutions. *International* Journal of Physical and Social Sciences, 3(3), 328-344.
- Chandrasekhar B (2013) Estimation of technical efficiencies of Indian microfinance institutions using stochastic frontier analysis. International Journal of Research in Commerce, IT & Management, 3(4), 69-75.
- Shah S (2012) Endeavouring towards Customer Satisfaction: A Case Study of TVS Motors Ltd. Asia Pacific Marketing Review, International Journal of the Asia Pacific Institute of Management, New Delhi, 1(1), 113-119.
- Shah S (2012) Ethical Governance in the Indian Construction Industry A Case Study. Journal of Values-Based Leadership, International Journal of the College of Business, Valparaiso University, Indiana, USA, Vol. V, Issue II, Summer/ Fall 2012 Issue, pp.41-58.
- Shah S (2012) Proposing a Welfare Framework for the Society and Local Community Stakeholders: A Mixed Method Study. Journal of Human Values, Sage Publications, International Journal of the Management Centre for Human Values, Indian Institute of Management Calcutta, 18(1), 53-71.
- Shah S, Shankar A and Sharp D (2012) Hindustan Unilever Ltd.: Meeting Employee Expectations. The ISB-Ivey Case Study Series, Richard Ivey School of Business, University of Western Ontario, Canada [In collaboration with the Indian School of Business (ISB), Hyderabad.
- Shah S (2012) Corporate Governance in a Multinational Corporation in India A Case Study. Journal of Values-Based Leadership, International Journal of the College of Business Administration, Valparaiso University, USA, V(1), 27-36.
- Shah S (2012) Corporate Social Responsibility: A Way of Life at the Tata Group. Journal of Human Values, Sage Publications, Indian Institute of Management Calcutta, Vol. 18 (2), Oct 2012 Issue.
- Shah S (2013) Hindustan Unilever Limited: Dealing with Changing Employee Expectations in the Indian FMCG Sector. Accepted for publication at the Richard Ivey School of Business - Case Study Series (University of Western Ontario, Canada) in collaboration with the Indian School of Business (ISB), Hyderabad.
- Shah S (2013) Human Resource Management in the Changing Business Environment of the Indian Construction Industry: A Case Study of Larsen & Toubro Construction Ltd. Accepted for publication with the Emerging Market Cases Studies Series of Emerald Publishers, United Kingdom.



Conference Papers

- Shah S (26-30 May 2013) Customer-focused Innovation Culture at the Tata Group Companies: A Mixed-Method Approach. *4th International Multidisciplinary Conference* organised by the International Journal of Arts and Sciences, Harvard University, USA.
- Mahalik T, Subramanian S and Rao U S (19 Apr 2013) Prediction gold prices using Artificial Neural Networks Model. 2nd International Conference on Emerging Markets and Issues in Management (ICEMIM 2013), VIT, Vellore.
- Ranjan R, Subramanian S and Rao U S (19 Apr 2013) Predicting Stock Market Crashes using Modified Hindenburg Model. 2nd International Conference on Emerging Markets and Issues in Management (ICEMIM 2013), VIT, Vellore.
- Nirmalananth N G and Rao U S (6-7 Apr 2013) Study of Global Supply Chains of Multinational Companies.
 International Conference on Managing Change in Business & Economy, Faculty of Management Studies, Pacific Academy of Higher Education and Research University, Udaipur.
- Arjun K H, Subramanian S and Rao U S (22 Feb 2013) Empirical analysis of impact of RBI's decisions on reporate, reverse reporate, CRR, SLR, on banks fixed deposit interest rates. 2nd International Conference on 'Competency Building Strategies in Business and Technology for Sustainable Development', Sri Ganesh School of Business Management, Salem.
- Shah S (1 Feb 2013) Corporate Stakeholders Management in Family-Owned Corporate Organisations: A Case Study of TVS Motor Company Ltd. 4th Asian Invitational Conference on Family Business, Indian School of Business, Hyderabad.
- Manohar S S and Pandit S (3-4 Jul 2012) Global Economic Scenario Sustainable Innovation for Clean Energy Supply.
 EABIS 11th Annual Colloquium, Lausanne, Switzerland, On Website.
- Manohar S S and Pandit S (6-9 Jan 2013) A Study of Core Values and Beliefs of Leading Innovative Organizations. 10th Aims International Conference on Management, IIM-Bangalore, Accepted for publication.
- Chittaranjan S, Giridhar S and Rao U S (6-9 Jan 2013) Characteristics of Outstanding Companies with Sustained Growth and Profitability. 10th AIMS International Conference on Management, Indian Institute of Management Bangalore (IIMB).
- Jayaprada N (28 Sep 2012) Women Empowerment through Micro Finance. *Women Empowerment*, Department of Women Studies, Sri Krishnadevaraya University, Anantapur.
- Anand D and Kineman J J (29-31 Mar 2013) Recoding Science to Unify Eastern and Western Worldviews. 1st International Conference on Ancient Wisdom and the Modern World, New Delhi.
- Das K, Subramanian S and Rao U S (6-7 Apr 2013) Prediction of Volatility and Option Price using Neural Networks and Black Scholes Model. *International Conference on Managing Change in Business & Economy*, Udaipur.
- Sayee Prasanna G R, Subramanian S and Rao U S (6-7 Apr 2013) Price Discovery in Agricultural Commodity Futures Market: An Indian Perspective. *International Conference on Managing Change in Business & Economy*, Udaipur.



- Narayanan S and Subramanian S (6-7 Apr 2013) Multi Asset and International Portfolio Performance An Empirical Study. *International Conference on Managing Change in Business & Economy*, Udaipur.
- Mohan S and Subramanian S (6-7 Apr 2013) A test of effectiveness of the Modified Garman Kohlhagen model in the pricing of INR-USD options. *International Conference on Managing Change in Business & Economy*, Udaipur.

Books

• Ramamoorthy V E and Shah S (2013) Soulful Corporations: A Values-Based Perspective on Corporate Social Responsibility. India Studies on Business and Economics, Springer Publishers (New Delhi). ISBN: 978-81-322-1274-4

Chapters in Books

• Shah S and Rao, U S (2012) Corporate Strategies in a Downturn, *Competitive Advantage through Globalisation*, Macmillan Advanced Research Series, Macmillan Publishers India, pp.35-52.







COURSES OFFERED

Undergraduate	B. Com. (Hons.)
Postgraduate	Master of Finance

Teaching Faculty

Head of Department: Dr. (Miss) N Niranjana

Name	Designation	Qualification
Dr. (Miss) N Niranjana	Professor (Hon.)	M.Com., M.Phil., Ph.D.
Dr. (Miss) Ch Radhakumari	Associate Professor	M.Com., M.Phil., Ph.D.
Dr. (Miss) T R Rajeswari	Associate Professor	M.Com., B.Ed., M.Phil., Ph.D.
Sri Ruchir Desai	Associate Professor	M.Com., FCMA
Sri Sanjay Sahni	Associate Professor	M.Com.
Dr. N Siva Kumar	Associate Professor	M.B.A., Ph.D.
Miss U Suma*	Asst. Professor	M.Com., M.Ed.
Sri Rajeev Rajan	Asst. Professor	M.F.M.
Sri S Ramesh	Asst. Professor (Hon.)	B.Com., F.C.S.
Sri K Sai Chittaranjan	Asst. Professor	B.Com., M.B.A., M.Phil.
Sri C Srinivas Yadav*	Asst. Professor	B.Com., M.B.A., M.Phil.
Ms. Kirti Kiran	Asst. Professor	M.Com.

^{*} also pursuing Doctoral Research



Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Sri Soumya Chakravarti	Faculty , Welingkar Institute of Management Development & Research, Bangalore	I MFM	Summer semester 2012/13
Sri Vijayaraghavan Krishnamurthy	General Manager and Head - Consulting, L&T Infotech Ltd., Mumbai	I MFM	Summer Semester 2012/13
Sri Prakash Chittaranjan	Software Professional	IMFM	Summer Semester 2012/13
Sri G Sriram	Senior Manager, Delloit Haskins and Sells, Chennai	IMFM	Summer Semester 2012/13
Sri B S Vijay Sai	Director, Callready T&D, Bangalore	I MFM	Summer Semester 2012/13
Sri Sai Shankar Menon	Consultant, Mount Nathan Advisors Pte Ltd, Singapore.	I MFM	Summer Semester 2012/13
Sri C V Subhash	Management Consultant	I MFM	Summer Semester 2012/13
Sri Abhinanda Sircar	Principal Scientist, Software Sciences & Analytics, GE India Technology Centre	I MFM	Winter Semester 2012/13
Sri Aruni Kumar Mahapatra	Senior Client Coverage – Manager- Financial Markets (South India), ING Vysya Bank Ltd.	I MFM	Winter Semester 2012/13
Sri C S V Ramana Kumar	Head, ALM Financial Markets ING Vysya Bank Ltd.	I MFM	Winter Semester 2012/13
Sri Natesh Shankar Shetty	Holistic Healer, Behavioural Therapist & Life Coach, Whitefield, Bangalore	I MFM	10, 17 Dec 2012
Sri Ram Chandrasekhar	CA, DFM Enginer, Apple Cu., USA	III B.Com.	28 Dec 2012

Sri Ashoke Joshi	Retired IAS Officer & Chairman of SSS Trust of TVS Motor Company	IMFM	19 Jan 2013
Sri Karthik Subramanian	Manager, Business Development & Marketing Operations, TV 18	III B.Com.	15 Mar 2013

WORKSHOPS & CONFERENCES CONDUCTED

Workshop 1

Title: Financial statement analysis

Dates: 18 Aug 2012

Venue: Multimedia Room, Brindavan Campus, SSSIHL

Theme: The workshop focussed on the importance of financial statement analysis and the vital diagnosis of the

performance of different industries through the financial statement analysis.

List of External Speakers / Invited Guests

Name	Designation	Торіс
Sri N Sivaraman	President and Wholetime Director, L&T Finance Hyderabad	Financial statement analysis

Workshop 2

Title: Technology and Banking industry

Dates: 8 Sep 2012

Venue: Multimedia Room, Brindavan Campus, SSSIHL.

Theme: The workshop covered the future of the banking industry and focussed on recent happenings in the industry in

developed countries, with special focus on changes being brought about by technological advances.

List of External Speakers / Invited Guests

Name	Designation	Торіс
Sri N T Arun Kumar	Managing Director, UBS Group Operations, Hyderabad	Technology and banking industry

Workshop 3

Title: Challenges before the finance professional in the coming decade

Dates: 2 Feb 2013

Venue: Multimedia Room, Brindavan Campus, SSSIHL.

Keynote Address: Bhagawan Sri Sathya Sai Baba's video discourse on 'Values Centred Leadership in Man Management' Theme: Challenges before the finance professional in the coming decade. The conference focussed on the changing landscape of finance and the challenges that finance professionals would face due to these changes. The areas covered ranged from corporate financial challenges to challenges in the areas of accounting. Experts from various areas of finance presented their opinions and also participated in a group discussion.

List of External Speakers / Invited Guests

Name	Designation	Topic
Mr. S Chandramohan	Group CFO, TAFE	Managing Risk and Volatility
Mr. Narasimhan N	Global CFO, Coats plc (Industrial Products)	CFO as a business partner
Mr. Joydeep Nag	CFO, Louis Dreyfus	Debates and dilemmas
Mr. Vijayaraghavan Krishnamurthy	Head, Strategic Initiatives, BFSI, WIPRO	The transforming landscape of the Banking Industry
Mr. S Vishwanath	Financial Controller, TE Connectivity Pvt. Ltd.	Challenges to the finance professional [Group discussion]
Mr. Indraneel Roy Chaudhury	Partner, Price Waterhouse Coopers	Challenges to the finance professional [Group discussion]

Departmental Colloquium

The Department of Commerce hosts weekly colloquium talks by industry experts as well as faculty members in current thrust areas of Commerce, Management and Business. The details of these talks are provided below:

Date	Presenter	Designation	Topic
13 Jun 2012	Sri Rajeev Rajan	Asst. Professor, Dept. of Commerce, SSSIHL,	General Anti-avoidance Rules (GAAR)
20 Jun 2012	Dr. N Sivakumar	Asst. Professor, Dept. of Commerce, SSSIHL	Insider Trading
27 Jun 2012	Sri K Sai Chittaranjan	Asst. Professor, Dept. of Commerce, SSSIHL	Communism, Capitalism and the whole range of economic systems
7 July 2012	Sri Aditya Jairam	Regional Manager, TCS	ERP for medium scale industry
11 Jul 2012	Sri Ruchir Desai	Associate Professor, Dept. of Commerce, SSSIHL	The mystique of stock markets – Part I
18 Jul 2012	Sri Sanjay Sahni	Associate Professor, Dept. of Commerce, SSSIHL	Know your customer (KYC) norms
21 July 2012	Sri S Krishnan	Dy. General Manager, IDBI Bank Ltd.,	Development Banking
25 Jul 2012	Sri K Sai Chittaranjan	Asst. Professor, Dept. of Commerce, SSSIHL,	Emerging trends and practices in Indian Insurance industry
28 Jul 2012	Sri C Subramaniam	LEEDS Consultant	Six Sigma
8 Aug 2012	Sri Ruchir Desai	Associate Professor, Dept. of Commerce, SSSIHL,	The mystique of stock markets - Part II
18 Aug 2012	Sri Yegna Narayanan	Deputy Manager, Future Generali Insurance Co.	Managing Organisational Behaviour
22 Aug 2012	Sri Rajeev Rajan	Asst. Professor, Dept. of Commerce, SSSIHL	Current account deficit
25 Aug 2012	Sri P V Murali	Faculty Member, Manipal University	Soft skills for managers

29 Aug 2012	Dr. N Sivakumar	Asst. Professor, Department of Commerce, SSSIHL	Investment myths
12 Sep 2012	Sri S Ramesh	Asst. Professor (Hon.), Dept. of Commerce, SSSIHL	Depository system
15 Sep 2012	Sri Bhimsen	Management Consultant	Communication skills
19 Sep 2012	Sri K Sai Chittaranjan	Asst. Professor, Dept. of Commerce, SSSIHL	Macro-Economic Indicators
22 Sep 2012	Sri Viveck Kapoor	Head for Seeds & Specialty Fertilizer business, Rallis India Ltd.	Agricultural Marketing
10 Nov 2012	Sri Nagaraja Rao	Asst General Manager – Supply Chain Logistics, Ashok Leyland	Supply Chain Management
14 Nov 2012	Dr. N Sivakumar	Asst. Professor, Dept. of Commerce, SSSIHL	Arcelor Mittal vs. The French Govt.
1 Dec 2012	Sri R Subramaniam	Consultant, Siemens	ERP
5 Dec 2012	Sri Rajeev Rajan	Asst. Professor, Dept. of Commerce, SSSIHL	GMR – Male problem
22 Dec 2012	Sri S Ramesh	Hon. Asst. Professor, Dept. of Commerce, SSSIHL	Public Private Partnership (PPP) model
23 Jan 2013	Sri Sai Chittaranjan	Asst. Professor, Dept. of Commerce, SSSIHL	Subsidies: The Arguments For and Against
30 Jan 2013	Sri Rajeev Rajan	Asst. Professor, Dept. of Commerce, SSSIHL	Apple versus Samsung - The IPR wrangle
20 Feb 2013	Sri C Srinivas Yadav	Assistant Professor, Department of Commerce, SSSIHL	Alternative investments
3 Mar 2013	Mrs. D Lakshmi Sri	Senior Process Associate & Analyst, Accencture	Firm Valuation
9 Mar 2013	Sri G Sriram	Senior Manager, Delloit Haskins and Sells, Chennai	IFRS
13 Mar 2013	Sri Ramesh	Asst. Professor (Hon.), Dept. of Commerce, SSSIHL	Corporate governance under Companies Act

Workshops Attended

- Sri K Sai Chittaranjan attended 'Case Method Teaching Seminar', Harvard Business Publishing and Case Research Society of India and Hindustan Unilever Ltd., Mumbai, 30 May to 1 Jun 2013.
- Ms. Kirti Kiran attended Faculty Development Programme on Excellence in Management (Teaching) Education, PSG Institute of Management, Coimbatore, Tamil Nadu, 22-23 Feb 2013.

Other Information

Industrial Tour for MFM students

Separate industrial visits to Hosur and Bangalore for the students of the Masters in Financial Management Programme were organized by the Department on 6 Feb 2013 and 22 Mar 2013. The objective of these visits was to enable the students to witness manufacturing and financial services operations from a practical perspective and interact with professionals in their work setting.

The companies/Institutions visited were TVS Motors (Hosur), ING Vysya Bank (Corporate Head office and other offices in Bangalore).

SPECIAL ACHIEVEMENTS

Dr. N Niranjana

- Received the 'Bharat Jyothi Award', India International Friendship Society, New Delhi, 2012
- Received the 'Best Citizen of India Award', International Publishing House, New Delhi, 2013

Received the 'Sai Krishna Award for Best Teacher', SSSIHL for the academic year 2011/12, Sai Kulwant Hall, Prasanthi Nilayam, Andhra Pradesh, 22 Nov 2012.

Sri Sanjay Sahni

- Invited to deliver Keynote address on the theme 'Restoration of Peace in Society and Harmony in Nature' at Conference of Intellectuals at Allahabad University, Allahabad, Uttar Pradesh, 19 May 2012.
- Invited to deliver Valedictory Message to participants in Management Development Workshop at SSSIHL, Muddenhalli, 27 Jan 2013.
- Chaired a panel discussion on Values Centred Leadership as part of the Man Management Workshop conducted by Dept. of Management Studies, SSSIHL at Prasanthi Nilayam, 23 Mar 2013.

Dr. N Siva Kumar

- Invited to make a presentation to the members of Armaments Research and Development Establishment (ARDE), a premier lab of Defence Research and Development Organisation (DRDO) on the topic 'Values based management -Achieving purpose at work', Pune, Maharashtra, 1 Nov 2012.
- Invited to make a presentation on the topic 'From Greatness to Goodness Human Values in Business' at the Summer Course on Indian Culture and Spirituality, Organised by Sri Sathya Sai Organisations, Karnataka, Brindavan, Bangalore, 17 Apr 2012.

Dr. (Miss) Ch Radhakumari

- Evaluator for three research papers in International Conference on E-governance 2012(ICEG), Cochin, 28-29 Dec
- Evaluator for International Conference on Banking and Finance, International Management Institute, New Delhi, 13-15 Dec 2012.
- Evaluated the Doctoral Thesis titled, 'Micro Enterprises by Self-Help Groups in Kerala- A strategy for Restructuring', Faculty of Business Administration, College of Engineering, University of Kerala.

Miss U Suma

Received the 'Sai Krishna Award for Best Teacher', SSSIHL for the academic year 2011/12, Sai Kulwant Hall, Prasanthi Nilayam, Andhra Pradesh, 22 Nov 2012.

Achievements in National level exams

Name	CSIR JRF/NET Rank*	Total No. of Exam takers
Ms. Kirti Kiran	UGC NET: Lectureship (LS)	5,71,627 (June 2012)

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test) | LS (Lectureship) | All ranks are national (All India Rank)





RESEARCH

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Miss Suma U	Women Executives in India – A Diagnostic and Descriptive Study	Prof. R Kumar Bhaskar

RESEARCH PUBLICATIONS

Journal Papers

- Radhakumari C (2013) TI as a source of entrepreneurship development in rural areas- Akshaya project in the State of Kerala, India. *International Journal of Economics, Commerce and Research (IJECR)*, (IF: 3.1852), 3(1), 97-118.
- Radhakumari C (2013) E-procurement A continuing e-governance journey of the State of Andhra Pradesh towards cost-saving & transparency in government's procurement. International Journal of Computer Science Engineering and Information Technology Research (IJCSEITR)--(IF: 6.3925), Vol.3 (Issue: 1), 217-232.
- Radhakumari C (2013) A Business Process Reengineering and e-Governance Model –KAVERI of Karnataka. *International Journal of Economics, Commerce and Research (IJECR)*, (IF:3.1852), 4(1), 3
- Radhakumari C (2013) Akshaya a Grass root level IT Project in Kerala a Unique Experiment with Broadband. *International Journal of Scientific and Engineering Research (IJSER)*, (IF: 1.4), 4(1), 2.
- Radhakumari C and Bala M R G (2013) Financial Services for bankless villages—a facet of Financial Inclusion: the succeeding tale in Andhra Pradesh and Karnataka. *International Journal of Economics, Commerce and Research (IJECR)* -- (IF: 3.1852), Vol.3 (Issue-1), 63-78.
- Radhakumari C (2013) Information Technology & its role in the society—A case study of two southern States of India. International Journal of Economics, Commerce and Research (IJECR), (IF:3.1852), 4(1), 2
- Radhakumari C and Bala M R G (2013) Financial Inclusion for bridging the rural –urban divide for balanced economic Growth: Demand perspective A case study. *International Journal of Accounting and Financial Management Research* (*IJAFMR*) -- (IF: 4.2123) 2.4789, Vol.3 (Issue-1), 141-156.
- Sivakumar N (2012) Global climate change Spiritual and human values perspectives. *Social Responsibility Review*, Newsletter of Social Responsibility Research Network, UK, 3, 6-25.
- Sathyanarayanan S and Sivakumar N (2012) Transformation of collective spiritual consciousness using information technology The case study of Radiosai. *Purushartha* (Journal of SMS Varanasi), V (1), 56-70.





- Sivakumar N (2012) Innovation based growth paradigm Key to growth of the Insurance industry Part I. IRDA Journal, X(11), 32-37
- Sivakumar N and Agarwal S (2012) Development and testing of a model of factors affecting consumer attitudes towards sustainable use of advertising space on soft drinks and health drink packages A cybernetic approach. *Journal of marketing vistas*, 1(2), 46-58.
- Sivakumar N (2013) Innovation based growth paradigm Key to growth of the Insurance industry Part II. *IRDA Journal*, XI (1), 35-39.
- Sivakumar N (2013) Integration of human values in higher education pedagogy through experiential learning, *University News*, 51(18), 17-20.

Conference Papers

- Radhakumari C and Bala M R G (29-30 Dec 2012) Financial Services for bank less villages— a facet of Financial Inclusion: the succeeding tale in Andhra Pradesh and Karnatak. *International Conference on E-governance (ICEG -2012)*, SCMS Institute of Management, Cochin.
- Radhakumari C and Bala M R G (13-15 Dec 2012) Financial Inclusion for bridging the rural –urban divide for balanced economic Growth:Demand perspective A case study. *International Conference on Banking and Finance, International Management Institute*, New Delhi.
- Chittaranjan K S and Sivakumar N (13-14 Dec 2012) Inclusiveness in Medical Care The Case Study of Sri Sathya Sai Mobile Hospital. *IMSARC-12*, Symbiosis Institute of Management Studies, Pune.
- Chittaranjan K S, Giridhar B S and Rao U S (6-8 Jan 2013) Characteristics of Outstanding Companies with Sustained Growth and Profitability. 10th AIMS International Conference on Management, IIM-Bangalore, Bangalore, Karnataka.
- Chittaranjan K S and Ramamoorthy V E (6-8 Jan 2013) Increasing the Effectiveness of Service Delivery through a Sustained Follow-up. 10th AIMS International Conference on Management, IIM-Bangalore, Bangalore, Karnataka, only abstract published.





COURSES OFFERED

Undergraduate	B.A. (Hons.) in Economics B.Sc. (Hons.) in Economics	
Postgraduate	M.A. Economics	
Research	M.Phil.	Ph.D.

Teaching Faculty

Head of Department: Dr. R Prabhakar Rao

Name	Designation	Qualification
Dr. R Prabhakar Rao	Associate Professor	M.Sc., Ph.D.
Dr. Gopal Chengalath	Associate Professor (Hon.)	M.A., Ph.D.
Sri G Raghavender Raju*	Asst. Professor	M.A.
Dr. (Ms.) M R Geetha Bala	Asst. Professor	M.A., M.Ed., M.Phil., Ph.D.
Sri P Narayana Reddy	Asst. Professor (Hon.)	B.Ed., M.Sc.
Sri Rajbhushan J Nayak*	Asst. Professor	M.A., M.Phil.
Sri Siva Kiran Guptha K*	Asst. Professor	M.A., M.Phil.

^{*} also pursuing Doctoral Research





Visiting Faculty

Name	Designation / Institution	Course / Topic Covered	Duration
Prof. N Rajagopala Rao	Former Professor & Head, Dept. of Economics, SSSIHL, Prasanthi Nilayam Campus	Microeconomic Theory, Statistical Methods and Econometrics	Academic year 2012/13
Sri T Narayana Rao	Reader (Retd.) Economics, Sri Venkateswara College, Delhi	Economics Analysis - I, (I B.A/B.Sc.)	Academic year 2012/13
Prof. B L Pandit	Former Head, Dept. of Economics, Delhi School of Economics, University of Delhi	Monetary theory and Policy (Postgraduate students)	1-10 Jun 2012
Sri Sathya Sai Mudigonda	Independent Management and Actuarial Consultant	Economics of Insurance (Postgraduate students)	Academic year 2012/13
Dr. Debarshi Dey	Senior Biometrician, Novartis Pharmaceutical Ltd., Hyderabad	Statistical package 'R' (Postgraduate students)	18 Aug 2012
Sri Sundara Krishnaswami	Management Consultant, USA	Colloquium lecture	28 Nov 2012
Prof. B C Sutradhar	University Research Professor, Dept. of Mathematics and Statistics, Memorial University of Newfoundland, Canada	Colloquium lectures	17-20 Dec 2012
Prof. Madhusudhan Mohanty	Professor, Dept. of Economics and Statistics, California State University, USA	Colloquium lectures	8-21 Dec 2012

WORKSHOPS & CONFERENCES CONDUCTED

Workshop 1

Title: National Workshop on Recent Advances in Economic Data Analysis

Dates: 23 Feb 2013

Venue: Multimedia Learning Centre, SSSIHL, Prasanthi Nilayam Campus

Keynote Address:

Prof. Vishwanath Pandit, Former Vice-Chancellor, SSSIHL.

176

Theme: To gain a thorough understanding of global economic intelligence with tools that help to analyze complex relationships of economic data. Create dynamic charts, monitor developments and analyze comprehensive country and comparison reports in one easy-to-use application in the areas such as Balance of Payments, Commodities, Corporate Profits, Interest Rates, Employment, FX Rates, Housing & Construction, Inflation, Money Flow & Supply, Personal Income & Spending, Production Worker productivity, Retail Sales etc.

It is now so common to hear much talk of big data. In the last ten years, the amount of information companies have been gathering has grown tremendously and companies now consider data collection as an asset. This created a demand for data scientists and data analysis. The application of data analysis is vast – it can be used in any sector such as economics, financial services, insurance, health care and banks etc. The need for data analysts and scientists is also growing with these developments. India is in a unique position and will be the data scientist hub in the future.

The 2013 International Year of Statistics (Statistics - 2013) is an initiative of several associations and supported by hundreds of organizations and institutes from all over the world. There are a wide variety of ways organizations and societies might choose to recognize an International Year of Statistics by conducting conferences, workshops, symposia, career fairs, outreach fairs, public service announcements, videos, weekly 'featured statisticians' and special editions of magazines or journals.

List of External Speakers / Invited Guests

Name	Designation	Торіс
Prof. Srinivas Prakhya	Associate Professor, Marketing, IIM Bangalore	Risk Preferences and Identity
Dr. Venkatesh Parthasarathy	Researcher, HP Global Analytics, Bangalore	Business Analytics – An Icebreaker
Prof. K Srinivas Rao	Professor, Andhra University, Visakhapatnam	Statistical Perceptions Of Business Analytics
Prof. K R Shanmugam	Director, Madras School of Economics, Chennai	Data Envelopment Analysis (DEA) and Its Applications

Departmental Colloquium

The Department of Economics regularly hosts colloquium talks by the teachers, research scholars and external experts. The details of the colloquium are provided below.

Date	Presenter	Designation	Topic
6 Jun 2012	Prof. B L Pandit	Professor, Delhi School of Economics	Land as an asset
13 Jun 2012	Sri G Raghavender Raju	Assistant Professor, Dept. of Economics, SSSIHL	Rupee Depreciation in the Recent times: Probable Causes, its Impact and Policy Options
20 Jun 2012	Presentations by II M.A. students	Dept. of Economics	Review of their Dissertation Work
27 Jun 2012	Presentations by II M.A. students	Dept. of Economics	Review of their Dissertation Work
4 Jul 2012	Presentations by II M.A. students	Dept. of Economics	Review of their Dissertation Work
25 Jul 2012	Prof. G Balachandran	Professor, SSSIHL	Indian philosophy of Economics

22 Aug 2012	Presentations by I MA & III UG students	Dept. of Economics	Oil pricing and economic impact
29 Nov 2012	Sri Sridhara Krishnaswami	CEO and President, Preeti Petro Chemical, Texas, USA.	Ethics and International Business
5 Dec 2012	Dr. Ram Aneja	Former CEO Dairy Development Board	Economics of Milk and Oil
12 Dec 2012	Prof. Madhu S Mohanty	Professor California State University, Los Angeles, USA	Can Attitudes Change? Evidence from US Longitudinal data
19 Dec 2012	Prof. B C Sutradhar	Professor Memorial University, St.John's Canada	Inferences in Stochastic Volatility Models
23 Jan 2013	Presentations by I M.A. and III UG students	Dept. of Economics	India's FDI Policy
30 Jan 2013	Presentations by I M.A. and III UG students	Dept. of Economics	FDI into Indian Retail sector: Prospects and Consequences
6 Feb 2013	Presentations by II M.A. students	Dept. of Economics	Final Presentation of their Dissertation Work
13 Feb 2013	Presentations by II M.A. Students	Dept. of Economics	Final Presentation of their Dissertation Work
27 Feb 2013	Prof. V L Rao	Professor, GITAM University, Visakhapatnam	Recent Developments in Indian Economy
6 Mar 2013	Presentations by I M.A. and III UG students	Dept. of Economics	Union Budget 2013/14
20 Mar 2013	Presentations by I M.A. and III UG students	Dept. of Economics	Subsidies and SEZ policies in India

Workshops Attended

Dr. (Ms.) MR Geetha Bala

- Attended a series of U.G.C sponsored workshops -'Capacity Building for Women Managers in Higher Education', 'Management Skills Enhancement Modules Workshop', 'Human Resource Management in Institutions for Higher Education' and 'Financial Management in Institutions for Higher Education' organized by Centre for Women's Studies, University of Hyderabad from 29 Oct to 3 Nov 2012.
- Attended U.G.C sponsored 'Capacity Building for Women Managers in Higher Education Sensitivity/Awareness/ Motivation Workshop', G. Pulla Reddy Engineering College, Kurnool, 21-25 Sep 2012.

SPECIAL ACHIEVEMENTS

Dr. R Prabhakar Rao

- Delivered an invited talk on 'Measurement of Volatility: GARCH Process', National Seminar on Recent Advances in Stochastic Modeling and its applications, Andhra University, Visakhapatnam, 10-11 Feb 2013
- Chaired an invited talk session, National Seminar on Recent Advances in Stochastic Modeling and its applications, Andhra University, Visakhapatnam, 10-11 Feb 2013.
- Addressed the valedictory Session. National Seminar on Recent Advances in Stochastic Modeling and its applications, Andhra University, Visakhapatnam, 10-11 Feb 2013.
- Elected Member, Executive Council, The Indian Econometric Society (TIES) 2012/13.
- Editorial board member, Indian Journal of Mathematics and Statistics (IJMS).

Achievements in National level exams

Name	CSIR JRF/NET*	
Akash Krishnan	JRF (UGC NET)	

^{*} CSIR (Council of Scientific & Industrial Research) | JRF (Junior Research Fellowship) | NET (National Eligibility Test)

RESEARCH

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Sri G Raghavender Raju	An Analysis of the Current Account in India's Balance of Payments: Under the New Economic Policy Regime	Prof. Vishwanath Pandit
Sri Gopakumar K U	Inflation in India: An empirical analysis of old and new paradigms	Prof. Vishwanath Pandit
Sri Rajbhushan J Nayak	Public debt and its sustainability	Prof. Vishwanath Pandit

M.Phil.. Scholars

Name	Area of Research	Research Supervisor(s)
Sri Siva Kiran Guptha K	A Study on Macroeconomic Determinants of Stock Market in India After Liberalization	Dr. R Prabhakara Rao

Projects & Dissertations Completed

M.A. Dissertations

Name	Project Title	Supervisor(s)
S L Srivatsava	An Empirical Analysis of Household Savings in India	Dr. R Prabhakar Rao
Y S S K Manoj	A Study on the Performance of Statistical and Soft Computing Methods In Stock Price Forecasting	Dr. R Prabhakar Rao
Lakshmikant Sharma	Construction of Optimal Portfolio of Mutual Funds Using Proportional Mix of Equity and Index Funds	Dr. R Prabhakar Rao
G V N Bhuvanesh	An Empirical Study of Credit Channel Transmission of Indian Monetary Policy	Dr. R Prabhakar Rao
Bukka Mahesh Kumar	The Impact of Bank-Specific and Macroeconomic Variables on the Profitability of Public Sector Banks in India	Dr. R Prabhakar Rao
Veera Manikantha V	Economic Impact of Ageing Population: Lessons For India	Sri G Raghavender Raju
Bishal Chettri	Financial Development and Economic Growth: India's Experience	Sri G Raghavender Raju

Bheemaraju SaiKiran Raju	Recent Global Economic Crisis and the Indian Economy	
Akash Krishnan	Cartelization In the Indian Cement Industry: An Ex-Post Analysis	Sri G Raghavender Raju
Narayana Sai Sharma	Analysis of India's Exchange Rate Under the New Economic Policy Regime	Sri G Raghavender Raju

RESEARCH PUBLICATIONS

Journal Papers

- Fan Z, Sutradhar B C and Rao R P (2012) Bias Corrected Generalized Method of Moments and Generalized Quasilikelihood Inferences in Linear Models for Panel Data with Measurement Error. Sankhya-The Indian Journal of Statistics, Series B, 74(1), 126-148.
- Gupta S K and Rao R P (2012) Stock Market and Economic Growth: An Empirical Analysis for India. Gavesana-Journal of Management, 3(2), 54-61.
- Mani H, Pandit V and Rao R P (2013) Disequilibrium in the Indian Registered Manufacturing Sector: A Simulated Maximum Likelihood Analysis. Working Paper, CDE, Delhi School of Economics, 222, http://www.cdedse.org/pdf/ work222.pdf.
- Sutradhar B C, Jowaheer V and Rao R P (Accepted for publication) Remarks on Asymptotic Efficient Estimation for Regression Effects in Stationary and Non-stationary Models for Panel Count Data. Brazilian Journal of Probability and Statistics.
- Mahesh B and Rao R P (Accepted for publication) The Impact of Bank-Specific and Macroeconomic Variables on the Profitability of Public Sector Banks in India: A Panel Study. South Asian Journal of Management Research.
- Gupta S K and Rao R P (Accepted for publication) An Empirical Analysis of Stock Markets and Economic Growth after Liberalization in India. Finance India.
- Bala M R G (2013) Status of Women in India and Andhra Pradesh. International Journal of Human Resource Management and Research (IJHRMR) IMF 4.6794, VOL 3(1), 97-112.
- Bala M R G (2013) Empowerment of Women through Micro Credit. International Journal of Economics, Commerce and Research (IJECR) IMF 3.1852, Vol 3 (1), 87-94.
- Bala M R G (2013) Self Help Groups in Anantapur District: Concept and Characteristics. International Journal of Environment, Ecology, Family and Urban Studies (IJEEFUS) IMF 2.6539, Vol 3(1), 111-126.
- Bala M R G (2013) Policies and Programmes for the Advancement of Women. International Journal of Economics, Commerce and Research (IJECR) IMF 3.1852, Vol 3(1), 95-106.
- Radhakumari C and Bala M R G (2013) Financial Inclusion for bridging the rural-urban divide for balanced economic Growth:Demand perspective – A case study. International Journal of Accounting and Financial Management Research (IJAFMR) IMF 4.2123, Vol 3(1), 141-156.
- Radhakumari C and Bala M R G (2013) Financial Services for bank less villages a facet of Financial Inclusion: the succeeding tale in Andhra Pradesh and Karnataka. International Journal of Economics, Commerce and Research (IJECR) IMF 3.1852, Vol 3(1), 63-78.
- Aravind S S and Raju R G (2012) Analysis of Indian Investments Abroad. GITAM Journal of Management, 10(2), 199-212. Accepted for publication.
- Ghosh S and Raju R G (2012) India's Exchange Rate Behavior and Management: A Post Reform Period Analysis. GITAM Review of International Business, 4(2), 13-32.
- Prasad A P and Raju R G (2012) Foreign Exchange Derivatives Market in India: Status and Prospects. GITAM Review of International Business, 4(2), 67-88.
- Gopakumar K U and Raju R G (2012) Estimation of India's Consumption Function. Journal of Economic Policy and Research, 7(2), 126-135.





- Ratheesh K and Raju R G (2013) Capital Flows and their Macro Economic Effects in India. *GITAM Review of International Business*, 5(1), 1-25.
- Nayak R J and Bhalachandran G (Apr-Sep 2012) Fiscal Policy in India: An Empirical Analysis of the Current Stance. Journal of Economic Policy and Research, 7(2), 42-60.

Conference Papers

- Oyet A, Sutradhar B and Rao R P (Jul 2012) Bias correction inferences in longitudinal mixed models for count data with measurement error in covariates. *International Symposium in Statistics (ISS) on Longitudinal Data Analysis Subject to Outliers, Measurement Errors, and/or Missing Values*, Memorial University of Newfoundland, Canada.
- Radhakumari C and Bala M R G (29-30 Dec 2012) Financial Services for bank less villages a facet of Financial Inclusion: the succeeding tale in Andhra Pradesh and Karnataka. *International Conference on e-governance*, Cochin, International Journal of Economics, Commerce and Research (IJECR) IMF 3.1852, Page No.63-78.
- Radhakumari C and Bala M R G (13-15 Dec 2012) Financial Inclusion for bridging the rural—urban divide for balanced economic Growth: Demand perspective A case study. *International conference on Banking and Finance BFSCON-12*, International Institute of Management, New Delhi, International Journal of Accounting and Financial Management Research (IJAFMR) IMF 4.2123, Page No. 141-156.
- Krishnan A and Raju R G (19-20 Apr 2013) Cartelization in the Indian Cement Industry: An Ex-Post Analysis. International Conference on Emerging Markets and Issues in Management - 2013 (ICEMIM - 2013), VIT Business School, VIT University, Vellore.

Chapters in Books

- Bhargaw P and Raju R G (2012) Econometric Applications for Managers, *Infrastructure and Economic Development in India: Role of Public Private Partnerships*, 8(94), Allied Publishers Pvt. Ltd, New Delhi, ISBN-978-81-8424-763-3.
- Dinesh Borkar Rahul and Raju R G, (2012) Econometric Applications for Managers, An Econometric Analysis of Foreign Institutional Investments into India during Post Reform Period, 9 (112), Allied Publishers Pvt. Ltd, New Delhi, ISBN-978-81-8424-763-3.
- Rao P R and Raju R G, (2012) Stage wise progress of education in India, Role of Education in Economic Development: India's Experience, Serial Publication, New Delhi, ISBN-978-93-8061-510-3.
- Ghosh Soumyajit and Raju R G, (2012) *Econometric Applications for Managers, India's Exchange Rate Behavior and Management: A Post Reform Period Analysis*, 10(132), Allied Publishers Pvt. Ltd, New Delhi, ISBN-978-81-8424-763-3.
- Bala M R G, (2012) Women entrepreneurs and socio-economic development, edited by D Pulla Rao, Serials Publications,





New Delhi, and ISBN: 978-81-8387-424-3, Ch.3, pp.13-25.

• Bala M R G, (2012) *Economics of education and human development in India* edited by D.Pulla Rao, Akansha Publishing house, New Delhi, ISBN:978-81-8370-229-4, Ch.2, pp.21-30.







COURSES OFFERED

Professional	B. Ed.

Teaching Faculty

Head of Department: Prof. (Miss) Madhu Kapani

Name	Designation	Qualification
Prof. (Miss) Madhu Kapani	Professor	M.A., M.Ed., Ph.D.
Dr. (Mrs.) B Rudramamba	Associate Professor	M.A., M.Ed., Ph.D.
Dr. (Mrs.) P Lavanya	Asst. Professor	M.Sc., M.Ed., M.Phil., Ph.D.
Dr. P Ramesh Narayana	Asst. Professor (Part-time)	M.Sc., M.Ed., Ph.D.

WORKSHOPS & CONFERENCES CONDUCTED

Workshop 1

Title: Models of Teaching **Dates:** 25 Sep 2012

Venue: Department of Education, Anantapur Campus

Keynote Address and Overview of the workshop: Prof. (Miss) Madhu Kapani

Theme: Strength in education resides in the intelligent use of powerful variety of approaches-matching them to the student's styles and characteristics. Competence in teaching stems from the capacity to reach out to differing children and to create a rich and multidimensional environment for them. A model of teaching is a plan or pattern that can be used to shape curriculum, to design instructional materials and to guide the teacher's action in the classroom, student-teacher interaction, preparing an outline for guiding students activities and to develop specific teaching aids. The existing models of teaching are one basis for the repertoire of alternative approaches that teachers, curriculum makers, and designers of materials can use to help diverse learners reach a variety of goals. The teaching models represent four different





'families' of approaches to teaching. These models focus on the individual and the development of his/her unique personality, some focus on the human group and represent ways of teaching, that emphasize group energy, interpersonal skills and social commitment. Some represent teaching concepts, models of inquiry from the disciplines and methods for increasing intellectual capacity. These models are useful for improving human relation and raising the standard of education. It is very difficult to decide and select any one particular model because their approaches and goals are different. These work as guidelines for the teachers to prepare their own teaching models which will suit the age and intellectual level of their students. The basic ideas of all the models were discussed in this workshop.

List of External Speakers / Invited Guests

Name	Designation	Торіс
Dr. Minakshi Biswal	Associate Professor, Vasanta College	Introduction to models of teaching - Glaser's Basic model and Bruner's concept attainment models of
	for women, BHU, Varanasi	teaching

Workshops Attended

Dr. (Mrs.) P Lavanya

• Participated at a UGC-Sponsored orientation programme at Academic staff college, S V University, Tirupati, Andhra Pradesh, 14 May to 9 Jun 2012.

SPECIAL ACHIEVEMENTS

Prof. (Miss) Madhu Kapani)

- Invited to deliver talks by Sri Sathya Sai Seva Organisation, Andhra Pradesh to the teachers of Sri Sathya Sai Vidya Vihar, Vishakapatnam for their In-house training Programme in Value Education entitled 'Amazing Mothers' and 'Role of teachers in value Education', 2-3 Feb 2013.
- Invited to deliver Valedictory address of the 18th Diploma Course for teachers of Sri Sathya Sai schools organised by the Institute of Sathya Sai Education, Dharmakshetra, Mumbai, 19 May 2013.
- Invited as resource person to deliver lecture on 'The Miracle of Love Love the undercurrent of all values, EHV and character, Unity-Purity and Divinity' to the teachers of Sri Sathya Sai schools for certificate course, organised by the Institute of Sathya Sai Education, Dharmakshetra, Mumbai and Sri Sathya Sai Vidya Vihar, Vishakapatnam, 17-18 May 2013.





RESEARCH PUBLICATIONS

Journal Papers

• Lavanya P (2012) Common Errors in Geometry at secondary school level. Excellence in Education, *An International Journal of Education & Humanities*, Vol-1,(No.2320-7019), 115-117.

Conference Papers

- Kapani M (25-26 Mar 2013) Quality Assurance in Teacher Education: From Education to Educare: A Paradigm shift. National Seminar on Emerging paradigms of Teacher Education, Organised by Centre of Advanced Study in Education, Faculty of Education and Psychology, Maharaja Sayajirao University of Baroda, Vadodara.
- Rudramamba B (30-31 Mar 2013) Role of Education in promotion of values. *Value Education for personality and career development*, S V University, Tirupati, Andhra Pradesh.
- Lavanya P (27-28 Mar 2013) Examination system at secondary level. *National seminar on Issues and challenges of school Education*, Department of Education, Sri Padmavathi Mahila Visva Vidyalayam, Tirupati, Andhra Pradesh.
- Lavanya P (2013) *Promoting values through teaching of Mathematics in: Education and Human Values* (pp.22-28). APH Publishing Corporations (New Delhi).
- Rudramamba B, (2013) *Value Integration through Teaching of social studies*, Education and Human values, (pp.3-10). A P H publishing corporation (New Delhi). ISBN:978-93-313-1952-4.
- Rudramamba B, (2013) *Policies and programs for Education in human values in: Value Education*, (pp. 179-191). A P H publishing corporation (New Delhi). ISBN:978-93-313-1950-0.











COURSES OFFERED

Undergraduate	B.A. (Optional English)	
Postgraduate	M.A. English Language & Literature	
Research	M.Phil.	Ph.D.

Teaching Faculty

Head of Department: Prof. (Miss) Rajeshwari C Patel

Name	Designation	Qualification
Dr. (Miss) S Kanaka Durga	Professor (Hon.)	M.A., M.Phil., Ph.D.
Prof. (Miss) Rajeshwari C Patel	Professor	M.A., Ph.D.
Dr. A R Manjunath	Professor (Hon.)	B.Ed., M.A., PGDTE, Ph.D.
Dr. (Miss) P L Rani	Associate Professor	M.A., PGCTE, Ph.D.
Dr. Vivek Chauhan	Asst. Professor	M.A., Ph.D.
Dr. Arun Kumar Behera	Asst. Professor	M.A., PGDTE, DDE, Ph.D.
Sri Prashant Luthra*	Asst. Professor	M.A., M.Phil.
Miss Dibba Bhargavi*	Asst. Professor	M.A., M.Phil.
Miss Maitali Verma*	Asst. Professor	M.A., M.Phil.
Sri Ramesh Hanamsagar	Asst. Professor (Hon.)	M.A., PGDTE
Prof. S K Sinha	Adjunct Faculty	M.A., Ph.D.
Smt. Aloka Sarkar	Adjunct Faculty	M.A., M.Phil.
Miss Divya Goyal*	Teaching Assistant	M.A.
Sri Siddhartha R	Teaching Assistant	M.A.
Ms. Sony Dibba	Teaching Assistant	M.A.

^{*} also pursuing Doctoral Research





Workshops Attended

• Miss Divya Goyal attended the Delhi Ibsen Festival 2012, New Delhi, 1-9 Dec 2012.

Doctoral Research Scholars

Name	Area of Research	Research Supervisor(s)
Ms. Lalitha Sarma	Woman's 'I' through the Eye of Drama	Prof. (Miss) Rajeshwari C Patel
Ms. Divya Goyal	The Plays of Henrik Ibsen: A Venture into Unexpected Places	Prof. (Miss) Rajeshwari C Patel
Mr. Prashant Luthra	R. K. Narayan: The Artist as Moralist	Prof. (Miss) Rajeshwari C Patel
Ms. Maitali Verma	The Modern Poetic Tradition and the Reconstitution of the 'I': Braving the Battle Between Public Person and Private Self	Prof. (Miss) Rajeshwari C Patel
Ms. D Bhargavi	A Study of the Problem of Good and Evil in the Novels of Iris Murdoch	Prof. (Miss) Rajeshwari C Patel

M.Phil. Scholars

Name	Area of Research	Research Supervisor(s)
N Aruna Narayanan	Nationhood vs. Selfhood – A Study of the Novels of Amitav Ghosh and Shashi Tharoor	Dr. (Miss) S Kanaka Durga
V S Uma Devi	Rejuvenation of Values in Modern India through the Selected Prose Works of Swami Vivekananda, Sri Aurobindo, Rabindranath Tagore and Dr. S Radhakrishnan	Dr. (Miss) S Kanaka Durga
Manisha Thakuri	Culture & Communicative Competence Combined – A Study to Identify the Possibility of Reinforcing Learner-culture through ESL classes	Dr. (Miss) P L Rani

Projects & Dissertations Completed

M.A. Dissertations

Name	Project Title	Supervisor(s)
Sunandini C H	The Power of the Individual: A Study of Ayn Rand's Protagonists in The Fountainhead and Atlas Shrugged	Prof. (Miss) Rajeshwari C Patel
Troyee Banerjee	Re-Viewing 'Life of Pi'	Dr. (Miss) P L Rani

RESEARCH PUBLICATIONS

Journal Papers

- Patel R C and Verma M (Jan-Jun 2012) Revisiting Post-Modernism: A Comment. *Himalayan Journal of Contemporary Research*, 1(1), 28-35
- Behera A K (2012) Improving One's speaking skills is at one's own hand. *Asian Academic Research journal of Multidisciplinary*, I (2), 87-92.
- Behera A K (2012) Phonetics in Language Learning. The Dawn Journal, July-December 2012, 198-203
- Behera A K (2013) Requisites of Teaching the Spoken Language. *International Journal of Applied Research & Studies*, II (2), 1-6.
- Behera A K (2013) ELT as Communication. International Journal of English and Education, II (2), 206-210.
- Behera A K (2013) Should Functional English be taught as a Subject in Technical Programmes? *International Journal of Applied Research*, III (3), 193-195.
- Behera A K (2012) Press in India and Raja Ram Mohan Roy. International Journal of English and Education, I(2), 280-282
- Behera A K (2013) The role of the English Teacher in the E-learning System. The Challenge, XXII (1), 105-110.
- Behera A K (2012) Code switching and some of its factors. Asian Academic Research journal of Multidisciplinary, I (2), 82-86.
- Behera A K (2012) How about the Language of the Newspapers?, Research Revolution, I (2), 4-5.
- Behera A K and Tripathy B K (2012) Role of Newspapers in enriching Vocabulary. *International Journal of English and Education*, I(2), 203-206.
- Behera A K (2012) Plurilingualism in India. Research Revolution, I (1), 19-21.
- Behera A K (2012) Learner-centric Teaching. Research Revolution, I (3), 35-36.
- Behera A K (2013) Learning styles in understanding student's learning process. *Journal of International Academic Research in Multidisciplinary*, I (2), 24-28.
- Behera A K (2013) Etymological Analysis of English Words. Asian Journal of Humanities & Social Sciences, May 2013, 20-24

Conference Papers

- Rani P L (18-19 Jan 2013) Globalization and Enculturation: Problem and Solution in ELT. *AINET International Conference & 5th National & 9th Vidharbha ELTAI Conference,* Nagpur.
- Ms. Lalitha Sarma R (27-28 Sep 2012) The Empowered Woman in Literature. National Seminar on 'Women
 Empowerment Retrospect and Prospect', The Centre for Women's Studies, Sri Krishnadevaraya University, Anantapur.
- Ms. Lalitha Sarma R (15-16 Feb 2013) Narrating Female *Bildung. National Seminar on 'The Resilient Indian Women: Pre and Post Empowerment'*, The Centre for Women's Studies, Catholicate College, Pathanamthitta, Kerala.

Books

- Behera A K (2013) Dictionary of Loanwords. Sanbun Publishers (New Delhi). ISBN: 978-93-82393-29-0.
- Behera A K (2012) Speaking English Fluently. Sanbun Publishers (New Delhi). ISBN: 978-93-80213-81-1.

Chapters in Books

Behera, A K. (2012). Teaching English Literature: Social Effects & Impediments, Expression, 78-81.







SUB-DEPARTMENT OF POLITICAL SCIENCE

Political Science is offered as a major subject for the Bachelor of Arts programme. This subject is studied as one of the three-subject combinations in the Humanities group.

The primary focus areas are Centre State relations in India, Indian Constitution and Constitutional Mechanisms, Coalition Governance and Compulsions, Political Parties and Systems of Governments.

Teaching Faculty

Name	Designation	Qualification
Prof. R Gangadhara Sastry	Professor	M.A., M.Phil., Ph.D.
Miss G Rajya Lakshmi	Associate Professor (Hon.)	M.A.

SUB-DEPARTMENT OF HISTORY & INDIAN CULTURE

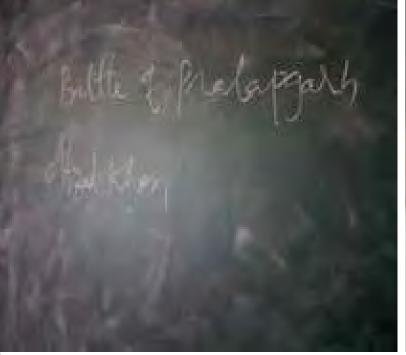
History & Indian Culture is offered as a major subject for the Bachelor of Arts programme. This subject is studied as one of the three-subject combinations in the Humanities group.

Teaching Faculty

Name	Designation	Qualification
Sri R Visveswar	Asst. Professor	M.A., M.Phil.
Ms. M Vijayalakshmi	Asst. Professor	M.A., M.Phil.

SUB-DEPARTMENT OF PHILOSOPHY

Philosophy is offered as a major subject for the Bachelor of Arts programme. This subject is studied as one of the three-subject combinations in the Humanities group.





Teaching Faculty

Name	Designation	Qualification
Dr. (Miss) Sharada Subramaniam	Associate Professor	M.A., Ph.D.
Dr. (Miss) M Venkatalakshmi	Asst. Professor	M.A., Ph.D.

Workshops Attended

• Dr. (Miss) M Venkatalakshmi attended a workshop on *Capacity Building For Women Managers in Higher Education*, Sensitivity/ Awareness / Motivation, G. Pulla Reddy Engineering College (Autonomous): Kurnool, Sponsored by UGC, 21-25 Sep 2012.

Conference Papers

- Sharda S (22-23 Sep 2012) Dharma and Integrated Living with Special reference to Sri Sathya Sai Baba. *International Conference on Dharma Dhamma*, Centre for Studies of Religion and Society (CSRS) Department of Culture, Government of Madhya Pradesh, Bhopal, India.
- Venkatalakshmi M (28-29 Apr 2012) Dharma The Foundational Value. *Human Values in Sanskrit Literature*, SSBN Degree College (Autonomous), Anantapur, Andhra Pradesh.

SUB-DEPARTMENT OF TELUGU LANGUAGE & LITERATURE

The sub-department of Telugu Language & Literature offers Telugu as an additional language for all the Undergraduate programmes in the first and second years, and 'Optional Telugu' in the B.A. programme.

Teaching Faculty

Name	Designation	Qualification
Prof. M Veerabhadraiah	Professor (Hon.)	M.A., Ph.D.
Dr. (Ms.) C Padmavathamma	Professor (Hon.)	M.A., Ph.D.





Dr. (Mrs.) M Praphulla	Associate Professor	M.A., Ph.D.
Dr. (Miss) P Vijayalakshmi Pandit	Asst. Professor (Hon.)	M.A., Ph.D.
Ms. S Sivaleela	Asst. Professor	M.A.
Dr. Madhavaraju S	Asst. Professor (Hon.)	M.A., Ph.D.
Dr. P Ramesam	Asst. Professor (Part-time)	M.A., M.Ed., Ph.D.

Journal Papers

• Praphulla M (2012) Bhagavan Sri Sathya Sai Baba-Telugu sahithee seva. Souvenir published on the occasion of 4th *Prapancha Telugu Mahasabhalu*, Ananthavyasam (December), 285-290.

Conference Papers

• Praphulla M (28- 29 Apr 2012) *Sree Pulya Umamaheswara sastinah kavayadvaye Manaveeya mulyani*. UGC-sponsored *National conference on Human Values in Sanskrit literature*, Sree Sai Baba National Degree College (autonomous), Anantapur, Andhra Pradesh.

OTHER LANGUAGE OF HINDI

The subject of Hindi is offered as another language for various undergraduate programmes at both, the Anantapur Campus (since 1972) and the Prasanthi Nilayam Campus (since 1979).

Teaching Faculty

Name	Designation	Qualification
Dr. (Miss) Kiron Bala Arora	Associate Professor	M.A., Ph.D.
Dr. Piyush Kumar Shrivastava	Asst. Professor	M.A., Ph.D.
Sri J Sadic Pasha	Part-time Faculty	B.Ed., M.A.





Workshops Attended

• Dr. (Miss) Kiron Bala Arora attended UGC workshop, *Capacity Building of Women Managers in Higher Education* on 'Human Resource Management' and 'Finance Management', Hyderabad University, Hyderabad, 29 Oct to 3 Nov 2012.

Special Achievements

Dr. (Miss) Kiron Bala Arora

- Conducted and co-ordinated a 2-day National Hindi Conference, Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, on the theme, Kamayani evam Godan ki Hirak Jayanthi on 29-30 Nov 2012 with participation of fourteen Resource Persons from all over India.
- Invited as a Resource Person to transact a Manual titled, Women's Studies Perspective at a UGC sponsored 6 day Workshop, Sensitivity, Awareness and Motivation, G.Pulla Reddy College of Engineering, Kurnool, 21-22 Sep 2012.

Journal Papers

• Shrivastava P K and Singh D (Feb 2013) Manas Me Nam Nirdharan. 'Sravanti' DWI Bhasha Masik Patrika (Feb 2013)

Conference Papers

• Arora K B (29-31 Jan) *Adhunik Hindi Kavita mein Samajik Nyaya*. *Comparative Literature and Social Justice*, Andhra University, Vishakhapatnam.

Books

• Shrivastava P K, (2013) Sai Baba ke Mahavaky - *Leadership Ke Bare Me Youth Mata Pita Aur Teachers Ke Liye*, translation of the English book written by Lt. Gen. (Retd.) Dr. M L Chibber. Sri Sathya Sai Book Trust, Bhopal, Madhya Pradesh.

Chapters in Books

- Shrivastava P K, Singh D (Jun 2012) *Manas Ki Samajbhashiki: Nate Rishte ki Shabdavali*, Bhasha Samskruti Aur Lok. *Vidyanivas Misra Smriti Granghamala*, 100-108. ISBN 978-93-5072-168-1.
- Shrivastava P K, Singh D (Apr 2013) *Manas me Kriyaon Ka Samajik Sandhrbha.* 'Sravanti', *Dwi Bhasha Masik Patrika*, 5-11.

200

- Shrivastava P K, Singh D (Aug 2013) *Manas Ki Sahbdavali: Samajshastriya Drishti.* 'Sravanti', *Dwi Bhasha Masik Patrika*, 9-14.
- Shrivastava P K (Apr-Jun 2013) Manas Me Bhasha Aur Samskriti Ka Sambandh. 'Sankalya', Trai Masik Patrika, 88-93.
- Shrivastava P K, Singh D (Oct 2013) Sambodhan Ke Star Par Manas Me Bhasha Ka Samajik Prayog: Vakta-Shrota aur
 Paristhiti Ke Sandarbha Me. 'Sravanti', Dwi Bhasha Masik Patrika, 11-15.

OTHER LANGUAGE OF SANSKRIT

The subject of Sanskrit is offered as another language for various undergraduate programmes.

The subject aims to teach the fundamentals of grammar and outlines of classical literature based on selected portions of Mahakavyas and Dramas.

Teaching Faculty

Name	Designation	Qualification
Dr. C L N Murthy	Professor (Hon.)	M.A., Ph.D.
Dr. N Venkatesha Rao	Associate Professor	M.A., Ph.D.
Sri Mahabala Rao M G	Asst. Professor	B.Ed., M.A., M.Phil.
Dr. (Mrs.) M Praphulla	Associate Professor	M.A. (Sanskrit), M.A. (Telugu), Ph.D. (Sanskrit), Ph.D. (Telugu)

Workshops Attended

• Dr. N Venkatesha Rao attended the 3rd International Conference on Mahabharata held at Udupi from 17-19 May and delivered a talk on 'Mahabharata tatparyanirnaya and its Critical approach for the study of epics'.

Special Achievements

Dr. N Venkatesha Rao

- Conferred with a Special award 'Vedanta Vidya Prathibha Prakasha' by Prathibha Samskritha Vidyalaya during its golden jubilee celebrations on 17 Feb 2012 for propagating Samskrita Kavya & Panini grammar.
- A special award 'Madhwa Madhava Prashasti' was conferred for highlighting the Veda Bhashya of Madhva & Sayana by Kambaalooru Prathishtana and Maadhavateertha Samsthan on 28 May 2012 in Bangalore.
- Delivered lectures were as a resource person in Poorna Prajna Samshodha Samsthan (Research Institute) on the topic 'Commentaries on the works of Jagannatha Dasa with special reference to Sankarshana Wodeyar', 23-30 Oct 2012.

Articles

- Rao V N (1 Mar 2013) Tilivu dayeyatta saagali. Sugunamaala, 29(3), 20-23.
- Rao V N (1 Feb 2013) Nindeya hinde neetisamhita. Suguna maala, 29(2), 39-42.
- Rao V N (20 Jan 2013) Kastam madamadam devam. Sarvamoola, 9(1), 17-18.
- Rao V N (20 Feb 2013) Ashareeram-Shareereshu. Sarvamoola, 9(2), 15-16.
- Rao V N (1 Dec 2013) Kaala-karala sarala. Suguna maala, 28(12), 33-36.

- Rao V N (1 Jan 2013) Kartavyaanusarana. Suguna maala, 29(1), 33-36.
- Rao V N (20 Jan 2013) Sameekshai. Trikanneshvari, 4(1), 24-25.
- Rao V N (20 Sep 2012) Guhanihitatvam. Sarvamoola, 8(9), 21-22.
- Rao V N (20 Dec 2012) Shayaano yaati sarvatah. Sarvamoola, 8(12), 19-21.
- Rao V N (20 Jan 2013) Kastham-madaamadam. Sarvamoola, 9(1), 17-18.
- Rao V N (20 Mar 2013) Tasyaisha aatmaa vivrunate. Sarvamoola, 09(3), 28-29.
- Rao V N. (20 Oct 2012) Veeta soka Views of Anandateertha. Sarvamoola, 8(10), 18-19.
- Rao V N. (20 Jun 2012) Ubhou tau na vijaaneetah. Sarvamoola, 8(5), 18-19.
- Rao V N (20 Apr 2012) Katopanishad-Hatahschet manyate hantum-1. Sarvamoola, 09(5), 26-27.
- Rao V N (20 May 2012) Katopanishad-Hatahschet -manyate hantum-2. Sarvamoola, 8(6), 21-22.
- Rao V N (20 Jul 2013) Veetashokarahasyata. Sarvamoola, o9 (7), 21-22.
- Rao V N (20 Aug 2012) Dhaatuh prasaadaat. Sarvamoola, 8(8), 18-19.
- Rao V N (20 Nov 2012) Aaseeno doorm vrajati. Sarvamoola, 8(11), 24-25.

Conference Papers

- Rao V N (17-19 May 2013) Contribution of Anandateertha to the Critical analysis of Mahabharata study. International conference on Mahabharatha (By Vadiraja research foundation & Karnataka Sanskrit University), Udupi-(Geetha Mandira)
- Rao V N (April) Human Values in Valmiki Ramayana. National Seminar on Human Values, Anantapur, pp. 53-57.
- Rao V N (3-4 Feb 2013) Advanced Studies in Dvaitha philosophy. All India Madhva Philosophical conference, Poorna Prajna Sanskrit College, Bangalore, Raichoor-M.I.G.College Grounds.

Books

Rao V N (2012) Vaisnva Vrata Vaibhavam. Hayagreeva prakaashana (Bangalore).

Other Information

Dr. N Venkatesha Rao is supervising Post-Doctoral research in the area- Pramanamimamsa- a comparative analysis on knowledge and its means in Indian philosophy.

OTHER LANGUAGE OF KANNADA

The subject of Kannada is taught as another language at the Muddenahalli Campus of the University (since June 2012).

Teaching Faculty

Name	Designation	Qualification
Sri A Kumsi Shivappa	Faculty (Hon.)	B.Ed., M.A.





THE TRUST

Sri Sathya Sai Institute of Higher Learning (Public Charitable Trust) was founded on 31 October 1981 by Bhagawan Sri Sathya Sai Baba.

The Trust was founded to foster the composite culture of India and promote in the students and teachers, an awareness and understanding of the social needs of the country; with special awareness to the needs of the rural population. It is aimed to inculcate in students a world perspective; an international outlook imbibing human values along with a spiritual and scientific education.

Bhagawan Sri Sathya Sai Baba is the Founder Trustee of Sri Sathya Sai Institute of Higher Learning (Public Charitable Trust). Its members (Academic Year 2012/13) are:

- Sri Indulal H Shah, Former Chairman, SSS Seva Organisation
- Sri V Srinivasan, All India President, SSS Seva Organisation
- Justice A P Misra, Former Judge, Supreme Court of India
- **Prof. S P Thyagarajan,** Former Vice-Chancellor, University of Madras
- Sri R J Ratnakar, Member, SSS Central Trust

During the academic year in review, the meeting of the Board of Trustees took place on 21 November 2012.

THE PRINCIPAL BODIES

Sri Sathya Sai Institute of Higher Learning (Deemed to be University) is an independent and self-governing institution. The following pages delve into the university's principal bodies and committees, as well as its main officers – both administrative and academic, and include a brief overview of their roles.

The administrative and academic functioning of the University is carried out by the following two principal bodies:

- 1. The Board of Management
- 2. The Academic Council

The Board of Management

The Board of Management is the principal authority of the Institute. It is in charge of the general management and administration of the Institute, such as: framing of rules, creation of posts (teaching and non-teaching), appointment and suspension/dismissal of members, constitution of committees, review and evaluation of teaching and research, etc. It also has the power to constitute and lay down the functions and powers of the Selection Committees for the purpose of selecting the teaching and non-teaching staff, Building and Works Committee, Examination Committee, Research Committee and other such Committees as it may deem necessary. It normally meets four times every year.

The following are the external members of the Board of Management for the academic year 2012/13:

Sri V Srinivasan	All India President, Sri Sathya Sai Seva Organisation	Nominee of SSSIHL (Public Charitable Trust)
Prof. S P Thyagarajan	Former Vice-Chancellor, University of Madras	Member

Dr. (Ms.) Dolly Sunny	Professor, Department of Economics, University of Bombay, Mumbai	Central Govt. Nominee
Dr. (Miss) P Selvie Das	Former Member of Parliament, Rajya Sabha	Member
Prof. C R Visveswara Rao	Former Vice-Chancellor, Vikram Simhapuri University, Nellore	Member

The Board of Management met four times during the academic year 2012/13 on 28 July 2012, 22 September 2012, 22 November 2012 and 23 February 2013.

The key items discussed and ratified during the year included appointments of new members of the teaching faculty and administrative staff, career advancement of faculty members, research collaborations with external agencies of repute, major upgradation of infrastructure (including an Advanced Research Centre) and proposal to start new courses - M.Ed., and M.Tech. (Nuclear Medicine).

The Academic Council

The Academic Council is the principal academic body of the Deemed to be University and it has general control over and is responsible for the maintenance of standards of teaching, research and training, approval of syllabus, coordination of research activities, examinations and tests within the University and exercises such powers and performs such other duties and functions as may be prescribed or conferred upon it by the Rules of the Institute.

The following are its external members:

Prof. G K Karanth	Senior Professor of Economics, Institute of Social Economic Change, Nagarbhavi, Bangalore	
Prof. K A Suresh	Director, Centre for Soft Matter Research, Bangalore	
Prof. N S Nagaraj	Head, Dept. of Computer Science and Engineering, Don Bosco Institute of Technology, Bangalore	
Prof. M P Vithal	Professor of Finance and Strategy, Indian Institute of Plantation Management, Bangalore	
Prof. V Nagaraja	Chairman, Dept. of Microbiology & Cell Biology, Indian Institute of Science, Bangalore	
Prof. M Madhusudan Rao	Dept. of English, Acharya Nagarjuna University, Guntur, Andhra Pradesh	

The Academic Council met on 1 October 2012. Agenda items included discussions on the newly introduced courses (Master of Financial Management and M.Tech. (Analytical Methods and Chemical Instrumentation) and revised regulations of the Ph.D. programmes, M. Tech. (Applied Optics) programme and Kannada (as an additional language). Following this, the heads of various departments presented their proposals to the Academic Council for its consideration and approval.

THE BOARDS OF STUDIES

The Boards of Studies is responsible for framing and initiating, or revising courses of studies and teaching methods at the University. It also makes suggestions regarding evaluation procedures and other academic matters concerning their subjects. Suggestions and recommendations of the department are deliberated upon in the Boards of Studies meetings. The presence of experts facilitates objective and dispassionate debates of the issues at hand. The recommendations and suggestions of the Boards of Studies need to be approved by the Academic Council.

The Board of Studies met during the academic year and their proposals were presented to the Academic Council on 1

October 2012. The following is the list of the external experts on the Boards of Studies, for the academic year 2012/13:

Faculty of Science

Department of Mathematics &	Prof. K Vairamanickam	Head, Dept. of Science & Humanities, Krishnasamy College of Engineering & Technology, Cuddalore, Tamil Nadu
Computer Science	Prof. N S Nagaraj	Head, Dept. of Computer Science and Engineering, Don Bosco Institute of Technology, Bangalore
	Prof. B K Panigrahi	Head, Ion Beam & Computer Simulation Section (IGCAR); Professor, Homi Bhaba National Institute, Kalpakkam, Tamil Nadu
Department of Physics	Prof. S Bhudhudu	Physics Dept., SV University, Tirupathi
	Prof. K N Rao	Head, Dept. of CSE, PVP Siddhartha Institute of Technology, Vijayawada
	Prof. P K Sai Prakash	Emeritus Scientist, Department of Chemistry, Osmania University, Hyderabad
Department of Chemistry	Prof. S Srihari	Dept. of Environmental Studies, Kakatiya University, Warangal, Andhra Pradesh
	Prof. V Nagaraja	Chairman, Dept. of Microbiology & Cell Biology, Indian Institute of Science, Bangalore
Department of Biosciences	Prof. D N Rao	Dept. of Biochemistry, IISc., Bangalore
Department of Biosciences	Prof. R Manjunath	Dept. of Biochemistry, IISc. Bangalore
	Prof. Ravi Parkash	Emeritus Professor, M D University, Rohtak
	Prof. P Bhanumathi	Dean, Home Science College and Research Institute, Tamil Nadu Agricultural University, Madurai
Department of Home Science	Dr. K R Anila Kumar	Scientist E, Head, Department of Applied Nutrition, Defence Food Research Laboratory, Mysore

Faculty of Management & Commerce

	Mr. P S Rao	President, Rane Brake Lining Limited, Chennai
Department of Management	Prof. Srinivas Prakhya	Associate Professor, Marketing, IIM Bangalore
Studies	Prof. Latha Krishnan	Director, Professor, Department of Management Studies, Sona College of Technology, Salem
	Prof. S K Prasad	Director, New Horizon Leadership Institute, Bangalore
Department of Commerce	Prof. Latha Krishnan	Director, Professor, Department of Management Studies, Sona College of Technology, Salem
	Dr. D Raja Jebasingh	Asst. Professor, Post Graduate & Research Department of Commerce, St. Joseph's College of Commerce, Bangalore
	Prof. V Nagadevara	Professor, Quantitative Methods & Information Systems, Indian Institute of Management, Bangalore

Faculty of Economics & Humanities

Department of Economics	Prof. B L Pandit	Former Head, Dept. of Economics, Delhi School of Economics, University of Delhi, New Delhi
	Prof. G Latchanna	Dean & Head, Dept. of Education, Andhra University, Vishakhapatnam
Department of Education	Dr. (Mrs.) Chhaya Goel	Associate Professor, Dept. of Education, CASE, M S University, Baroda
Department of English Language & Literature	Prof. M. Madhusudhana Rao	Professor, Dept. of English, Nagarjuna University, Guntur, Andhra Pradesh
Sub-Department of Telugu Language & Literature	Dr. J Suman Babu	Dept. of Telugu, P R Government College, Kakinada, Andhra Pradesh
Sub-Department of Political Science	Prof. I Dosagiri Rao	Head, Department of Politics & Public Administration, Andhra University Campus, Kakinada, Andhra Pradesh
Sub-Department of Philosophy	Prof. Raghu Ram Raju	Professor, Central University, Hyderabad
Sub-Department of History & Indian Culture	Prof. V Sakuntala	Dept. of History, Sri Venkateswara University, Tirupati, Andhra Pradesh
	Prof. P Hymavati	Dept. of History, Kakatiya University, Warangal, Andhra Pradesh

Other Languages

Subject of Sanskrit	Prof. Sripada Subramanyam	Director, Andhra Pradesh Govt. Oriental Manuscripts Library and Research Insitute, Hyderabad
Subject of Hindi	Prof. C Shareshchandra	Professor, Department of Hindi, Karnatak University Dharwad, Karnataka

IMPORTANT COMMITTEES

In addition to the principal bodies that govern the University, there are various committees set-up which ensure that the areas of academics and administration, research and qualitative aspects, buildings and library maintenance, etc. are in accordance to the highest standard that SSSIHL has striven to consistently maintain. Some of these include:

- **Finance Committee**
- Planning and Monitoring Board
- Internal Quality Assurance Cell (IQAC)
- Research Advisory Committee (RAC)
- Departmental Committee
- **Examinations Committee**
- Institutional Ethics Committee
- Institutional Bio-Safety Committee(IBSC)
- Library Management Committee (LMC)

APPENDIX B: SCIENCE COLLOQUIUM 2012/13

The colloquium provides an opportunity for Doctoral research Scholars and the Teaching Faculty to share their research experiences with fellow researchers. Considering the various streams of research done in the university, from Pure Mathematics, Nano Science to Home Science etc., this colloquium fosters the capacity of a researcher to present the gist of his/her research in a manner that can be understood and appreciated by people from different scientific backgrounds.

The passion with which presenters deliver their talks inspires everyone, and this in turn helps in the cultivation of mutual respect, which is fundamentally important for multi-disciplinary research. The barriers between different disciplines is therefore becoming narrower and such forums facilitate a healthy exchange of information.

Date	Presenter	Designation	Topic
16 Jun 2012	Dr. S Pratap Chandran	Post-Doctoral Fellow, Dept. of Chemistry, Prasanthi Nilayam, SSSIHL	Photonic control of surface anchoring on solid colloids dispersed in liquid crystals
23 Jun 2012	Dr. Arun Sreekumar	Associate Professor and Director of Metabolomics, Dept. of Molecular and Cellular Biology, Baylor College of Medicine, Houston, USA	Mass spectrometry-based metabolic analyses with emphasis on its applications in nominating markers and pathways for cancer progression
30 Jun 2012	Sri Ajith Padyana	Doctoral Research Scholar, DMACS, SSSIHL	GPU Computing
30 Jun 2012	Ms. Tapasya Anand	Doctoral Research Scholar, Dept. of Home Science, SSSIHL	Therapeutic effects of dietary fiber
30 Jun 2012	Ms. Mekha M S	M.Phil. Scholar, Dept. of Home Science, SSSIHL	Nutraceutical potential of thymol from 'Ajwain'
07 Jul 2012	Sri Sai Giridhar Sarma Kandanur	Doctoral Research Scholar, Dept. of Chemistry, SSSIHL	Low cost synthesis of NCE's & solid form modulation of API's as novel therapeutic agents
07 Jul 2012	Sri Pradyumna Mulpur	Doctoral Research Scholar, Dept. of Physics, SSSIHL	Surface Plasmon Coupled Emission (SPCE) as a Platform for the Ultrasensitive Detection of Small Molecules & Bacteria
14 Jul 2012	Sri Sai Hareesh A	Doctoral Research Scholar & INSPIRE Fellow, DMACS, SSSIHL	Computational Photography
14 Jul 2012	Dr. B S Vijayakumar	Associate Professor, Dept. of Biosciences, SSSIHL	Nanobiotechnology
21 Jul 2012	Mrs. A Sumana	Asst. Professor, Dept. of Home Science, SSSIHL	Nutraceutical potential of Agathi (Sesbania grandiflora) supplemented products
21 Jul 2012	Sri R S Sai Siddhardha	Doctoral Research Scholar, Dept. of Chemistry, SSSIHL	Design and development of gold decorated functionalized graphene for catalytic applications
28 Jul 2012	Sri Srikanth Khanna	Asst. Professor, DMACS, SSSIHL	IRIS-Image Pre-processing Using Fractional- Derivative Filters
28 Jul 2012	Sri Sai Kiran Aditha	Doctoral Research Scholar, Dept. of Physics, SSSIHL	Photovoltaics: A journey from crystalline Silicon to CZTS

4 Aug 2012	Prof. K B Chandran	Lowell G Battershell Chair & Professor, Dept. of Biomedical Engineering, University of Iowa, USA	Computational Simulations in the Human Cardiovascular System
11 Aug 2012	Dr. Prakash Kachandhani	Senior consultant Surgeon, Department of Orthopaedics, SSSIHMS	Avascular Necrosis of femoral head, Rheumatoid Arthritis, Autologous Chondrocyte Implantation
18 Aug 2012	Sri Abilash Gangula	Doctoral Research Scholar, Dept. of Chemistry, SSSIHL	Fe2+ catalysed in-situ generation of reducing moieties for fabrication of gold nanoparticles: A potential platform for versatile optical sensing
18 Aug 2012	Sri Avinash Chirala	Doctoral Research Scholar, Dept. of Physics, SSSIHL	Nanophosphors for Biomedical Applications
25 Aug 2012	Dr. S Pratap Chandran	Post-Doctoral Fellow	Optical Properties of Plasmonic Metal Nanoparticles: A Brief introduction
25 Aug 2012	Ms. G Supraja	Teaching Assistant, Dept of Biosciences, SSSIHL	Antimicrobial Activity of <i>Brassica Alba</i> (White Mustard)
25 Aug 2012	Ms. Shobha Iyer	Doctoral Research Scholar, Dept of Home Science, SSSIHL	Therapeutic Potential of Pimpinella anisum
1 Sep 2012	Sri Sai Shyam	Asst. Professor, DMACS, SSSIHL	Puzzling mathematics
1 Sep 2012	Sri Sandeep Patnaik	Doctoral Research Scholar, Dept. of Physics, SSSIHL	Nanoformulations for Improved Bioavailability of Non-Steroidal Anti-inflammatory Drugs
22 Sep 2012	Sri Lalith Srikanth C	Doctoral Research Scholar, DMACS, SSSIHL	Image segmentation and its applications
1 Dec 2012	Dr. S Venketesh	Asst. Professor, Dept. of Biosciences, SSSIHL	ATP signaling and cytoplasmic calcium homeostasis: A new role for Lysosomes
8 Dec 2012	Sri N Uday Kiran	Asst. Professor, DMACS, SSSIHL	Rotating Needle Problem
8 Dec 2012	Dr. M Narayanaswamy	Experienced Senior Broadband Engineer, Sumitomo Electric., USA	Broadband flood is coming; Let us learn Swimming
15 Dec 2012	Prof. N Venkata Rao	Environment Canada, Toronto, Canada	Journey to the top of the world
15 Dec 2012	Ms. Mekha M S	M.Phil. Scholar, Dept. of Home Science, SSSIHL	Role of nutrition in ageing
02 Feb 2013	Dr. N V R Kiran	Geological Survey of India, Hyderabad	Applications of chemistry in forensic aspects of explosions
09 Feb 2013	Combined presentation	All Science Departments	Research proposal submitted to the UGC under the Innovation University Scheme
16 Feb 2013	Dr. E N Prabhakaran	Asst. Professor, Dept. of Organic Chemistry, Indian Institute of Science, Bangalore	Crystal Structures of High Energy Conformers: Why Proteins (don't) access them?
2 Mar 2013	Dr. Erlendur Haraldsson	Professor emeritus of Psychology, University of Iceland	Some extraordinary cases of children who claim memories of a past life
8 Mar 2013	Prof. V Chandrasekaran	Head, Dept. of Mathematics & Computer Science, SSSIHL	Mathematics: Queen of All Sciences

APPENDIX C: 31ST ANNUAL CONVOCATION - TEXT OF SPEECHES

INTRODUCTORY ADDRESS BY PROF. J SHASHIDHARA PRASAD, Vice-Chancellor, SSSIHL

Aum Sayeeswaraya vidmahe Sathya Devaaya Dheemahi Tannah Sarvah prachodayaath

I offer my most humble, respectful and loving pranams at the lotus feet of my beloved Swami. This is the second convocation to be held after Bhagawan Baba left his physical form and assumed all pervading universal consciousness. We can feel His divine presence watching this ceremonious function wherein His children whom He always considered as His property are receiving the degrees to walk into the world carrying His message of Love. I am sure that the graduands of this hallowed Institution will be the torch bearers of the vision and mission of revered Bhagawan and thereby fulfill His dream and will of a peaceful world.

Esteemed Chief Guest of the day Dr. Anil Kakodkar, Former Vice-Chancellors, Members of the various Trusts, Board of Management and Academic Council, Members of the faculty, distinguished invitees and guests, Graduands of the year, students of the University and my dear brothers and sisters, Loving Sairam to each one of you!

I deem it a great privilege to extend a most cordial welcome to all of you to the thirty first Convocation of Sri Sathya Sai Institute of Higher Learning.

Justice P N Bhagwati took over the responsibility of Chancellorship of this University founded by Bhagawan Sri Sathya Sai Baba twenty months back after beloved Swami left His mortal coil. In spite of his old age and health problem, Justice Bhagwati has been taking keen interest in the development and growth of the University and his advice and guidance are always readily available whenever we approach him. We miss his presence today as he has been advised by the doctors not to take up travel.

We are honored to have Dr. Anil Kakodkar, Former Chairman, Atomic Energy Commission and Secretary to the Government of India, Department of Atomic Energy, during the years 2000-2009, and presently DAE Homi Bhabha Chair Professor at Bhabha Atomic Research Centre (BARC). He is the youngest Director of BARC after Homi J Bhabha.

Dr. Kakodkar has worked for the development of the atomic energy programme in India throughout his professional life. Undeterred by the restrictions imposed by the international community, he succeeded in developing various systems for the pressurized heavy water reactor, in building the Dhruva reactor starting from the conceptual stage, in rehabilitation of Madras Atomic Power Station Units 1&2 both of which at one stage appeared to be on the verge of being written off following failure of the moderator inlet manifolds, and in conceptualization and development of Advanced Heavy Water Reactor that realizes the next generation objectives through innovative configuration of present day technologies besides use of thorium.

Dr. Kakodkar has been a key contributor to India's strategic programme. He was among the chosen few involved in the first successful Peaceful Nuclear Explosion Experiment that India conducted on May 18, 1974 at Pokhran. And later, he played a key role in the series of successful Nuclear Tests conducted during May 1998, again at Pokhran. India also demonstrated nuclear submarine power pack technology under Dr. Kakodkar's leadership.

Dr. Kakodkar's sterling leadership led to a significant boost to India's nuclear power programme notwithstanding the uranium supply constraints. As a result and with the completion of projects already underway, India's nuclear generation capacity is set to reach 10,000 MWs as well as poised for a rapid scale up thereafter. The comprehensive and robust programme under Dr. Kakodkar's leadership has earned India a distinctive status as a country with advanced nuclear technology.

Notable also are his innovative contributions to human resource development activities. Establishment of NISER (National

Institute of Science Education and Research), DAE-Mumbai University CBS (Centre for Basic Sciences) and HBNI (Homi Bhabha National Institute) are expected to result in a fresh wave of human resource development, generating greater experimental capabilities and bringing in linkage between basic research and technology development for the acceleration of India's multifaceted atomic energy programme.

His contributions to the Energy Sector, promotion of higher education and research, societal development and culture through his active participation as the leader/member of several Commissions and Advisory bodies are noteworthy. He is a Fellow of all the National Academies of Science and Technology and has been conferred honorary doctorate from eighteen universities including IITs. He is the recipient of Padma Sri in 1998, Padma Bhushan in 1999 and Padma Vibhushan in 2009. He has several international recognitions notably Rockwell Medal for Excellence in Technology, Member of World Innovation Foundation, USIBC Award for Expansion of US-India Trade Relations and Ordre national de la Légion d'honneur (National Order of the Legion of Honour) by the President of the French Republic, 2011; the highest civilian honour of France. Major National Honours and Awards run to three pages and I am afraid I cannot read through them.

I had the privilege of interacting with him during my tenure as the Vice-Chancellor of University of Mysore particularly when the National Neutrino Observatory was taking shape, which is expected to throw light on the birth of the universe.

Dr. Kakodkar is the illustrious son of illustrious parents Smt. Kamala and Shri Purushotham Kakodkar, who were involved with the freedom movement along with Mahatma Gandhi and had undergone imprisonment. His mother brought him up with great patriotic spirit. It was with this patriotic zeal that he was instrumental in initiating the nuclear treaty with the US Government. It paved the way for nuclear technology collaboration with the countries across the globe.

I very warmly and affectionately welcome him.

It has been a year and a half since our beloved Swami, the Divine Chancellor, left His mortal coil to assume His infinite cosmic form. During this time, there was an element of skepticism in some sections of society about the sustenance of His Institutions, without realizing that Bhagawan in His all pervading universal consciousness would guide the destiny of His creations, which are close to His heart. This has been amply demonstrated with regard to the Sri Sathya Sai Institute of Higher Learning – the University founded by Bhagawan that trains students to live His message and thereby transform society.

The University has made substantial progress over the past one year.

The fourth Campus of the Institute at Muddenahalli has been operational from this academic year starting 1st June 2012. Two new programmes have commenced this academic year. A two-year M.Tech. Programme in Analytical Methods and Chemical Instrumentation at the Prasanthi Nllayam Campus and a two-year Master of Finance Programme in the Brindavan Campus as an integrated programme for the B.Com. (Hons.) students. Making further strides, the Institute is commencing two new Programmes from the coming Academic Year – A two year M.Tech. Programme in Nuclear Medicine at the Prasanthi Nilayam Campus and a one year M.Ed. Programme for women in the Anantapur Campus.

The student strength has increased by four percent. The number of research scholars/fellows has increased by eighteen percent, strengthening the research activities at the University. The number of faculty has gone up by twenty-nine percent with the introduction of new courses. Qualified persons with a good background approached the University, of their own accord, expressing their desire to serve in this Institution.

Sixty percent of the faculty holds a doctoral degree and a good number of teachers, nearly twenty, are pursuing research leading up to a doctoral degree. The teacher student ratio (8:1) is far ahead of the national average of (33:1). Also, the computer student ratio (3:1) is far ahead of the national average of (229:1), enabling each student to have one computer for independent use at the Institute. Compared to the last academic year, this year, publications in good refereed journals have gone up by 48%, papers presented in conferences have gone up by 68% and publications of books and chapters have more than doubled. The pass percentage in GATE and UGC-CSIR NET continues to be high as in the past.

As part of the Fund for Improvement of Science & Technology Infrastructure (FIST) Programme to rebuild the Science &

Technology infrastructure in the country, the Department of Physics of the Institute has been identified as one of the ten 'University Departments' in the country that are to be supported with huge grant support under Level-1 scheme of FIST-2012, for the next five years.

Apart from the regular Workshops and Conferences conducted by the various departments of the Institute, this year, the Department of Management Studies, in the month of August, organized for the first time, an Executive Development Programme for Training on Strategic Planning, for the Management Team of Burckhardt Compression (India), a wholly owned subsidiary of Burckhardt Compression AG, Switzerland.

Another major initiative was the redesign of the Institute website, based on Bhagawan's philosophy of simplicity with aesthetics & clear vision, adopting an information architecture to bridge the secular & spiritual aspects of SSSIHL. It provides ease of navigation with a clear & concise introduction to SSSIHL for first-time visitors.

New buildings are under construction - extension of hostel building, class rooms and auditorium complex in Prasanthi Nilayam Campus; Quarters for teachers and workers in Anantapur campus.

Research activities in thrust areas have been initiated with the active participation of Sri Sathya Sai Institute of Higher Medical Sciences and Food and Drug Administration, USA and few other overseas partners. These projects aim at translating the scientific and research knowledge for practical use in serving the patients. It is expected to have new vistas in early diagnosis and treatment of tuberculosis, dengue, Chikungunya and HIV. A recent initiative in this direction is the establishment of the Chondrocyte Cell Culture Lab of SSSIHL at the Sri Sathya Sai Institute of Higher Medical Sciences. The Lab will help studies that will explore the possibilities of chondrocyte cell culture in treating knee cartilage defects. It will aid the quality of health of patients by avoiding joint replacement surgeries and the symptoms and costs associated with it.

Another initiative is the Gamma Camera Project, wherein the Board of Research in Nuclear Science (BRNS) has sanctioned a ₹70 lakhs project to the Department of Physics to take up a collaborative project with the Sri Sathya Sai Institute of Higher Medical Sciences in the area of Nuclear Medicine. The Project aims at reviving and optimizing the performance of a gamma camera for medical diagnosis.

I would like to acknowledge the active support and participation of Dr. Choudhary Voleti in these projects undertaken with the hospital.

The increase in academic activities does not in any way imply that the Values-based Integral Education, conceived and demonstrated by our beloved Baba has been pushed behind to second place. Conscious efforts have been made to sustain and take forward all the activities pertaining to Integral Education with the active participation of Faculty and Research Scholars in workshops and brain storming sessions.

In the month of May 2012, the Institute organized a two day Workshop for all faculty members and research scholars focusing on Bhagawan's Guidelines for teachers and scholars and the art and science of Mentoring. Mentoring has always been an integral part of the teaching-learning process at the Institute, more so because of its values-based integral education philosophy. However, since the last two years, the Institute has been putting in efforts to design a robust framework to formally institutionalize the process.

Apart from the Summer Course in Indian Culture and Spirituality that the Institute conducts every year for its own students in the month of June; this year the Institute widened its scope to include youth from outside the Institute, with the objective of re-infusing and rejuvenating the spirit of Bharatiya culture in young men and women. In the month of May, the Brindavan Campus of the Institute with the support of the Sri Sathya Sai Seva Organization, Karnataka, conducted a similar course for young men and women from across the state of Karnataka, and last week, the Anantapur Campus just concluded yet another course in Indian Culture and Spirituality organized for young women from across Andhra Pradesh, with the support of the Sri Sathya Sai Seva Organization, Andhra Pradesh.

Teachers and Senior Research Scholars have also been deputed to deliver talks on Bhagawan, across the country and abroad, whenever requested.

Anyone who is able to get deeply connected to Swami, will feel the Divine Hands of our beloved Baba in each of these activities, indicating that He is there for us always and is guiding, leading and protecting us in all our endeavours. Let us pray to Him to reside in our hearts always and bless us.

Once again, I warmly welcome each one of you for this auspicious ceremonial function.

Jai Sai Ram!

CHIEF GUEST'S ADDRESS BY DR. ANIL KAKODKAR, Homi Bhabha Chair Professor, Bhabha Atomic Research Centre and former Chairman, Atomic Energy Commission of India

Prof.J. Shashidhara Prasad, Vice Chancellor, members of Board of Management, members of Academic Council, members of faculty, students, their parents, distinguished invitees, ladies and gentlemen.

Let me at the outset thank Prof. Shashidhara Prasad, Hon. Vice Chancellor of the University and authorities of the University for their Kind Invitation to be a part of this convocation. Sri Sathya Sai Institute of Higher Learning founded by Bhagawan Sri Sathya Sai Baba is special in many ways. Apart from catering to needs of modern higher education for a large number of students, the institution has strong spiritual basis with social foresight that enables students to remain rooted in India and her value system even as the students scale new heights in terms of higher learning. As a University this institution does incorporate several features that are considered important. I am planning to deal with some of these features in general terms in this address.

Convocation is a special day in the academic calendar of a University. It marks the culmination of a phase of learning. Having satisfied that the student is now ready, as a worthy citizen, to face and contribute to the world at large; the teachers deliver the final advice and blessings for further journey that student is embarking upon. It is a solemn occasion for the students and also for the teachers. The bond between the teachers and the students that is supposed to have been built through years of mentoring brings in an emotional content to the Convocation day. I wish to use this occasion to thank all teachers who in their own way have contributed to shaping the young minds while they are with the University.

I congratulate all students graduating today. Some of you who are being specially recognised deserve our highest appreciation. All of you have gone through your respective courses of studies and have been adjudged to be worthy of the degrees that are being awarded to you. You are now ready to face the exciting world out there. You have to be an important part of the nation building process through your respective capabilities that you have acquired here and elsewhere. Today there is ample scope for innovation and entrepreneurship. The way our country is evolving, the opportunities for the capable ones will continuously expand. I wish all of you graduating today a very successful career ahead. May all your dreams be fully realised.

Higher Education and Socio-Economic Transformation

Education is the key ingredient in character building and socio-economic transformation. Done properly, education can empower our huge human capital to be a major constructive force to propel inclusive growth of the nation as a whole. High quality higher education that empowers our youth, has the potential to cause a quantum jump in socio-economic status of poorer families in a single generation. Inclusive access to such higher education can thus transform our strong demographic advantage into significant enlightenment of the society and wealth generation being added at the base of the pyramid.

The socio-economic scene around us is transforming itself at an accelerated pace as a result of demographic shifts, impact of new technologies, the growing economy and several other developmental initiatives. Knowledge is now an important factor in economies world over, a trend that is likely to be increasingly dominating the global and national scene. We thus need to quickly align our education system to the needs of changing knowledge driven paradigms in the best interests of our socioeconomic development; while remaining consistent with our cultural values and traditions.

The so called 'A3' (Anyone, Anywhere and Anytime) connected society, that is fast emerging on one side and the digitally illiterate across the digital divide on the other, both constitute major socio economic challenges that can be handled only on the basis of widest possible access to appropriate education delivered urgently.

While future holds great potential if we are able to manage the challenge of providing quality education to all, there are serious threats on the horizon if we are not able to do so quickly. Urgent actions are thus necessary on this front to quickly reduce the disparity gap as we move up the economic growth path, lest serious problems as a result of frustrated aspirations surface and create potential threats that might become difficult to contain and our youth force, which is a powerful engine of growth and development could well turn in to a major destructive force. Our large youth force must be provided with opportunities for constructive engagement in a manner that fulfils their aspirations.

Luckily the possibility to widely use modern technologies in education does provide an opportunity to create such wider access to good quality education at a fast enough pace to overcome these challenges successfully.

New Education Paradigm

There are even more fundamental reasons for seeking to change our education system. A new paradigm where an earlier era of education being driven by intellectual culture of enlightenment and economic circumstances of industrial revolution is expected to transform to an era of education through group learning and collaboration taking full advantage of information available to students through multitude of information technology platforms all around us. In this context, I would encourage all of you to take a look at an interesting video on the changing education paradigms at [http://www.youtube.com/watch?v=zDZFcDGpL4U] which effectively brings out the need for change. The challenge before us is to be able to make the necessary transitions at all levels in our education system. Clearly this would require sustained efforts on part of a large number of individuals and institutions.

Some of the key challenges that we need to address are:

- To create and nurture a holistic learning environment that enables structured and curiosity driven learning as well as problem solving abilities and skills through participative experience.
- To make education student centric with broader choices in terms of courses, their content and teachers with teachers increasingly playing the role of mentors.
- To embed education, particularly higher education in an ambiance of high level research; deliver education all the way up to current frontiers of knowledge; nurture research to push frontiers of knowledge and nurture an innovation eco-system that facilitates quick translation of new knowledge to value for moving towards a better quality of life.
- To bring to bear ICT technologies to simultaneously handle the twin challenge of rapidly enhancing the quality and improving the access to quality education.
- To prepare our youth to be effective participants in the emerging A3 connected society, be integral part of lifelong learning and value creation through commons processes and be able to address problems with an interdisciplinary approach.

A lot of ground work needs to be done to realize these objectives. Since there is a large diversity in our institutions, we would need to adopt a differentiated strategy and adopt those measures that are most suitable for a particular situation. There is also the question of developing coherence within and across institutions regarding the approach to management of desired change.

Nurturing Research and Innovation Environment

High quality research in our Universities must be emphasized for a variety of reasons. Such research should span a wide spectrum of disciplines ranging from basic sciences and engineering to humanities, economics and management. Aim of research should be to push frontiers of knowledge as well as to evolve technologies and to implement them for development. This would require several dimensions to be incorporated in the research domain in our Universities. Our research should become comparable to the best in the world. So we should be able to identify individuals and groups who do research that

can be compared with the best in the world and preferentially support them in a liberal way. We should engage ourselves in some grand challenge activities of importance to the nation. Several faculty would need to come together to address such grand challenges through their coordinated research. We should have an environment that incubates industrial enterprise making use of the R&D carried out in our laboratories. We should have the presence of industry research on the campus in the form of research parks where our students and faculty have the opportunity to participate. Similarly, there should be presence of our national laboratories engaged in key national programs on our campuses. In my view, all this would make our education more holistic and also create an ecosystem that nurtures the spirit of innovation that we so desperately need to inculcate in our younger generation.

While such enrichment on the campus is a very desirable feature, for this to be realized, we need to bridge a considerable gap in the mutual confidence that exists between our academia and our industry. We need to reach a condition wherein both sides see a win-win situation while collaborating. Considerable credible work is necessary to create confidence in both sides to invest in each other. We need to explore opportunities to work together in a variety of mutually beneficial ways to create conditions of mutual trust and confidence.

As we engage with the industry, we should also explore opportunities to engage in R&D of relevance to society. In this context, I strongly feel that, treating education and development together, would bring in a lot of synergies that would benefit both domains. While this approach facilitates hands - on activity based learning and empowers students to boldly address the challenges they would face in real life, the process of development becomes more robust by involvement of a knowledge institution, an attribute that would become increasingly important in the emerging knowledge dominated era. That we would produce experts rather than just activists in the process would be an additional advantage.

In the context of rural development, this is even more important. A larger part of our population still lives in rural areas. There are serious issues related to greater development deficit and livelihood in these areas. This is leading to large scale migration to urban areas, a phenomenon that appears inevitable. Creating enhanced livelihood and improved conditions for better quality of life in rural areas, could at least slow this trend, if not reverse it and reduce strain on the urban infrastructure which is unlikely to keep pace with growing needs. Comprehensive higher education and research campuses in rural areas that are well equipped with modern amenities and are engaged in world class research that is also oriented to the problems of the neighborhood could well become fountainheads for innovation and technology led growth in the region while creating better access to higher education right in rural areas.

Our students getting exposed to such activities would not only give them a good problem solving experience but also emotionally bind them with the society around. We need to recognize that the above approach would invariably involve interdisciplinary efforts involving sciences, technology, engineering, medicine, humanities, economics, management and others depending on the objectives of a particular development effort. Opportunities for students to participate in applications of such interdisciplinary efforts, to address a particular challenge, enable a holistic learning experience for them. This builds the capability to focus R&D to solving real life problems rather than looking for problems that can be solved through research one is engaged in. Quality of education as well as of research improves considerably in the process.

Nation Building in a Changing paradigm

We Indians have a great heritage. India was a premier country in the world till about five or six centuries ago. We had great Universities and centres of learning that attracted scholars from many parts of the world. We have our time tested value system. After a long period of oppression and foreign rule, India is now bouncing back. Democracy has taken roots in independent India. We have an unparalleled demographic advantage with the largest youth force. Indian youth have demonstrated their capabilities through their impact both in technological as well as in economic terms, here as well as in countries abroad, for example in USA. As mentioned earlier, the world is now highly interconnected and 'A3' (anyone, anywhere and anytime) connected society is fast taking shape. We are fast embracing knowledge driven economy worldwide. Technology is changing our lives faster that we would have imagined.

We need to be conscious about the impact of these rather rapid transitions around us. We need to prepare our societies to benefit from these transitions while preventing their ill effects. Opportunities and threats created by increasingly competitive

interconnected world, the potential for greater disparities if the policies are not managed well and threats to time tested Indian value system, are some of the major challenges before our society today.

While there may be several drivers to this evolving situation in our country, we must also acknowledge that apart from people who engaged themselves in mass movements at different times, a very large number of individuals have made key contributions to shaping the evolution in a healthy manner and in the right direction, through their wisdom, sustained work and passionate contributions. For example, there have been people who pursued mathematics and astronomy and made new discoveries ahead of others. Others pursued social reforms in spite of several odds. Then we have had far sighted pioneers who established key industries within the country in much adverse circumstances. We need such people, in large numbers, who can guide and shape the society as it evolves through knowledge and technology driven transitions on one side and rapid mixing of cultures driven by instant communications that take place today on the other. Such people, through their research and analysis can present an authentic assessment of the transitions around, create innovative approaches to maximise the gains and minimise threats and prepare our youth with capability to effectively deal with the evolving situation. The very fact that Indian traditions and culture have survived through centuries of external influence gives us the hope about our societies responding correctly to the changing paradigm. Our Universities as centres of learning have a special role in this regard.

All of us have the opportunity to be a part of such people both by ourselves as well as through the students whom we teach and mentor. Through our teaching, research, development of technologies and nurturing a spirit of innovation and entrepreneurship; with strong commitment to our time tested value system, we have the opportunity to be an important part of people who can shape the destiny of our nation. At our Universities we need to create a holistic learning environment that could be a fertile ground for nation building in today's context. We all must resolve to make that happen through our respective pursuits of scholarship, research and engagement with society and industry around.

Let us look at today in this backdrop. We are in a way passing through a critical phase in our country. Are we well prepared for this transformation? How are we to respond proactively to the emerging situation? You will all agree with me that quality education that prepares our young people to embrace the changing scenario, would be the key to success in this regard.

Our Universities and more particularly the teachers should prepare our youth to play a key role in creating, sustaining and enhancing the relative competitive edge of our country. This would become more important as country moves up on the economic ladder. Our Universities and the faculty must therefore shape young people who can confidently engage themselves with the real life world and make an impact through their innovative capabilities. They should be able to do so in today's context as well as be ready to deal successfully with the emerging change. This task is crucially important to the future of India and all of us connected with education have a special role and responsibility in shaping that future.

Closing Remarks

I do wish that all of you would give some serious thought to these issues and decide your respective course of action. It should be our collective efforts to progressively move towards making the world a better place to live. Through a lifelong learning process and maintaining university, industry and society interconnected with each other, each one of us, regardless of career we decide to pursue, can meaningfully contribute to this objective. After all we are all in this world to play our respective roles. Our happiness and joy of life depends on how well we play our roles.

To dear students, I once again wish all of you well in your respective further pursuits. I am certain you would rise progressively in your respective careers. I do hope that as you rise, you will retain in you a spirit of trusteeship and contribute substantially to your roots, the society around, the institutions that brought you up and the nation at large. It is this spirit of trusteeship and the desire to support others who were not as fortunate or successful as us that makes this world a better place. We must remember that our happiness depends on the happiness all around us.

Once again my best wishes to you all. Thank you.

REVERED FOUNDER CHANCELLOR'S BENEDICTORY ADDRESS

Dear Students!

What is education? What sort of education we should acquire? What should be the standard of education? What education is ideal for mankind? What is the result of the modern education?

A true student is the one who thinks over and thoroughly understands the impact of the five forms or components of education. The awareness and spiritual knowledge is not of one's own making. Man acquires the sacred potentialities due to the culture he acquires out of this education.

What is culture? It is not a particular stipulation. In day to day life, the effort to transform the path of untruth, impermanence experienced by man into a path of truth, eternity and live in divinity is culture.

Where will you find such sacred divinity?

Divinity is performing the cosmic dance in the form of truth within every man. Truth is god present in every man. You don't have to foster or safeguard the country, if you foster and nurture truth and Dharma that in turn will protect the country. When sathya and dharma are upheld, the welfare of humanity is assured. The entire universe rests on sathya and dharma. The entire universe has truth as its origin and finally it merges back into the truth. Is there any place where there is no truth? In fact, it is the unsullied truth which is present everywhere if you are able to keenly observe. Every man has truth as its foundation. Sathya and dharma protect the entire world. Man is not able to realize this truth and therefore he suffers.

Embodiments of Lovel

Education is definitely not an exercise. Education is not to eke out a livelihood. We have to consider that education is for life and not for living.

Studentsl

Where have you come from? You have been born in this sacred land of Bharat. Where are you living? You are living in Bharat. You are not able to know the sanctity and sacredness of Bharat. You are not able to know your own land of merit where you are born. Bharat is the land of action (karmabhoomi) and it wants you to discharge your duties. Bharat wants you to accrue merit by discharging your duties. In this land of Bharat, one should give up human qualities to attain divinity, realize the truth and share the love with all. As this land fosters merit it is called punyabhoomi.

What is the intimate relation between god and this land?

The hand, the leg, the head, the stomach; all these parts belong to the same body. Body is the combination of different organs. This body has human qualities. What is humanness? This humanness is related to the community or society. Society is in nature. Nature is a part of divinity. Nature is a limb of god, humanity is a part of the nature. Nature is a part of the society and this society is a part of humanity. Hence, when we understand the interrelationship of these different limbs we will understand divinity.

Embodiments of Love!

Today, students are not ready to work. Work is important, it is nothing great in earning degrees. It is more than fifty years since we got independence and thousands and lakhs have got degrees. What is that all of these students are doing for the country? They are not ready to participate in the service activities, they are not ready to work for the upliftment of the country Bharat. First of all, one has to understand the sacredness of this country. If you can't safeguard your own homeland, how can you safeguard the sacred principles?

Students!

Give up the thought of going abroad. If you don't get any employment atleast do service in your home. Serve the society, uphold the glory of this society. Get a good name to your motherland Bharat. You should get a name that you are a man of action, a man of duty. We have to protect our motherland. What is there in other countries, which is not present here?

Yanna bharate tanna bharata

What is not present here is not present anywhere in the world. In fact, all capacities, capabilities and resources are found in Bharat. Bharat has a very high reputation. You have forgotten the pristine glory of this country, what will you derive by going to dry lands? All these appear like a drama. You dedicate all your knowledge to a foreign country. All your knowledge and education should be beneficial for your motherland. You serve your country men, safeguard your home. This will bestow good name to your education. First of all, bend your back and do work. All of you should be action heroes. It is not proper to carry on your life sojourn without doing action just with pomp, show and hollow words.

To get a good name, first you have to bend your body and work. For a gigantic tree to grow, the seed loses its identity and transforms itself into a different form. It sprouts up, grows into a tree and gives us fruits. When you kill your ego, you will have positive results. The seed completely annihilates its form and name. Hence, we have to give up body consciousness and inculcate attachment to the country.

The present students don't have love for their country. If someone asks them the national song, they don't know. They all know cinema songs but not national songs. Why should you not sing the national song-Jana gana man adhinayak jaya he' which glorfies the divine principle and work to bring that glory to the mother land? Today we are not recognizing the value of our country Bharat.

Students, boys and girls!

We have to uphold the honour of this country. We have to foster our self-respect. A man who loses his self- respect can never win anything. What you have to achieve today is self-respect. This can come only by spiritual awareness and by no other means. The students of today desire *kalimi*- wealth, *balimi*- strength and *chelimi*- friendship. There is no place these days for virtues. Without character or virtues what is the use of having wealth, strength and friendship. In the name of friendship all say 'Hello, Hello' but within all are 'hollow'. First of all character has to be developed. We have to respect others then others will respect us.

If you have this question that why you are not respected, enquire that how many have you respected. First respect others, serve others then others will respect you and serve you. Whatever results you want, first render that service to others. When you serve you will get reflection, reaction and resound.

Youth should be moulded as ideal citizens. Bhagawan would be very happy to have such ideal students. Many people come and ask me, "What is your property?" I tell them, "My property is my students." If they become good, go anywhere and get a good name that gives joy to me.

Students!

At the time of your convocation, you get education degree from the university, but I give you the 'educare' degree. This 'educare' is related to the bliss of the self. I will take care of you in all respects, you all have to work hard. Never become lazy. Laziness is rust and dust; Realization is rest and best; Attain that realization.

APPENDIX D: GOLD MEDALLISTS

No.	Gold Medal	Awardee
1	Justice P N Bhagwati Gold Medal	TJVRKMK Sayi, for Distinction in Master of Technology in Computer Science
2	9 th President of India, Dr. Shankar Dayal Sharma Gold Medal	Anoop Ajaighosh, for Distinction in Technology in Applied Optics
3	11 th President of India, Dr. A P J Abdul Kalam Gold Medal	Tarrung Kapur, for Distinction in Master of Business Administration
4	Sri Burgula Ramakrishna Rao Gold Medal	Iyer Kalyanasundaram N , for Distinction in Master of Business Administration in Finance
5	1st Vice-Chancellor, SSSIHL, Dr. V K Gokak Gold Medal	Sai Prasanna A N , for Distinction in Master of Science in Mathematics
6	2 nd Vice-Chancellor, SSSIHL, Dr. Somnath Saraf Gold Medal	Amritha Krishnan S, for Distinction in Master of Science in Physics
7	3 rd Vice-Chancellor, SSSIHL, Prof. S Sampath Gold Medal	B Praphulla Chandra , for Distinction in Master of Science in Chemistry
8	4 th Vice-Chancellor, SSSIHL, Dr. K Hanumanthappa Gold Medal	Pankaj Kumar Thakur , for Distinction in Master of Science in Biosciences
9	5 th Vice-Chancellor, SSSIHL, Dr. G Venkataraman Gold Medal	Ratheesh K, for Distinction in Master of Arts in Economics
10	6 th Vice-Chancellor, SSSIHL, Sri S V Giri Gold Medal	Shivam Chopra , for Distinction in Bachelor of Science (Hons) in Mathematics
11	7 th Vice-Chancellor, SSSIHL, Sri A V Gokak Gold Medal	Sadhu Sai Pavan Prashanth , for Distinction in Bachelor of Science (Hons) in Physics
12	8 th Vice-Chancellor, SSSIHL, Prof. Vishwanath Pandit Gold Medal	Archith N , for Distinction in Bachelor of Science (Hons) in Chemistry
13	The Vice-Chancellor, SSSIHL, Prof. J Shashidhara Prasad Gold Medal	Aiyer Kartik Satyanarayan , for Distinction in Bachelor of Science (Hons) in Biosciences
14	Sri Shankarrao B Chavan Gold Medal	T Venkata Shiva Sai Aditya , for Distinction in Bachelor of Science (Hons) in Economics
15	Sri RV Janakiramaiah Gold Medal	Dinesh Kumar Choudhury , for Distinction in Bachelor of Arts (Hons) in Economics
16	Mother Eswaramma Gold Medal	Anneetharaj I, for Distinction in Bachelor of Education
17	Smt. M Venkamma Gold Medal	Shefali Rampal Tarun Bhardwaj , for Distinction in Master of Science in Home Science
18	Smt. A Parvathamma Gold Medal	Sura Anusha, for Distinction in Bachelor of Science (Home Science)
19	Smt. J Eashwari Bai Gold Medal	Prashanthi A K, for Distinction in Bachelor of Commerce (Hons)
20	Smt. R Sundari Kondala Rao Gold Medal	Sri Ram Sai Sudha Pradeepikarani , for Distinction in Bachelor of Arts
21	Smt. Neti Kameswaramma Gold Medal	Iyer Shobha Ramamurthy , for Distinction in Master of Philosophy in Sciences
22	Sri R K Maheswari Family Trust Gold Medal	Jhaveri Aman Sunil Priti , for Distinction in Master of Philosophy in Management & Commerce and Master of Philosophy in Economics

220

Ph.D. CANDIDATES

- Doctor of Philosophy is conferred on Sri Rajan S S in Economics for his thesis on "Efficiency and Productivity Growth in Indian Banking" under the supervision of Prof Vishwanath Pandit, the 8th Vice-Chancellor of Sri Sathya Sai Institute of Higher Learning.
- Doctor of Philosophy is conferred on **Sri Krishna Kiran Vamsi Dasu** in Mathematics for his thesis on "A Study of a Pair of Second Order Nonlinear Dynamic Equations with Singular Interface on Time Scales" under the supervision of Dr. Pallav Kumar Baruah, Assistant Professor, Department of Mathematics and Computer Science.
- Doctor of Philosophy is conferred on Kum. Tapasya Anand in Food Science and Nutrition for her thesis on "Studies on Phytonutrients and Therapeutic Potentials of Mushrooms" under the Supervision of Prof Rashmi Kapoor, Head, Department of Home Science.

APPENDIX E: RESIDENTIAL TEACHERS AT SSSIHL HOSTELS

Prasanthi Nilayam Campus

Dr. G Nageswara Rao	Dr. Shashank Shah
Dr. S Siva Sankara Sai	Sri D Hanumantha Rao Naidu
Sri G Srinivas Srirangarajan	Sri Srikanth Khanna
Sri R Renju	Sri A S Vishwanathan
Dr. Pallav Kumar Baruah	Dr. Krishna Kiran Vamsi Dasu
Dr. N Niranjan	Sri Siva Kiran Gupta
Sri N Uday Kiran	Sri Muralikrishna Molli
Dr. A Sunil	

Anantapur Campus

Ms. Pushpa Ramanna	Miss Maitali Verma
Dr. (Miss) Kiron Bala Arora	Miss Sony Dibba
Dr. (Miss) Sharada Subramaniam	Ms. S Sivaleela
Dr. (Miss) T R Rajeswari	Dr. (Miss) Pratima Tripathi
Dr. (Miss) P L Rani	Dr. (Miss) Y Lakshmi Naidu
Dr. (Mrs.) Sahida Sharma	Ms. M Meera
Dr. (Miss) M Venkatalakshmi	Dr. (Ms.) Seethalakshmi Laxmanan
Miss Divya Goyal	Miss Kirti Kiran
Miss Dibba Bhargavi	Miss Shubhra Upadhyaya

Brindavan Campus

Dr. K S Narahari	Dr. C N Sundaresan
Sri K P Gopinath	Dr. K S Umesh
Sri Rajkumar Jain	Dr. T Ravikumar
Sri M G Nandagopal	Sri K Sai Chittaranjan
Sri Ruchir Desai	Sri K K Sai Anand
Sri R Subramanian	Sri Darshan Gera
Sri Sanjay Sahni	Sri Denny Melkay M George

Muddenahalli Campus

Sri S Mohan	Sri M G Mahabala Rao
Sri S Sai Manohar	Sri Ajith Padyana
Sri V Bhaskaran	





he real sign of an educated person is his attitude of sameness towards all. He sees in society the manifestation of Divinity. Every student should observe the three principles of equality, unity and cooperation. Education has to aim at ensuring peace and stability in each country by continuous precept and practice of the basic unity.'

Bhagawan Sri Sathya Sai Baba Revered Founder Chancellor



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