

The cultivation of Human Values alone is true Education.

Sri Sathya Sai Baba Revered Founder Chancellor





FOREWORD

It is with an immense sense of satisfaction, I pen this foreword to the annual report of Sri Sathya Sai Institute of Higher Learning (SSSIHL) for the academic year 2017/18. This unique Institute has reached yet another milestone in terms of accomplishing notable progress in all its endeavours.

In 2017, our admissions acceptance rate continued to be one of the best in our country, with 2669 qualified applicants competing for 482 seats across all our academic programs, that include undergraduate, postgraduate and professional. This competitive acceptance rate of 18%, combined with an exceptional student-teacher ratio of 9:1, strengthens the quality of education at SSSIHL. This is strongly reflected by the overall examinations pass rate of 96%. In addition, a significant percentage of our final-year postgraduate students secured top ranks at national level competitive examinations.

The large applicant pool from over 26 states and union territories of India augments the quality of student-teacher interaction in the compulsory residential system of education that we have at SSSIHL. In fact, the intangible aspects of the Sri Sathya Sai Values-based Integral Education—with its several benefits of student discipline, focus, and development of good values and character—facilitate a higher academic and research output. Indeed, this is true for all Sai Educational Institutions.

Perhaps for the first time in our history, over 70% of our teaching faculty have Ph.D. qualifications, with an additional 15% pursuing their doctoral research. Furthermore, a record 177 guest lecturers and visiting faculty from industry and academia (from institutions such as IISc, BARC, Cisco, IITs, Pricewaterhouse Coopers, IIMs, Wipro, Barclays, Bayer Healthcare and TCS) interacted with our students during the academic year

Our need-based research efforts continue on the high development arc of the past few years. Our focus on the three broad areas of Health, Energy and Environment has resulted in significant research output, as highlighted in the report. Our faculty are actively engaged in several cuttingedge research projects funded by external funding agencies (both government and non-government). Their research investigations during the academic year 2017/18 resulted in over 200 research articles published in a wide range of peerreviewed journals of high repute.

Sound research demands sound infrastructure. I am happy to report that with the kind support of Sri Sathya Sai Central Trust, SSSIHL Central Research Instruments Facility (CRIF), based at the Prasanthi Nilayam campus, is operational. This is one of the few such facilities in our country (and the first in a rural location) with an investment of ₹45 crores that houses advanced characterization/analytical tools under a single roof, to carry out translational research in various frontier areas of Science and Technology, encompassing physical, biological, chemical, materials science, food and also computational and interdisciplinary areas. This would facilitate faculty, postgraduate and doctoral students to keep pace with the scientific developments taking place globally, and to publish their research findings in peer-reviewed high impact journals.

On our faculty selection front, the above facilities have had a catalytic effect. For instance, in recent months, post doctorate applicants who graduated from premier institutions such as IISc, TIFR and the IITs have joined our teaching fraternity and research faculty.

None of this would have been possible without the dedicated love, effort and support of teachers, staff, active alumni and the Sri Sathya Sai Central Trust. My heartfelt gratitude to all of them. We pray to our Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba to continue to bless us with His Divine guidance so that this modern Gurukula will sustain its unique identity and status amongst all the educational institutions in our country.

Prof. K B R Varma
Vice-Chancellor

ANNUAL REPORT 2018

1 June 2017 to 31 May 2018

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SRI SATHYA SAI VALUES-BASED INTEGRAL EDUCATION

Sri Sathya Sai Institute of Higher Learning (Deemed to be University), Prasanthi Nilayam, Andhra Pradesh, India, is a visible manifestation of Bhagawan Sri Sathya Sai Baba's vision of education for human transformation.

Bhagawan Baba has designed the system of Sri Sathya Sai Values-based Integral Education in such a manner that between the time an 18-year old student joins the university and when she or he graduates (at the age of 21 or 23), there is a deep *inner* transformation that takes place. This concept is very unique at the university level.

The University hosts over 1300 undergraduate, postgraduate and professional programme 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, Karnataka

Programmes offered include:

- Undergraduate: B.A., B.Com. (Hons.), B.B.A., B.C.A., B.P.A., B.Sc. (Hons.),
- Postgraduate: M.A., M.Sc.
- Professional: B.Ed., M.B.A., M.Tech.
- 。 Research: Ph.D.

A MODERN GURUKULA

Sri Sathya Sai Institute of Higher Learning (SSSIHL) was founded to inculcate ethical and moral values in students. These ethics and morals form the undercurrent of every subject taught at the university. This helps students develop a wholesome and balanced personality, one where academic competence is supplemented with good character.

This holistic development of students can only be possible in an environment that encourages the development of the student's mind, body and spirit.

To facilitate this, the University has a compulsory residential policy for all students and doctoral research scholars. It is an essential ingredient for the university's Values-based Integral Education to achieve its objective of transformation. The environment is similar to the ancient Indian Gurukula system of education, in a modern context. Teachers and students live and grow together in an atmosphere of mutual trust and unity. This helps students develop a wholesome and balanced personality, one where academic competence is supplemented with good character.

DISTINCTIVE FEATURES

Admissions |

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

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

Infrastructure

- Campuses set in spacious and peaceful surroundings
- Well equipped, modern science laboratories and cuttingedge Research Instruments Facility
- Libraries across campuses with over 2,00,000 volumes
- Computer and Multimedia learning centres with ultra-high speed broadband internet connectivity
- International Centre for Sports and a cricket stadium

Academics & Research

- Over 95% examinations pass rate
- Favourable Student-Teacher Ratio
- Integrated five-year programmes combining undergraduate and postgraduate studies for a systematic and graduated learning process
- Interdisciplinary research for societal benefit
- Awareness Programmes and Moral Classes reinforcing human values

Integral Education

- Life lessons learnt through the 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
- Inculcating the spirit of self-reliance and service to society
- Synthesis of science and spirituality for societal benefit

The concept of integral education that SSSIHL imparts is willingly pursued by all teachers, staff and students.



THE PROCESS

The diagram on the right forms the basis of the system of Values-based Integral Education at SSSIHL.

The base is the concept of a modern Gurukula that sustains all relationships and activities at SSSIHL. It is responsible for creating and sustaining the congenial environment necessary for the teacher-student interaction to grow and develop.

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

These dimensions are: Intellectual, Physical, Cultural, Devotional and Service. The key activities for each of these dimensions form the basis of most of the time that students spend at SSSIHL.

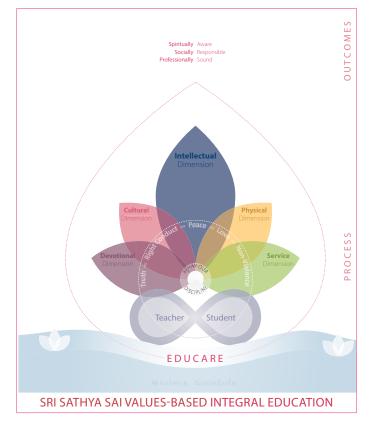
Bhagawan Baba purposefully designed the system of Integral Education so that while students spend 60% of their time on academics (intellectual capacities), they also spend 40% time on the development of other qualities.

(See page 8 for further details.)

The Daily Routine

This is a crucial component of this process. Each student's day starts at 5:00 a.m., with a couple of hours spent in prayer, exercise and other vocational pursuits (such as practice sessions for music, band, traditional Indian music and the likes).

Classes commence at 9:00 a.m. After college ends at around 4:00 p.m., students move to the Mandir/Prayer hall for participation in congregational chanting (veda), devotional singing (bhajans) and other spiritual activities. These also include talks by eminent speakers on a variety of spiritual topics. Post dinner, students usually spend time on their studies.



THE OUTCOME

The outcomes of the system of Values-based Integral Education at SSSIHL are threefold. It prepares all graduates to be:

- Spiritually aware
- Socially responsible and
- Professionally sound

It helps develop a strong character and positive qualities in students and nurtures virtues like adaptability, tolerance and sacrifice; developing students into noble and responsible citizens.

I have established these institutions to impart spiritual education as a main component and worldly education as a secondary one. Education should enable one to cultivate good qualities, character and devotion. The teaching of the university curricula is only the means employed for the end, namely, spiritual uplift, self-discovery and social service through love and detachment.

Sri Sathya Sai Baba Revered Founder Chancellor ALL STUDENTS AT SSSIHL SPEND 60% OF THEIR TIME AT UNIVERSITY ON INTELLECTUAL ACTIVITIES (PRIMARILY ON THEIR STUDIES). THE REST OF THE 40% OF THEIR TIME IS SPENT ALMOST EQUALLY ON ACTIVITIES RELATED TO THE INTEGRAL EDUCATION DIMENSIONS OF DEVOTIONAL,

CULTURAL, PHYSICAL AND SERVICE.

THESE ARE HIGHLIGHTED BELOW.

DEVOTIONAL DIMENSION

- Bhajans (Sankirtan)
- Vedic chants and stotrams
- Meditation & Silent sitting
- Suprabhatam (prayer at dawn)
- Assembly (college prayer)
- o Brahmarpanam (food prayer)
- Kshama Prarthana (night prayer)

The activities of the devotional dimension enable a student to connect to his/her Divine inner Self. This inner connection opens the heart and brings forth the feeling of love, compassion and empathy for fellow human beings.





CULTURAL DIMENSION

- o Celebration of festivals:
 - Eid-al-Fitr, Independence Day, Christmas, Sri Krishna Janamashtami (cow procession), Ganesh Chaturthi, Ganesha Immersion, Christmas Ugadi, Sri Ramanavami, etc.
- o Brass Band
- Nadaswaram & Panchavadyam ensemble
- o Annual Sports & Cultural Meet
- o Performing Arts: Music programmes
- o Drama & Dance
- o Fine Arts: Rangoli, Card making
- Photography, Altar making
- Public Speaking
- Debates and Elocution

From the performing arts to public speaking to the fine arts, the cultural dimension is designed to give students wide opportunities to find an avenue to their individual artistic expression.

The university makes every effort to provide the best possible resources—both material and human—so that students excel at their chosen activity. Festivals of major world religions are celebrated, reinforcing the unity among all faiths. Every student is involved in one way or another in the celebration of these festivals.





PHYSICAL DIMENSION

- o Sports
- o Games
- Jogging
- Exercises and Yogasanas
- o Annual Sports & Cultural Meet

Sports and games are a part of the daily routine of all students. From yoga classes to fitness training, from team sports to individual sports, students are encouraged to overcome their limitations and excel in these activities.

The university has excellent sports facilities.







SERVICE DIMENSION

- Self-Reliance departments:
 Electricals, Plumbing (water supply),
 Audiovisual, general store, dispensary,
 dietary services, hostel mess, arts &
 crafts, costumes & props, etc.
- Community living
- Social Work
- Voluntary work
- Community Service
- Prasadam Distribution

The philosophy of service at SSSIHL is based on the concept that divinity pervades all of humanity, and hence when you serve others, you are serving the Divine. Students learn to serve without expecting anything in return, other than the deep inner satisfaction of serving others.

The compulsory residential system, where students live in dormitory-styled accommodation with other students from totally different backgrounds (for a minimum of two years and up to five years or more), provides an excellent foundation for the service dimension.





INTELLECTUAL DIMENSION

Apart from academics and research, the activities in this dimension include:

Awareness Courses

These mandatory courses are designed to cultivate a broad view of the human condition in students. The course content (e.g. the Unity of Religions and Faiths, Study of the Indian Epics, etc.) helps trigger self-reflection and enquiry and sensitises students to the concerns of society, and gets them to think about practical solutions to these problems.

Thursday Moral Class

At each campus, Thursday mornings begin with an hour of inspiring and ennobling talks by speakers focusing on their personal spiritual experiences, messages from sacred scriptures and other elevated and socially relevant themes. It is also used to highlight students' talents in music, dramatics, elocution, debates, quizzes, etc.

In 2017/18, some of the topics included: Immortality, Stones in the Sky, Jignaasaa (A Quest for Knowledge), Talks on the Ramayana, The Divine Chancellor, etc.

Prayer Talks

Every morning before classes commence at the college (across all campuses), all students and teachers gather for the morning assembly. Prayers/veda chanting/bhajans and a few minutes of silent sitting are sometimes followed by a talk by students, faculty members or invited guests on topics related to morals and values.

In 2017/18, some of the topics included: God's Love, Power of the Mind, Yoga, Self-Leadership, Living with God, Maturity (Growing Up), Gratitude, Surrender, Values, Carpe Diem, Thought, Patriotism, Experiences with the Lord, Distraction, Vivekananda's Message, No Pain, No Gain, Social Responsibilities, Spectrum of Beliefs, Subhash Chandra Bose: His Philosophy, My experiences talking on the stage, Vedanta and Science, and Emotional Intelligence.









UNIVERSITY GOVERNANCE & STRUCTURE

Sri Sathya Sai Institute of Higher Learning (Deemed to be University) is an independent and self-governing institution. It was 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 and the Institute.

THE TRUST

Sri Sathya Sai Institute of Higher Learning (Public Charitable Trust) was founded to foster the culture of India and promote in the students and teachers an awareness and understanding of the social needs of the country; with special focus 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 secular education.

Its members for 2017/18 were:

- Justice A P Misra, Former Judge, Supreme Court of India
- Sri K Chakravarthi, Member-Secretary, Sri Sathya Sai Central Trust
- Sri T K K Bhagwat, Member, Sri Sathya Sai Central Trust
- o Sri S S Naganand, Member, Sri Sathya Sai Central Trust
- Sri R J Rathnakar, Member, Sri Sathya Sai Central Trust
- Prof. S P Thyagarajan, Former Vice-Chancellor, University of Madras

THE PRINCIPAL BODIES

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

- The Board of Management
- The Academic Council

THE BOARD OF MANAGEMENT

The Board of Management is the principal authority of the university, responsible for its general management and administration.

Its members for 2017/18 were:

- Prof. K B R Varma, Vice-Chancellor, SSSIHL (Chairman)
- Sri S S Naganand, Member, Sri Sathya Sai Central Trust Nominee, SSSIHL (Public Charitable Trust)
- Dr. (Ms.) Renu Swarup, Senior Advisor, Dept. of Biotechnology, Ministry of Science & Technology, and Managing Director, Biotechnology Industry Research Assistance Council (BIRAC)
- Dr. Sandip Chatterjee, Officer on Special Duty/Scientist F,
 Ministry of Electronics and Information Technology, Govt. of India
- Prof. Srinivasan Chandrasekaran, Professor (Hon.), Dept. of

- Organic Chemistry, Indian Institute of Science
- Prof. S Siva Sankara Sai, Dean, Faculty of Sciences, SSSIHL
- Prof. (Miss) Rajeshwari C Patel, Dean, Faculty of Economics & Humanities, SSSIHL
- Prof. G Nageswara Rao, Head, Dept. of Chemistry, SSSIHL
- Prof. R Prabhakara Rao, Head, Dept. of Economics, SSSIHL
- Dr. Naren Ramji, Registrar, SSSIHL (Member Secretary)

In 2017/18, The Board of Management met on 14 October 2017 and 18 February 2018.

THE ACADEMIC COUNCIL

The Academic Council is the principal academic body of the university. 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, and examinations and tests within the university. Its external members for 2017/18 were:

- Prof. H P Khincha, Dept. of Electrical Engineering, Indian Institute of Science, Bangalore
- Prof. Gopal Naik, Dean, Indian Institute of Management, Bengaluru
- Prof. S B Krupanidhi, Materials Research Centre, Indian Institute of Science, Bangalore
- Dr. N R Munirathnam, Director General, Centre for Materals for Electronics Technology (C-MET), Ministry of Electronics and Information Technology (MeitY), Govt. of India, Pune
- Prof. Ram Rajasekharan, Director, Central Food Technological Research Institute (CFTRI), Council of Scientific and Industrial Research (CSIR), Mysore
- Dr. V Natarajan, Director, Research & Innovation Centre, IIT Madras Research Park, Chennai

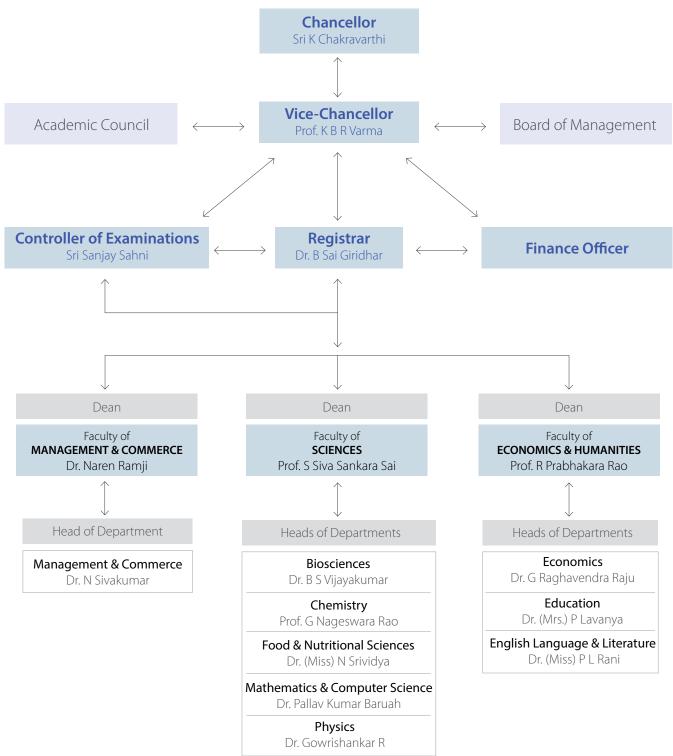
In 2017/18, The Academic Council met on 11 October 2017.

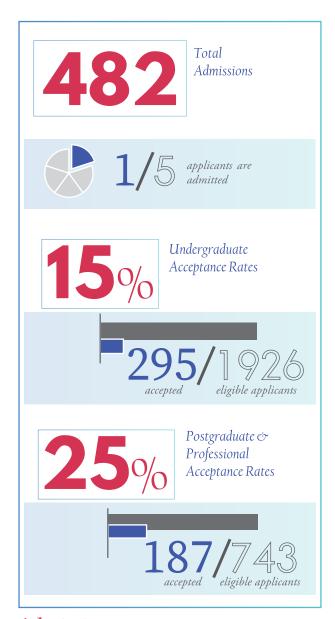
IMPORTANT COMMITTEES

In addition to the principal bodies that govern the university, there are various committees that have been set up to ensure that academics and administration are in accordance with the high standards that SSSIHL has striven to consistently maintain. Some of these committees include:

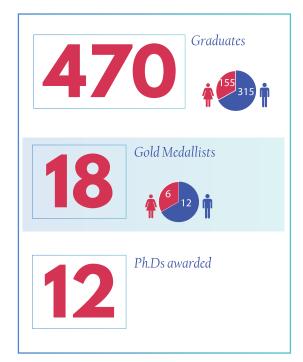
- The Boards of Studies
- The Finance Committee
- Planning and Monitoring Board
- Internal Quality Assurance Cell (IQAC)
- Research Advisory Board
- Institutional Ethics Committee
- Institutional Biosafety Committee
- Building and Works Committee
- Campus-Hostel Management Committee
- Research Conferments Cell







Admissions



Graduates



Visiting Faculty & Guest Lecturers

684

Doctoral Research Scholars Research & Teaching Grants

2:1

Student-Computer Ratio

students have one-on-one access to computers at all times

₹1.58 crores

SSSIHL 2017/18 STATISTICS

23/29
States of India

Student Diversity



Student-Teacher Ratio

1/5

Teachers are Residential

Expenditure on Infrastructure & Equipment

₹ 2.53 lakhs

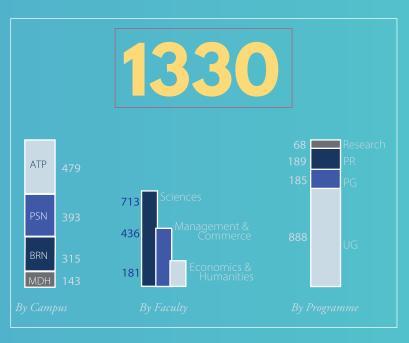
Expenditure per Student / per year

₹ 11.36 crores

Staff Profile

Student Profile





ACADEMIC WORKSHOPS & CONFERENCES

TO FACILITATE WIDER EXPOSURE TO THE DEVELOPMENTS IN ACADEMIA AND INDUSTRY AND ENABLE THE EXCHANGE OF IDEAS, THE INSTITUTE HOSTED ALMOST TWENTY NATIONAL AND INTERNATIONAL WORKSHOPS AND CONFERENCES DURING THE ACADEMIC YEAR 2017/18.

For a full report of all SSSIHL Workshops & Conferences in 2017/18, kindly visit our Events page at sssihl.edu.in

PROF. KENJI UCHINO LECTURE SERIES OF FUNCTIONAL MATERIALS

Dept. of Physics: 12-15 Jun 2017

Students, scholars and teachers of the Departments of Physics and Chemistry had the rare honour of being part of a four-day lecture series on Functional Materials by Prof. Kenji Uchino, a pioneer in piezoelectric actuators. Prof. Uchino is the Professor of Electrical Engineering, and the Director of the International Center for Actuators and Transducers at Penn State University, USA.

The lectures were on the following topics: Essentials to Piezoelectric Actuators – Researcher's Misconceptions, Essentials to Piezo Actuators, Piezo Motors Overview and Entrepreneurship for Engineering.

The lectures started with an overview of the history of piezoelectric materials as well as the fundamentals of piezoelectricity, necessary terminologies and equations/ formulas, followed by the overall applications of piezoelectrics. Prof. Uchino then discussed superior piezoelectricity of lead based systems and the ongoing research on lead free materials for improving piezoelectric properties.

Practical design and fabrication issues related to piezo actuators were summarized with a focus on manufacturing techniques and applications. Material and design aspects of piezo actuators and piezo motors with an emphasis on multilayer technologies, particularly important for manufacturing actuators and transformers, were also discussed. Application oriented materials development, including high power piezoelectrics and piezoelectric performance under mechanical stress were also outlined. He talked about the fact that high power drive generates significant heat generation, while the hysteresis of piezoelectrics is enhanced significantly under high mechanical stress. He also comprehensively elaborated upon his device-development philosophy, device designs, drive/control techniques, typical applications and future progress in this field.

The final lecture elaborated on his industrial and academic experience. Prof. Kenji provided guidelines on how to start-up a high-tech company for young engineers and discussed issues surrounding the motivation for entrepreneurship.

HANDS-ON EXPERIENCE IN ADVANCED RESEARCH TECHNIQUES (HEART) 2017

Dept. of Biosciences: 3-8 Jul 2017

The five-day conference was a collaboration between eleven scientists from the US and India, and the Departments of Biosciences and Chemistry, SSSIHL that offered handson training in the areas of protein and metabolomics mass spectrometry as well as protein, metabolite and genome informatics.

Each day included a two-hour scientific talk by the external experts focused on the application of various OMICS technologies in disease research, followed by a hands-on training workshop that was divided into four parallel sessions on Genome Informatics, Protein and Metabolite Informatics, Protein Mass Spectrometry and Metabolite Mass Spectrometry.

In addition, sessions on experimental design and one-on-one discussions with doctoral research scholars on their respective thesis projects were conducted. The main objective of each training session was to provide information and know-how on the respective technologies in the context of specific thesis projects.

External experts and guests from: Baylor College of Medicine and Agilent Technologies









GST: THE NUTS AND BOLTS OF A GOOD AND SIMPLE TAX

Dept. of Management & Commerce: 21 Jul 2017

Led by two experts, the seminar explored the Goods and Services Tax (GST) in light of the 2017 tax reforms made by the Government of India towards achieving 'One Nation, One Tax'. GST applies a single tax rate for a product or service across the country, which will be shared by the state and the central government on equal terms. Prior to the introduction of GST across India on 1 July 2017, central and state taxes were separate for different goods and service. The speakers discussed the constitution of the GST, including the various indirect taxes including value-added tax (VAT), sales tax and service tax.

The pros and cons of GST implementation were also explored. For example, the various operational concerns of companies and the challenges of GST implementation in a huge country like India. Positive outcomes discussed included the impact the use of technology will have on tax evasion, the ensuring of no more tax costs (which is expected to make manufacturing in India more attractive for both local and international industrialists), etc. Also, GST greatly reduces the number of levied taxes, streamlining logistics and inventory into a common market that eliminates fragmentation.

External experts and guests from: Sridhar & Brito and PricewaterhouseCoopers



PULSAR-2KI7, A JOURNEY THROUGH PHYSICS

Dept. of Physics: 21 Jul 2017

The workshop brought together both the worlds of theoretical and applied Physics in an effort to broaden the horizons for students pursuing Physics at the University. It incorporated Physics from the age of vacuum tubes to that of nanotubes, with the students and research scholars benefiting from interactions with people with whom the subjects have grown. Topics discussed included Nuclear Physics, Particle Science, the domains of expanding multiple universes and dark matter, and how Mother Nature, to this day, remains esoteric in the eyes of Physics.

External experts and guests from: University of New Haven, Clemson University and IIT Madras

INTEL & CALLIGO SOFTWARE TRAINING: AN INTRO TO ARTIFICIAL INTELLIGENCE

Dept. of Mathematics & Computer Science: 10 Aug 2017

A training workshop in collaboration with Intel & Calligo software organized on the basics of Artificial Intelligence. It was based on the Intel® Student Ambassador Program for Artificial Intelligence (AI), where university students engage with Intel around their work in Machine Learning, Deep Learning and Artificial Intelligence. Calligo software experts demonstrated some of the tools used by Intel for Machine Learning and Deep Learning to students of the department. Those software tools were subsequently used by students pursuing projects in Machine Learning.

External experts and guests from: Calligo Technologies

SAMANVAYA (MBA FOUNDATION DAY) – 31ST ANNIVERSARY OF THE SSSIHL MBA

Dept. of Management & Commerce: 20-21 Aug 2017

As every year, the Dept. of Management & Commerce celebrated the inauguration of the Masters of Business Administration (M.B.A.) programme by Sri Sathya Sai Baba, Revered Founder Chancellor, SSSIHL. The event consisted of quizzes, games, campaigns, role-plays and presentations that kindled the thoughts, analytical skills and intellectual fervour of students. The sessions included Take it and Sell it (a sales exercise where students had to put on their salesman hat and sell items like ash, plastic wire, phone cords, etc. to randomly created teams of four), an advertising competition and a business quiz.

The event concluded with a felicitation programme in remembrance of the teachers who have encouraged and supported several batches of students and research





scholars over the decades in their journey of Management Education embedded with human values.

FOSTERING A WINNING CULTURE IN AN ORGANIZATION THROUGH VALUES AND ETHICS

Dept. of Management & Commerce: 2 Dec 2017

Setting Sri Sathya Sai Baba's exposition on ethics as the base and His expectations from future managers as the learning objective, the workshop was built on the notion that Bhagawan Baba voiced: just as a plant uses soil, water, and sunlight to grow, in the same manner, people must nurture themselves with values and ethics.

Four guest speakers from varying professional backgrounds were invited for the workshop to stimulate the healthy discussions on this important subject. Topics included Organisational Values and Employee Connect & Engagement, Moral Challenges and Value Based Practices in Accounting and Finance, Connecting Organizational and Individual Values in the Workplace and Changing Marketing Landscape - Being Right and Winning Right.

External experts and guests from: Eli Lilly and Company, SPR & Co, Barclays Shared Services and Genpact

DESIGN A JOYFULLY ALIGNED LIFE: INSIDE OUT

Dept. of Management & Commerce: 2 Dec 2017

In the midst of all abundance, does life sometimes seem unfulfilling? Do you feel ever-busy but disengaged? Do you wonder if there could be a better 'you' - a more confident, more aligned you? The SSSIHL alumni participants of the workshop explored these questions, and then some! Designed for senior working professionals to raise their awareness on the idea that one must live mindfully to die fulfilled, the workshop consisted of a presentation on mindfulness, meditations, discussions, group exercises, visioning and much more. The end result was a greater sense of ownership and responsibility for life's passing moments and efforts to ensure that they are perfectly aligned to own goals and priorities. All in a hope that we must all

be aligned to our own conscience, the source of joyful fulfilment.

DEEP LEARNING

Dept. of Mathematics & Computer Science: 7-9 Dec 2017

The most influential Machine Learning paradigm in the recent years that has revolutionized the domain of speech, vision and language is Deep Learning. The workshop concentrated on three major areas of Deep Learning: Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN) and its variants, including Long Short Term Memory (LSTM), and Generative Adversarial Networks (GAN) and its competitor Variational Autoencoders (VAE).

The key highlight of the workshop was the hands-on sessions that focused on implementation and application of these networks to computer vision and language modelling problems using PyTorch framework. Lectures and lab sessions were chaired by both internal and external experts.

External experts and guests from: Grab, Singapore, IIT Hyderabad











INTRODUCTION TO ACTUARIAL SCIENCE

Dept. of Mathematics & Computer Science: 23 Dec 2017

Actuarial Science is a discipline that applies mathematical and statistical methods to assess risk in insurance, finance and other industries and professions. Actuarial professionals often go through vigorous training and professional examinations to get qualified, especially today with the proliferation of high speed computers. Typical applications include the areas of life insurance, pensions and healthcare.

The workshop introduced the concept to final year B.Sc. in Mathematics students with a series of lectures, discussions and two case studies on Rating Methodologies (Innovative Products) and Estimating Liabilities (Reserving).

External experts and guests from: Swiss Re, Bangalore

BIG DATA GENOMICS SYNERGY

Dept. of Mathematics & Computer Science: 16-17 Jan 2018

The workshop explored the intersection between computer science and biological research. Invited experts married the field of Genomics, the study of the complete genetic material (genome) of organisms, and Big Data. The amount of data being produced by sequencing, mapping, and analysing genomes propels genomics into the realm of Big Data was the main theme of the workshop.

Students also had computer lab sessions that provided easy to use, powerful tools of all phases of analytical projects and were introduced to the use of multifaceted predictive analytics capabilities in a single solution, in an effort to find statistical solutions for problems involving Genomic Data through the programming language R.

External experts and guests from: OmiX Labs (India), Accenture, iBIG Foundation, HCITExpert.com

DECODING THE MEDIA DISCOURSE

Dept. of English Language & Literature: 30-31 Jan 2018

How does a journalist develop the essential writing skills and professional habits needed to address audiences in a rapidly changing media landscape? As we enter the post mass media world, what challenges does media writing pose? And where do media linguists—who address crucial aspects of text production (written, oral and online) in the domain of public discourse in general and news media in particular—come into all of this? A series of talks on Media Language, Writing for Print Media, Writing for Radio and Television addressed some of these issues head on.

External experts and guests from: SwarajyaMag, The Hindu, Radio Mirchi and News9

SIGMA: SYMPOSIUM ON INFORMATICS, GENETICS, MYCOLOGY AND ANTIBODIES

Dept. of Biosciences: 10 Feb 2018

The symposium deliberated on various issues related to the advancement of biological and medical research in the areas of genetics, mycology and antibodies. Lecture Topics included Genomes, Methylomes and Acetylomes, Endophytic Fungi: A Novel Source of Enzymes and Bioactive Compounds, Computer Aided Drug Design, Therapeutic Potential of Antisense Oligonucleotide-Mediated Exon Skipping Strategies in Duchenne Muscular Dystrophy, Exploring the connection between waste water and the spread of antimicrobial resistance, Human Genetics - Its Relevance and Scope and The Magic of Antibodies. Their applications in Human Welfare gave students and researchers plenty to think about in these diverse fields, inspiring them to develop more holistic solutions to problems in our society.

External experts and guests from: Indian Institute of Science, Vivekananda Institute of Tropical Management, IIT Madras, Dystrophy Annihilation Research Trust, Institute of Bioinformatics and Applied Biotechnology and St. Ann's College for Women

CATALYST INDUSTRY CONCLAVE 2018

10 Feb 2018

The unique event brought several members of industry (including CEO's, HR personnel, etc.) to SSSIHL for an immersive discussion on many topics rallied around the theme of the Criticality of Values-Based Education for Emerging Challenges in Business, Society and Leadership Development. It was organized by CATALYST, a voluntary graduate Placement Facilitation Program by SSSIHL alumni that helps SSSIHL graduates get placed with some of the best companies. In fact, several companies (including Fortune 500 firms) regularly recruit SSSIHL alumni.

Attendees got first hand insight into SSSIHL's unique set-up, and the speeches and panel discussions highlighted many challenges of the current state of play in industry and how SSSIHL's unique philosophy of Values-based Integral Education puts the University on a unique stand for recruiters. One CEO, whose company regularly recruits SSSIHL graduates, said, "There is no short supply of MBAs in India but the reason we recruit SSSIHL alumni is because they have the courage to live according to their values systems."

INNOVATION

Dept. of Management & Commerce: 12 Feb 2017

In today's increasingly competitive and fast changing business environment, a multitude of variables necessitates a business to innovate. Some of the major ones

include globalisation, increasing competition, fast advancing technology and changing workforce demographics (including an increasingly mobile workforce). Perhaps the most pressing need for innovation is due to the pace of increase of consumer expectations.

The interactive seminar provided students with integrative, real world, and contemporary perspectives on effectively managing innovation for sustainable profitable growth. Blending useful concepts, frameworks, and tools with insightful and actionable inputs, the sessions helped students understand how to effectively manage innovation for a sustainable competitive advantage and equipped them with an entrepreneurial mindset. They also learnt insights into formulating and implementing winning innovation strategies, driving growth through innovation and entrepreneurship, and how to foster creativity and develop an innovative, organizational DNA learning approach.

External experts and guests from: Praxight Partners

CHALLENGES OF THE EMERGING DIGITAL ECONOMY

Dept. of Management & Commerce: 16-17 Feb 2018

The digital economy is transforming the lives of people beyond recognition. It influences and impacts all of us, directly or indirectly - consumers, producers, investors, exporters, importers, public policy makers, academics, students, consultants, administrators, lawmakers, etc. In an effort to address these challenges, the Management Development Programme brought seven experts to deliberate on issues such as: Impact of the Digital Economy, Cash to Cashless – Is India Ready, Smart, Safe and secure connected world, Big data - Science in the new age world, Driving into the Future – Leveraging Digital, Digital Banking and the Digital Economy.

External experts and guests from: thyssenkrupp Aerospace, American Embassy, New Delhi, Qualcomm India, Quatrro Global Service, Ashok Leyland, Hotfoot Technologies, BHEL and Tata Consultancy Services

THE INTERNATIONAL CONFERENCE ON SPECIALIZED, AYURVEDIC & INNOVATIVE FOODS & NUTRITION SUMMIT (SAIFNS) 2018

Dept. of Food & Nutritional Sciences: 16-17 Feb 2018

The largest international conference at SSSIHL this year explored the bridge between ancient food traditions and emerging food technologies. The event was an intellectual platform for over 150 participants consisting of academicians, scientists, dieticians, nutritionists, industrialists, food innovators & entrepreneurs, agriculturalists, culinary specialists and research students from all over India as well as other parts of the world.

The interdisciplinary theme of the event was to integrate the valuable ancient knowledge of Ayurvedic nutrition with the modern specialised nutritional perspectives and recent innovations in foods using modern technology. It explored holistic solutions for food and nutrition challenges to ensure optimal nutrition and longevity for the present and future generations.

The broad themes discussed included: Specialised, Holistic & Integrative Nutrition; Indian Food Culture & Vedic Nutrition; Current Research Techniques in Food & Nutritional Sciences; Emerging & Novel Food Processing & Preservation Technologies and Specialty, Innovative & Convenience Foods.

External experts and guests from: Institute of Cytology and Preventive Oncology,

DFRL-DRDO, National Institute of
Nutrition (ICMR), Fortis Escorts Heart
Institute, Lords Institute of Medical
Sciences and Research, Mushroom
Research laboratory ICAR-IIHR, Periyar
University, Ayurvedashramam Pvt.
Ltd., Central Institute of Home Science
College, University of Mauritius, Sri
Sathya Sai General Hospital, Cape
Town University of Technology, Kerala
Agricultural University, Trans Disciplinary
University, CSIR-National Institute for
Interdisciplinary Science and Technology,
Diabetic Food International Pvt. Ltd. and
Memorial Sloan Kettering Cancer Center

FRONTIERS IN CHEMICAL SCIENCES

Dept. of Chemistry: 24 Feb 2018

The conference created a platform for researchers, scholars and educators to present and discuss the most recent innovations, trends, concerns, practical challenges encountered and the solutions adopted in the field of Chemistry. The premise was that Chemistry is the Central Science, and deeply ingrained into so many areas of business, government, and environmental management that a background knowledge in the subject is useful in varied fields like product development, marketing, management, computer science, technical writing, and even law.

Topics covered by the experts (all of whom were SSSIHL alumni) included 21st Century Chemistry, Rationale of Drug Design, Supramolecular Chemistry: A Chemistry of Non-covalent Interactions, Challenges in Chromatographic Techniques, Computational Chemistry: A powerful tool for researchers, Challenges in Chromatographic Techniques, Chemistry of Flavours and Fragrances and Omnipresent Corrosion.

External experts and guests from: Indian Institute of Science, Dayananda Sagar University, Green Research & Development Centre, IIT Madras, Symrise and Hindustan Petroleum.

EXPLORING ENTREPRENEURSHIP

Dept. of Management & Commerce: 28 Feb 2018

Entrepreneurship—and the innovation it often brings in its wake—helps the country transition from dependence on obsolete systems and technologies to new, modern ones. This is particularly important in the world we live in today. The immersive symposium divided the programme into a broad framework of six parts – each being a stage of a start-up: Founder Focus, Inspiration, Ideation, Idea Pitching, Incubation and Starting up. The key learning point from the presentations was to see beyond the bright, successful side of entrepreneurs, and appreciate the amount of challenges and downturns they went through that actually made them strong and successful entrepreneurs. Students learnt that entrepreneurship is not just starting a company but rather the ability to constantly reinvent what we do by adding the magical ingredients of creativity, innovation and execution.

External experts and guests from: Institute of Inspiring Innovation



PYTHON FOR SCIENTIFIC COMPUTING

Dept. of Physics: 30-31 Mar 2018

Python is a programming language that has become increasingly popular by virtue of its simplicity and capability and is extensively by corporations such as Google and Amazon in the areas of data mining and data processing. The workshop focused on python for education and research, and as a tool for using plots, visualizations and simulations, and advanced functions such as molecular dynamics and quantum simulations that will help teachers and researchers alike.

Students learnt not just the basics of Python but were exposed to the concept of loops, lists, tuples and dicts. They even coded sample programs at the computer labs.

External experts and guests from: Capital One, IBM, Indian Institute of Science, HSBC Data Processing and ARM

DATA SCIENCE

Dept. of Mathematics & Computer Science: 30 Mar - 1 Apr 2018

Data Science is a multidisciplinary blend of data inference, algorithm development and technology in order to solve analytically complex problems. Its rapid evolution attributed to the widespread digitization of business processes globally. The workshop helped equip faculty members with a better understanding of Data Science. Topics covered included Matrix Algebra, Inferential statistics, Regression Analysis and Multi varied Analysis.

External experts and guests from: DataScience Labs, Hyderabad







FACULTY ACHIEVEMENTS

FROM DELIVERING KEYNOTE ADDRESSES TO BEING INVITED AS A UNIVERSITY BOARD MEMBER, SSSIHL FACULTY REACHED SEVERAL PERSONAL MILESTONES DURING THE ACADEMIC YEAR 2017/18.

For a full report of all SSSIHL faculty Participation & Achievements in 2017/18, kindly visit sssihl.edu.in

MATHEMATICS AND COMPUTER SCIENCE

Sri Darshan Gera

 Invited Talk on Generative adversarial Network and Variational al Auto Encoders, and conducted a hands-on lab, National Workshop on Deep Learning: Bridging Theory and Practice, University of Calicut, 22-24 Feb 2018.

Dr. Pallav Kumar Baruah

 Keynote Talk on Blockchain and Big Data, IEEE International Conference on Data Security, Kalasalingam University, Tamil Nadu, 11 Dec 2017.

Dr. S Balasubramanian

 Hands-on tutorial on Convolutional Neural Networks, National Workshop on Deep Learning: Bridging Theory and Practice, University of Calicut, 22-24 Feb 2018.

Dr. Krishna Kiran Vamsi Dasu

- Teacher Invitee, Eighty-third Annual Meeting of the Indian Academy of Sciences at NEHU, Shillong, 3-5 Nov 2017.
- Young Scientist Award 2017 in the field of Mathematical Sciences, Andhra Pradesh Akademi of Sciences (APAS), Andhra Pradesh Science Congress, Andhra University, 7-9 Nov 2017.

Dr. Srinath M S

 Invited Talk on Supersingular Isogeny-based Cryptography, National Workshop on Post-Quantum Cryptography, Society for Electronic Transactions and Security, Chennai, 27 Mar 2018.

PHYSICS

Dr. Gowrishankar R

- Invited Plenary Talk on Investigations of Long-lived isomers in transuranic actinides, 62nd DAE-BRNS Symposium on Nuclear Physics, Thapar University, Patiala, Punjab, 20-24 Dec 2017.
- Resource Person, National level workshop on Laser and Light, Department of Postgraduate Studies and Research, University College of Science, Tumkur University, Tumkur, 17-18 Aug 2017.

FROM DELIVERING KEYNOTE ADDRESSES TO BEING INVITED • Examiner for Practicals, Department of Electronics, Sri KrAS A UNIVERSITY BOARD MEMBER, SSSIHL FACULTY ishnadevaraya University, Anantapur, 11-12 Dec 2017.

CHEMISTRY

Dr. G Nageswara Rao

 Filed a Patent Application for Spirobibenzopyrans and Analogues as Multitherapeutic Agents, 15 Jun 2017. The filing numbers are: PCT/IB2018/054280 (U.S.A.) and IN 201741020910 (India).

BIOSCIENCES

Dr. (Ms.) Seethalakshmi Laxmanan

 Co-Chairperson, National Seminar on Current Trends in Biosciences, 22-23 Jan 2018.

Dr. B S Vijayakumar

- Invited Ph.D. examiner and conducted a Ph.D. defense (viva voce), Bharathiyar University, Coimbatore, Tamil Nadu, May 2018.
- Evaluated 18 Doctoral Research theses for candidates from Bharathiyar University, Coimbatore, Periyar University, Salem and Bharathidasan University, Trichy, Tamil Nadu.

Mrs. B Anusha

- Invited Oral Presentation on Radical scavenging and reducing potential of Trachyspermum ammi L (Ajwain) plant extracts, National conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice, Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh, 15-16 Sep 2017.
- Invited Oral Presentation on In vitro anti-inflammatory activity of Ajwain (Trachyspermum ammi L) plant extracts, Pharma Transpire - 3rd International Conference on Design Development and Practice of Drugs, CES College of Pharmacy, Kurnool, Andhra Pradesh, 1-2 Feb 2018.

FOOD AND NUTRITIONAL SCIENCES

Dr. (Miss) N Srividya

- Best Oral Presentation Award for the paper, Nutritional quality and novel culinary applications of 'microgreens' – An emerging space age food crop, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.
- Best Poster Presentation Award for the paper, Agronomic bio-



fortification: A simple and low-cost strategy for the improvement of essential minerals, phytochemicals, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.

 Best Poster Presentation Award for the paper, Formulation and evaluation of vitamin fortified instant rasam mix, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.

Dr. (Mrs.) M Srijaya

- Invited Talk on Food irradiation: Scope and potential in processing and preservation of fruits and vegetables, National conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice, Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh, 15-16 Sep 2017.
- Chaired Scientific Session on Food Processing Technologies, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.
- Evaluator and Judge for Scientific Poster Sessions, Food Processing and Preservation, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.
- Evaluator and Judge for Scientific Poster Session, Food

Technology, National conference on Advanced Research in Pharmaceutical and Chemical Sciences - Emerging Challenges in Practice, Jawaharlal Nehru Technology University - Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh, 15-16 Sep 2017.

Dr. (Mrs.) Ambati Padmaja

 Best Poster Presentation Award for the paper, Extraction and Characterization of Passion Fruit Peel, 26th Indian Convention of Food Scientists & Technologists, CSIR-Indian Institute Chemical Technology, Hyderabad, 7-9 Dec 2017.

Dr. (Ms.) Meera Manikkavachakan

- Chaired Scientific Session for Oral Presentation on Food Technology, National conference on Advanced Research in Pharmaceutical and Chemical Sciences - Emerging Challenges in Practice, Jawaharlal Nehru Technology University - Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh, 15-16 Sep 2017.
- Chaired Scientific Session on Indian Food culture / Ayurvedic Nutrition, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.

Prof. (Mrs.) B Andallu

 Chaired Oral and Poster Presentations, and Delivered Invited Lecture on Phytoceuticals: Isolation, Identification and Assessment of Bioactivity (in vitro), National Conference on Advanced Research in Pharmaceutical and Chemical













- Sciences Emerging Challenges in Practice, Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh, 15-16 Sep 2017.
- Invited Talk on Protective effect of phytochemicals in Pimpinella anisum L. against H2O2-induced oxidative stress in human leukocytes, 105th Annual Session of the Indian Science Congress Association, Manipur University, 16-20 Mar 2018.

MANAGEMENT AND COMMERCE

Dr. (Mrs.) Swetha Thiruchanuru

 Invited Talk on The Glory of Women: Nurturing her innate qualities to become an Entrepreneur, Women Empowerment Cell, Sri Sai Baba National Degree College, Anantapur, Dec 2017.

Dr. Sayee Manohar K

Resource Person for the topic, New Dimensions of Commerce in a Globalized Era - 2018, Marudhar Kesari Jain College for Women, Vaniyambadi, Tamil Nadu, 27 Feb 2018.

Dr. (Miss) Ch Radhakumari

 Best Paper Award for the research paper, The SIR impact of demonetization – measure of long-term growth with statistical evidence, International Conference on Recent Trends in Technology and its impact on Indian Economy, Bathinda, Punjab, 24 Oct 2017.

Dr. (Miss) T R Rajeswari

 Invited Talk on Sustainable Management Practices to Promote Welfare of the People and the Planet, National Conference on Emerging Trends in Management Practices in the Globalised Era, Sivakasi, Tamil Nadu, 2 Feb 2018.

ECONOMICS

Dr. (Ms.) M R Geetha Bala

• Invited Talk on Inflation and Business Cycles, GATES Institute of Technology, Gooty, Andhra Pradesh, Dec 2017.

EDUCATION

Prof. (Miss) Madhu Kapani

 Invited Talk, Value Education and The Role of Teachers, National Seminar on Advanced Trends in Value Education, University College of Education, Sri Krishnadevaraya University, Anantapur, 5 Dec 2017.

Dr. (Mrs.) P Lavanya

 Invited Talk, Value Integration through Mathematics, National Seminar on Advanced Trends in Value Education, University College of Education, Sri Krishnadevaraya University, Anantapur, 5 Dec 2017.

ENGLISH LANGUAGE AND LITERATURE

Dr. Arun Kumar Behera

 Resource Person, Interactive Meeting for R N Bajaj Global University, Bikaner at the Sambhram Academy of Management, Bangalore.

SUB-DEPARTMENTS AND OTHER LANGUAGES

Dr. (Miss) Kiron Bala Arora

 Invited Talk on Seva as the way to True Education and Liberation, Sri Sathya Sai Gramin Jagriti project, Ambala, Haryana, May 2018.

Dr. N Venkatesha Rao

- Received Bharath Jyothi Award for Outstanding Achievements in Literature, India International Friendship Society, New Delhi, 26 Mar 2018.
- Invited Talks on the works of Vadiraja & Rare Commentaries, National Research Institute - Poornaprajna Samshodha Samsthanam, Bangalore, 5-12 May 2018.
- Invited Talks on Sandhyadhikarana, Brahmasutra, Dwaita Vedanta Samskit Conference Srimannyaya Sudhaa Mahotsava, Poornaprajna Vidyapeeta Samskrit College, Udupi, Karnataka, 3-5 Jan 2018.

Dr. (Mrs.) M Praphulla

• Invited Talk on Telugu Bhasha - Vaisishtyamu, Government Degree College, Uravakonda, Andhra Pradesh, 29 Aug 2017.

NEW FACULTY

- Dr. Srinath M S, Asst. Professor, Dept. of Mathematics & Computer Science
- Ms. Gorle Santoshi Kumari, Asst. Professor, Dept. of Mathematics & Computer Science
- Dr. Kurma Rao Tyada, Asst. Professor, Dept. of Mathematics & Computer Science
- Dr. Sampath Lonka, Asst. Professor, Dept. of Mathematics & Computer Science
- Dr. A Sunil, Asst. Professor, Dept. of Chemistry
- Sri Amit Sood, Associate Professor, Dept. of Management & Commerce
- Sri Vivek Kapoor, Associate Professor, Dept. of Management & Commerce

STUDENT ACHIEVEMENTS

ORGANIZATIONAL VISITS

At the end of each academic year, final year graduating students from various departments go on official visits to reputed organizations to get a feel of how what they learn in the classroom is applied in the real world. Students are accompanied by a few faculty members on these trips.

During the academic year 2017/18, these included:

Physics

I M.Tech. in Optoelectronics & Communications students, Bangalore, 16-18 Apr 2017. Organizations visited:

CISCO, Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS), Whitefield, Bangalore (IT operations and Maintenance), Honeywell, FCI OEN Connecters Ltd., and Analog Devices India.

Food & Nutritional Sciences

III B.Sc. in Food Science and Nutrition & Food Technology and I M.Sc. in Food and Nutritional Sciences students, Anantapur Dist., Andhra Pradesh, 30 Nov 2017. Organizations visited:

Timbaktu Collective, Sri Shashi Industries and Orillet Foods International.

Management & Commerce

Anantapur Campus: I M.B.A. students, Andhra Pradesh, 20-21 Sep 2017, 13 Jan 2018 and 22 Jan 2018. Organizations visited:

SSSIHMS, Prasanthigram, Sri Sathya Sai Seva Organization, Prasanthi Nilayam, TVS Motors & Titan Watches, Hosur, UltraTech Cement, Andhra Pradesh

Prasanthi Nilayam Campus: I M.B.A. students, Andhra Pradesh and Tamil Nadu, 17-20 Apr 2017 and 20 Jan 2018. Organizations visited:

UltraTech Cement and limestone mines, Andhra Pradesh, TVS Motors & Titan Watches, Hosur, Tamil Nadu

PROJECTS & DISSERTATIONS

Listed below are selected topics / areas of postgraduate and professional programme projects and dissertations.

Mathematics & Computer Science

M.Sc. in Mathematics and M.Tech. in Computer Science

Multi label Classification, Lax Conjecture, 3D Median Filter, 3D Canny Based Level, Set Segmentation, Reversible Watermarking for Medical Images, Video Watermarking using DWT-Fractional Order SVD, Analysis of Intrusion Detection Systems using

Machine Learning, Spam Detection Analysis using Machine Learning Algorithms, A Fragile Watermarking method for Video Sequences

M.Tech. in Computer Science

Face Recognition in Videos using Apache Kafka and Spark Streaming, A Model for Feature Selection and Protein Interaction Extraction from Literature using Deep Learning and Topological Data Analysis, Application of HPC and Machine Learning for calculation of reserves, HBasechainDB - A Scalable Blockchain Framework on Hadoop Ecosystem, Data Sharing Platform on Blockchain, Real time depth estimation on embedded systems, Video Stitching for Panoramic View, Correlating the access of pages to reduce the bandwidth pollution of the Foot Print caching with Tag-less DRAM cache, Guided Back Propagation and Batch Normalization in CNN Architectures-Kid-







ney Renal stone segmentation and classification in CT images, Real-time Target classification in videos on embedded systems, Online long-term object tracking in video sequences, Automatic music tagging

II M.C.A.

Consignment Management In Hospital Inventory, HL7 interface Engine, Dialln Back End, Dialln Front End, Sai Mail Server, Dispensary Stock Management System, eNutriAnalyzer

Physics

M.Sc. in Physics

Femtosecond Laser Mlcromachining: Fabrication of Photonic and Microfluidic Structures, Development of an automated vehicle using an Open Source Hardware System, Level Structures in 252Md, Synthesis, Fabrication and Designing of Lead based (PZT) and Lead-free based (BCZT/PVDF composite films) functional ceramics for Energy Harvesting Applications, First Principles Study of Electronic Structure, Thermoelectric and Optical Properties of NaTaO3, NaTaO2S, and NaNbO3, Studies on Temperature Coefficient of Resistivity of V2O5-Graphite and V2O5-Cu2Se Nanocomposites

M.Sc. in Materials Science

Supercapacitor Power Cells Based on Peanut Shell Derived Carbon, Enhanced β crystallinity in Halloysite Nanotubes Embedded Poly (Vinylidene Fluoride) Flexible Nanocomposite Thin Films and its Third Order Nonlinear Optical Properties, Fabrication of Poly (Vinylidene Fluoride) / CaCu3Ti4O12 ceramic – polymer composite films and investigation of their dielectric properties, Synthesis, Fabrication and Designing of Lead based (PZT) and Lead-free based (BCZT/PVDF composite films) functional ceramics for Energy Harvesting Applications

M.Tech. in Optoelectronics & Communications

Radio over Fiber Link Design for Fronthaul of 5G Cellular Communication Systems, FPGA based Hardware Accelerator for Compute Intensive Image Reconstruction Algorithms, Hardware Acceleration of Encryption Algorithms using GPU, Thyroid Ultrasound Image Classification using Deep Learning, Smart Accurate Intelligent ElectroCardioGram (SAI ECG), Planning and Designing Scaled Networks Using Docker based GMPLS Network Element Simulators

Chemistry

M.Sc. in Chemistry

Synthesis, characterization and Non-linear optical activity of diarylidene-N-methyl piperidones, Use of Cation-doped Hydroxyapatite - Hydroxyapatite Nanorods - Amorphous Aluminium Hydroxide for Defluoridation of Water, Removal of Pharmaceutical Compounds from Aqueous Solutions by using Activated Carbon prepared from Sawdust: Kinetic, Equilibrium and Thermodynamic Studies, Investigations on the use of branched silver nanostructures for fluorescence enhancement in the

Surface Plasmon Coupled Emission Platform, Synthesis and Characterization of Benzopyrylium chlorides and their effect on amyloidogenisis

Biosciences

M.Sc. in Biosciences

Antimicrobial Activity of Neem Leaf Callus, Screening of clinically isolated multidrug resistant Escherichia coli for the presence of nitrofurantoin resistance genes, Screening of clinically isolated multidrug resistant Klebsiella pneumoniae strains for the presence of molecular determinants involved in antibiotic resistance, The role of metabolic derangement on amyloidogenesis of TDP-43 protein using yeast as a model organism, Mechanism of homocysteine induced over expression of chaperones and DNA repair proteins in glioma

Food & Nutritional Sciences

M.Sc. in Food and Nutritional Sciences

Comparative analysis of nutrients and phytochemicals in sunflower sprouts and in hydroponically grown microgreens, A study on nutritional assessment and school performance of children (7-11 yrs) in Anantapur district, Formulation and development of banana pulp and peel incorporated functional products, Quality evaluation of formulated fruit based dark chocolates containing cocoa butter alternatives, Development and shelf-life studies of soya bean/ pea/quinoa enriched gluten free cookies, Formulation and standardization of ready to eat convenience foods for type II diabetes, Mechanism of homocysteine induced overexpression of chaperones and DNA repair proteins in glioma

Management & Commerce

M.B.A.

Social Entrepreneurship: A Case Study analysis on its Sustainable development of 'The Timbaktu Collective', Consolidation of global service locations- study analysing drivers and trends for prediction, Impact of Emerging Digital technology on Air Transport in India, Implementation of Smart In-store Technology (SIST) in Indian Retail Outlets, Developing Marketing Strategy for Bathroom Fittings in Indian B2B market, Dividend Announcement and Market Efficiency in India, A Study of Distribution Fitting on Crude IOL Futures' Prices, A study on Payment Banks as an Effective Tool for Financial Inclusion in Ludhiana District, Punjab, A Study on Financial Literacy of Small Business Operators and College Teachers in Naga Kurnool, A study of the Management Philosophy of Bhagawan Sri Sathya Sai Baba, Employees' perception on role stress: A study in selected banks, Role of Music in Brand Communications, Marketing Segmentation, targeting and Positioning of SML Isuzu Ltd., Increasing Patient, Satisfaction for Sri Sathya Sai Mobile Hospital: A lean Six Sigma Intervention, A study on the possibilities of Blockchain in the Indian Banking and Financial Services Industry, Facebook Marketing: An analysis of brand page Sentiment and Engagement, Competency Framework: A Model Developed for Voluntary Health Care Organizations, Digitalization & Agriculture



Economics

M.A. in Economics

Estimating Value at Risk in Indian Stock Market, Sectoral Analysis of the Indian Stock Market – A Network Algorithm Perspective, Analysis of Demand for Money, An Econometric Analysis of Market Determined Interest Rates in India, Impact of Human Capital on Economic Growth India Experience, The Determinants of Automobile Demand in India, Impact of credit on agricultural production in India, Poverty in India: A comparative study of the BIMARU states, An Econometric Analysis of Foreign Investment Flows into India, Analysis of Invisibles Account in India's Balance of Payments, Analysis of Financial Derivatives impact on Indian Stock Markets, Nexus Between Democracy and Economic Growth in India

English Language & Literature

M.A. in English Language and Literature

Character is Destiny: A Celebration of Precious Ramotswe and other Characters in Select Novels of Alexander McCall Smith, Black Beauty through the Aristotelian and the Anthropomorphic Lens, The Impact of Portfolio Assessment on Enhancing the Writing Skills of ESL Learners, The Study of Narrative Technique in Ian McEwan's Atonement

National Examinations

18% 5% UGC-NET (LS) 9%

This data pertains to final year postgraduate students who attempted these exams

GATE: Graduate Aptitude Test in Engineering CSIR: Council of Scientific & Industrial Research UGC: University Grants Commission NET: National Eligibility Test

Examinations Pass Rates

94%

Undergraduate Programmes

97%

Postgraduate & Professional Programmes

NATIONAL EXAMINATIONS

A high percentage of SSSIHL postgraduate students qualified in national exams such as the GATE/JEST or the CSIR-UGC NET in 2017/18. The list below includes the national rank for each exam.

Ranendra Pratap Biswal (Chemistry)

48 UGC-NET (LS)

Abhinash Subba (Chemistry)

144 (CSIR UGC-NET for JRF)

Saroj Poudyal (Physics)

287 (GATE) | 80 UGC-NET (LS)

Kocherlakota Sai (Biosciences)

596 (GATE)

Ayyagari Ranga Shaarad (Computer Science)

713 (GATE) | UGC-NET (LS) | CSIR UGC-NET for JRF

Gouri Shanker (Physics)

744 (GATE) | 268 (CSIR UGC-NET for JRF)

Sushant (Chemistry)

1209 (GATE)

Ratul Sabui (Physics)

1510 (GATE)

Saurav Gurung (Biosciences)

1868 (GATE)

Satyajeet Mahapatra (Biosciences)

2265 (GATE)

Sai Naveen R (Biosciences)

2435 (GATE)

Gandla Saiteja (Computer Science)

10710 (GATE) | UGC-NET (LS)

P Manoj Kumar Reddy (Computer Science)

11708 (GATE)

Manish Kumar (Computer Science)

20643 (GATE)

S Saikrishnan (Management)

(UGC-JRF)

A Lakshmi (Home Science)

(NET-LS)

Bhabani Shankar Padhy (Management)

(NET-LS)

Amruthavarshini S (English)

(NET-LS)

GATE Graduate Aptitude Test in Engineering | **CSIR** (Council of Scientific & Industrial Research) | **JRF** (Junior Research Fellowship) **NET** (National Eligibility Test) | **LS** (Lectureship)

All ranks are national (All India Rank)

CENTRAL RESEARCH INSTRUMENTS FACILITY (CRIF)

SSSIHL CENTRAL RESEARCH INSTRUMENTS FACILITY (CRIF), **BASED AT THE PRASANTHI** NILAYAM CAMPUS, IS ONE OF THE FEW SUCH FACILITIES IN THE COUNTRY (AND THE FIRST IN A **RURAL LOCATION) THAT HOUSES** ADVANCED CHARACTERIZATION/ ANALYTICAL TOOLS TO CARRY **OUT TRANSLATIONAL RESEARCH** IN VARIOUS AREAS OF SCIENCE AND TECHNOLOGY SUCH AS PHYSICAL, BIOLOGICAL, CHEMICAL, MATERIALS SCIENCE, FOOD AND ALSO COMPUTATIONAL AND INTERDISCIPLINARY AREAS.

A Ph.D. is a person who helps others through his research and develops the country.

Sri Sathya Sai Baba Revered Founder Chancellor

The facility, built with a funding of ₹45 crores with the kind support of Sri Sathya Sai Central Trust, hosts a range of cutting-edge instruments and laboratories as listed on the opposite page. It will significantly strengthen the existing research facilities at SSSIHL by providing state-of-the-art infrastructural facilities under a single roof.

This will allow faculty and postgraduate and doctoral students at the Institute to accelerate their research work in all the major research areas of the Faculty of Sciences - Health, Energy and Environment. It will enable them to keep pace with the scientific developments taking place globally; and to publish their research findings in peer reviewed high impact journals; and through their concerted efforts to carry out research in cutting edge areas of Science and Technology and contribute to the needs of the society at large.

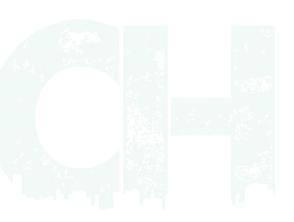












Full-time technical assistants with specific expertise operate and maintain the instruments and laboratories.

SSSIHL CRIF facilitates the strengthening of interdisciplinary health related research collaborations between SSSIHL and Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS). Some of these include: Regenerative Medicine & Tissue Engineering, Rapid Detection of Endemic Diseases, Diabetic Retinopathy, Development of Cost Effective Multi-Modal Microscopes, SPCE-based Point of Care Devices, etc.

CORE FACILITIES

The following core facilities at CRIF are shared resources offering a range of services to the research community at SSSIHL:

- Femto Fab
- Electron Microscope Facility
- NMR & Mass Spectrometry Facilities
- Materials Characterization Facility
- Thermal and Optical Characterization Facilities
- Liquid Nitrogen Facility
- Central Utilities Facility
- Optical Imaging and Integration

LABORATORIES

In addition, CRIF hosts the following labs:

- Wet Chemistry Laboratories
- Functional Materials Laboratory
- Water Research and Electrochemistry
- Bio-Safety Labs: Level 1 and Level 2
- Computational Science and Plasmonics













TO VIEW THE CURRENT RESEARCH AREAS FOR EACH DEPARTMENT, VISIT SSSIHL.EDU.IN

GIVEN BELOW ARE HIGHLIGHTS OF SELECTED RESEARCH WORK AT SSSIHL IN 2017/18.

SCIENCES

DEVELOPMENT OF SMALL ORGAN IMAGING GAMMA CAMERA SYSTEM

Thyroid diseases are among the most common endocrine disorders worldwide. In India alone, It is estimated that 42 million people suffer from thyroid diseases. Early diagnosis and treatment remain the cornerstone of medical management. The development of a portable thyroid-specific imaging system, which serves as a cheaper alternative to the traditional large field and expensive gamma cameras is being pursued at the Department of Physics. The spatial resolution is expected to be better than the traditional Gamma Cameras. The Department of Physics has developed a prototype of Small Area Imaging Gamma Camera (SAI-GC), with all digital Front End Electronics and Data Acquisition System. Relevant software is being developed for Image Reconstruction and Processing of gamma camera images to detect the cases of abnormalities like hyper and hypothyroidism.

BIG DATA ANALYTICS AND HIGH PERFORMANCE COMPUTING

The Department of Mathematics & Computer Science are working on DNA sequence Analysis and Structural Biology using High Performance Computing (HPC) and Machine Learning (ML) tools. They also envisage providing a framework for compressed storage, analysis and secured sharing of the genome sequence. They are working

to build an immutable data storage and management platform in Big Data environment using Scalable Blockchain.

Study on issues of Interoperability of Blockchain is opening up ways to develop platform for Fraud Free financial transactions, Comprehensive Health Insurance Management systems, E-voting platform etc. The researchers intend to use HPC technology to detect fake news and rumours using epidemic models and large graphs. Efforts are on to demonstrate that Artificial Learning (AI) and Blockchain together can provide solutions to many real-life problems and finally deliver the promise that Al holds. Work on predictive analytics in healthcare, such as effective treatment for Perinatal depression, Automatic segmentation and detection of stones in case of Renal CT images, early detection of cardiac disorders from CT images is also underway.

RESEARCH BASED REFORMS IN PHYSICS INSTRUCTION - CLASSROOM AND LABORATORY

One of the ways of improving the quality of Physics education is through research-based methodologies involving concept inventories, active learning, clicker methods, interactive lecture demonstrations, computer simulations & virtual experiments and context rich problems. The faculty members involved in undergraduate teaching are involved in the design and development of courses based on physics educational research practices in which efficacy of research-based physics learning strategies are tested and implemented in classrooms with active participation of learners. This is sponsored by the Government of Karnataka under the scheme of establishment of Centers of Innovative Science Education (CISE) through VGST, DST, Karnataka.

SYNTHESIS AND SEMI-SYNTHESIS OF NOVEL MOLECULES WITH POTENTIAL THERAPEUTIC APPLICATIONS

In this regard, spirobibenzopyrans and andrographolide have been identified as the novel synthetic and semi-synthetic pharmacophores respectively. In the due course of research, we have discovered a new class of spirobibenzopyrans with potent anti-cancer activity. A library of over 40 novel spirobibenzopyrans have been synthesized and studied for their therapeutic applications. On the other hand, andrographolide is known to possess a wide range of biological activities such as anticancer, antidiabetic, anti-inflammatory, etc. Currently, isolation of the active compound andrographolide from Andrographis paniculata and further synthesis of derivatives as potential leads against various diseases is under progress.

DEFLUORIDATION OF WATER BY POLYMER-METAL ION NANO-COMPOSITES: SYNTHESIS, CHARACTERIZATION AND THEIR APPLICATION STUDIES

Fluoride has a tendency to disperse into ground water from the rocks and soil. The excess amount (≥ 1.5 mg/L) of fluoride intake leads to fluorosis, collagen break down and disruption of immune system. The Geographical Information System (GIS) aided assessments of the ground water of the Rayalseema region of Andhra Pradesh, India revealed that more than 70% of the villages surpass maximum limit of fluoride (1.5 mg/L) defined by the World Health Organization (WHO) and Bureau of Indian Standards (BIS).

Therefore, the development of cheaper, robust, eco-friendly, and easy to use materials for defluoridation of drinking water would be the best assist to extenuate this 'fluorosis menace'. The Department of Chemistry is actively engaged in the synthesis of potential



adsorbents based on polymer metal nanocompsites for effective removal of fluoride from ground water.

SURFACE PLASMON-COUPLED EMISSION BASED BENCH-TOP DEVICE FOR CARDIAC TROPONIN T QUANTIFICATION

Troponin T (cTnT) measurement is important for ruling in or ruling out heart attacks and evaluation of patients with acute coronary syndromes. With the inclusion of high-sensitivity cTnT (hs-cTnT) assays, an early and more frequent diagnosis of AMI has been made possible. However, there is an increased need for individualized care in patients with heart disease, especially in resource limited settings. Ironically, the reliability, sensitivity and rapid diagnostics of current cTnT detection platforms come with the need for sophisticated instrumentation due to the non-specificity of the existent lowcost methods and increasing health care expenditure.

The researchers at the Department of Chemistry are engaged in the design and development of a SPCE based bench-top device for cTnT quantification resulting in near real-time cardiac damage assessment, and clinical decision making, in rural India and emergency conditions.

The current capital-intensive technology that is in use towards the quantification of cardiac Troponin T, restricts its reach to a large segment of the Indian population. A low-cost affordable technology would help widen the impact and also to render timely treatment during first aid and emergency conditions.

DETECTION OF ANTIMICROBIAL RESISTANCE GENES IN BACTERIAL CULTURES AND CLINICAL ISOLATES

Drug resistant bacteria have been the

major causes of increased morbidity and mortality affecting the vulnerable patients with decreased immunity. They are also one of the major causes of nosocomial infections in India. Antimicrobial resistance is a major clinical challenge in treating patients infected with antibiotic resistant bacteria. Hence, understanding the mechanisms of antibiotic resistance among clinically isolated bacterial pathogens may help in developing appropriate intervention strategies to tackle this global menace.

The researchers intend to gain insights into the mechanisms of antibiotic resistance being employed by the pathogens and their capacity for horizontal gene transfer using whole genome sequencing. Scant information is available on WGS based genomic analyses of clinical isolates from India.

The proposed research efforts could offer good insights into the prevalence of the antibiotic resistance genes (AMR genes) in the Indian subcontinent. Our laboratory is involved in the characterization of AMR genes using a range of molecular tools among the isolated nitrofurantoin resistant cultures.

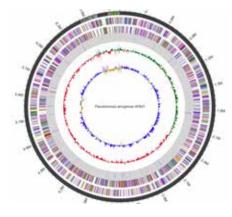
RECEPTORS IN THE MICROGLIAL INFLAMMATORY RESPONSE: IMPLICATIONS FOR MULTIPLE SCLEROSIS

Researchers at the Department of Biosciences are actively trying to understand whether secreted ATP has a role in the LPS and cytokine (TNFα and IFNγ) induced calcium response, expression of critical genes in inflammation, and activation of phagocytosis and chemotaxis. This will help to understand the role of P2 receptors and downstream signaling events involved in the processes. It will also help us to delve into the details of the role of P2 receptors in a mouse model of Multiple Sclerosis and help identify possible therapeutic targets. It may be noted that some P2 receptor

inhibitors are currently used as drugs, such as for thrombosis. Some are in phase II and phase III clinical trials for various cancers. The research work will validate these drugs for mouse model of Multiple Sclerosis.

This work proposes to reduce the lag period of these drugs for human Multiple Sclerosis trials. It will have considerable impact on understanding and identifying possible therapeutic targets in other neuro-degenerative diseases. Many genes that are induced by exogenous treatment of ATP (Hsp90 and HDACs) are known therapeutic targets in various diseases and hence inhibiting up-regulation of these genes by targeting purinergic receptors will have a favourable therapeutic effect. These diseases include Parkinsons, retinal degeneration and Alzhimer's disease.







MANAGEMENT & COMMERCE

SPIRIT AT THE WORKPLACE (S@W): A STUDY OF S@W IN BUSINESS ORGANIZATIONS IN INDIA

The dawn of the twenty first century has witnessed what appears to be a turnaround with many business organizations laying emphasis on ethics / values, Corporate Social Responsibility and sustainability, with a focus on multiple stakeholder welfare maximization. Business organizations in many parts of the world still maintain a skewed attention to mere economic criteria, even at the cost of societal and environmental factors, leading to a sense of hollowness, 'something missing,' in the organization. Using the phrase that has become widespread today, we seem to have lost 'spirit at the workplace' also referred to as 'S@W' or 'spirituality at the workplace' or 'workplace spirituality'.

This exploratory research study, investigates the construct 'Spirit at Work' in an Indian context. This research uses extant literature coupled with empirical investigation of the perspectives and the perceptions of managers in Indian business organizations. It has adopted a multiparadigmatic approach using a mix of quantitative and qualitative methods.

The study identified new elements of S@W specific to the Indian context and thereby highlighted the differences in the perceptions and views of S@W between the Indian and Western context. It has drawn upon insights from Karma Yoga principles, an Indian pyscho-philosophical equivalent of S@W. It further depicted S@W as a dynamic experience – as a journey to be undertaken by business organizations as well as business managers from a basic level to an advanced level.

In addition, it has presented both an individual-centric and an organization-centric approach to S@W. It shows that

individual values and attitudes play a role in integration of S@W through 'Personal attitude' at the basic level and 'Transpersonal work orientation' at the advanced level of the S@W journey. Unlike earlier studies, this study indicates that organizational culture and philosophy too have an explicit role to play in the integration of S@W through 'Engagement at the workplace' at the basic level and 'Transorganizational work orientation' at the advanced level of the S@W journey.

DEVELOPING THE CONCEPT AND PRACTICE OF 'INCLUSIVE BUSINESS' FOR POVERTY ALLEVIATION: A STUDY OF SELECT ORGANIZATIONS IN INDIA

This research work focuses on the concept and applications of Inclusive Business (IB) - businesses that enable the economically-weaker section of the populace to participate in market activities to gain by becoming part of the value-chain of firms as suppliers, distributors, employees or consumers. The study addresses three foundational issues, with the aim of advancing knowledge in this field relating to IBs: What is Inclusive Business, What is the process of value creation in an Inclusive Business, and How can organizations formulate strategies for developing inclusive business models?

It has adopted a qualitative research design using the case-study method. The study of successful and unsuccessful IBs have led to three unique and important contributions to the body of knowledge available on the theory and practice of IBs.

The first contribution aims at advancing the theoretical foundations of the field, by proffering a framework and a working definition for IB. The framework bridges—for the first time—ideas of human development and business strategy, by delineating how integration of the disenfranchised communities into value-chains can and must lead to

the expansion of human capabilities on one hand, and enhanced firm competitiveness on the other.

The second contribution of this study is the operationalization of the Human Development and Capabilities Approach (HDCA) through the development of a human-centric value-chain intervention (HC-VCI) framework. The HC-VCI framework is a first-of-its-kind management tool that focuses on helping the poor transition into market economies, rather than focusing exclusively on firm efficiency or competitiveness. The HC-VCI framework offers a novel perspective to human lives, where humans are valued not as factors of production but as social agents with human rights. These findings resonate with the latest research on well-being, human development and happiness.

The third contribution is the development of a framework for formulating strategies for developing successful inclusive business models. This contribution is divided into two parts. In the first part, the study identifies specific contingencies that IBs face, and relevant capabilities needed to overcome the contingencies. Specifically, the contingency-capability framework developed in this study points towards a holistic view of strategy. In the second part, the study develops a process model of strategy formulation in IBs.

ECONOMICS & HUMANITIES

FINANCIAL AND MACROECONOMIC MODELLING

Research at the Department of Economics is primarily focused on financial and macroeconomic modelling leading to policy analysis on the domestic and international economies. While the studies relating to economic policies, financial markets and their interlinkages in the emerging economies

were taken up on the international front; the research on the domestic economy concentrated on diverse issues relating to various aspects of the Indian economy. These include topics like determination of exchange rate, inflation, oil prices, automobile demand, modelling volatility in stock markets, measuring operational efficiency in Indian banks, studies in the fiscal aspects relating to GST, fiscal policy, etc.

The research is quantitatively oriented, relying on leading edge techniques in statistics and econometrics in delivering research publications of a high standard. Apart from producing high quality research publications in reputed national and international journals, the faculty at the department have also been regular participants in the conferences and seminars conducted by prestigious institutions across India.

As an outcome of macroeconomic modelling, a doctoral research was done in the area of Current Account of India's Balance of Payments Under the New Economic Policy Regime. The summary is as follows:

One of the most successful aspects of India's structural reforms has been the strength and dynamism of its external sector. The sector continues to be robust, despite sharp increase in India's imports over exports leading to huge trade deficits. India's balance of payments has recorded large and persistent surpluses, with foreign exchange reserves currently around US\$ 400 billion. Increased earnings from exports of services and remittances coupled with enhanced foreign investment inflows have provided strength to the external sector. The overall objective of this work is to identify and quantify linkages between the domestic and world economic developments on the one hand and the current account of India's Balance of Payments on the other, so as to make them more meaningful in terms of policy initiatives. Applied econometric methodology in keeping with the modern time series analysis is utilized

to ensure rigorous analysis and valid inferences.

THE 'I' OF WOMAN THROUGH THE EYE OF SHAKESPEAREAN DRAMA

The thesis is an investigation of the nature and locus of the feminine as represented in the aesthetic universe of the Shakespearean oeuvre. About 20-25 plays of Shakespeare have been reviewed in this study, using variables such as the trappings of patriarchy, agency and the principle of androgyny. This triangulation helped in mapping the complexity of human behaviour and also minimised the intrinsic shortcomings of any single approach of the feminist coterie. Whereas some texts were more viable for particular kinds of interpretations, the others refused to render meaning when subjected to certain other theories, owing both to formal principles and the specificity of the content.

Each chapter reads a cluster of plays and traces a subliminal and discontinuous emergence of notions associated with feminine identity. There are some counterintuitive findings on the attribution of evil on the nexus of femininity and agency. The study discovers how the conceptions of androgyny in the human personality, and the uroboric unity of being, help in negotiating selfhood as transcendent of gender dispositifs.

The plays are, more or less, an alibi. The single desideratum that has guided this disquisition is inclusion, even at the risk of a rupture of coherence. The conclusion highlights how Shakespeare balanced his imagination with reality to produce some of the most enduring portraits of women in the whole of world literature. Reconnaissance of gender and its performativity, through the trope of female characters in Shakespearean drama, unravelled inclusion and relatedness as the core of femininity.









RESEARCH SCHOLAR ACHIEVEMENTS

CHEMISTRY

Sri Swayamsiddha Kar

 Filed a Patent Application for Spirobibenzopyrans and Analogues as Multitherapeutic Agents, 15 Jun 2017. The filing numbers are: PCT/ IB2018/054280 (U.S.A.) and IN 201741020910 (India).

Sri Sai Giridhar S

 Poster Presentation on Diagnostic role and association of Lp-PLA2 and biochemistry markers with CAD, 69th Annual Conference of the Cardiological Society of India, Kolkata, 30 Nov-3 Dec 2017.

FOOD & NUTRITIONAL SCIENCES

Miss Ashrita C Haldipur

- Completed a certified online course on Systematic Review and Meta Analysis, authorized by John Hopkins University, offered through Coursera, Jun 2017.
- Completed a certified online course on Metabolomics: Understanding metabolism in the 21st century conducted by University of Birmingham through Future Learn, Oct 2017.
- Completed a certified online course on Health Research Fundamentals, offered by National Institute of Epidemiology, ICMR, Chennai, Aug-Oct 2017.

Miss Manjula Devi Ghoora

- Best Oral Presentation Award for the paper, Nutritional quality and novel culinary applications of 'microgreens'

 An emerging space age food crop, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition, Sri Sathya Sai Institute of Higher learning, Anantapur Campus, Andhra Pradesh, 16-17 Feb 2018.
- Completed a certified online course on Systematic Review and Meta Analysis, authorized by John Hopkins University, offered through Coursera, Jun 2017.

MANAGEMENT & COMMERCE

Sri G Aditya

 Presented original work on Stock market Sentiment Analysis using twitter tweets, Doctoral Summer School on Research Methods and Research Development, IIM Ahmedabad, 1-5 Apr 2018.

Sri K J Srinivas

 Won the First Prize for an Idea Presentation, Doctoral Summer School on Research Methods and Research Development, Indian Institute of Management, Ahmedabad, 1-5 Apr 2018.

SAKURA EXCHANGE PROGRAM TO JAPAN

As part of prestigious SAKURA Science Exchange Program organized by the Japan Government, SSSIHL teachers, doctoral research scholars and a research associate from the Dept. of Biosciences visited Japan Advanced Institute of Science and Technology (JAIST), Japan, 21-31 Jul 2017.

Teachers

Sri K K Sai Anand Dr. A S Vishwanathan

Research Associate

Dr. K N Naresh

Doctoral Research Scholars

Sri P Sujith Kumar Sri S Aswath Narayan Sri S B Sai Krishna Sri T N Girish Sri Aiyer Kartik Sathyanarayan Sri K K Jayanth Sri S Skanda

The research areas to which the scholars were exposed included Biopolymers, Hydrogels, Membrane dynamics using liposomes, Electrochemical techniques for bio-fuel cells, Bio-molecular NMR and Replica Exchange Molecular Dynamics (REMD) simulations.

The trip also gave them a preview into unique Japanese culture through their interactions with the Japanese people and visits to various places in Komatsu, Kobe, Kanazhawa, Kyoto and Tokyo. Notable was their visit to the traditional Buddhist Sensō-ji temple in Tokyo.

Noteworthy people who made the visit to Japan immensely successful were Prof. Noriyoshi Matsumi, faculty member, JAIST, Sri Chablani and Sri Ryuko Hira, Trustee, Sri Sathya Sai Central Trust.



RESEARCH PROJECTS

SSSIHL CONTINUES TO PURSUE NEED-BASED RESEARCH THAT WILL HELP ALLEVIATE PROBLEMS AFFECTING THE POORER SECTIONS OF SOCIETY.

DURING THE ACADEMIC YEAR 2017/18, THE TOTAL VALUE OF ONGOING PROJECTS AT THE UNIVERSITY WAS ₹8 CRORES.

MATHEMATICS AND COMPUTER SCIENCE

Big Data Analytics and High Performance Computing Maestro Technology, USA

PHYSICS

FIST (Fund for Improvement of Science & Teaching Infrastructure

Department of Science & Technology (DST)

Research Based Reforms in Physics Instruction: Classroom and Laboratory Vision Group on Science and Technology (VGST), DST, Govt. Karnataka

Design and Development of Small Organ Imaging Gamma Camera System DST

CHEMISTRY

Synthesis of novel Andrographolide derivatives as potential anticancer and antibacterial agents

Council of Scientific and Industrial Research (CSIR)

Defluoridation of Water by Polymermetal Ion Nano-composites: Synthesis, Characterization and their Application Studies

Science and Engineering Research Board (SERB)

Surface Plasmon-Coupled Emission based Benchtop Device for Cardiac Troponin T Quantification

DST – Instrumentation Development Programme (IDP) Technology Development Programmes (TDP)

ANIRVID: A Cellphone based Pointof-Care Diagnostic Device to Evaluate the Effect of Alternative Therapeutic Interventions on Depression and Heart Ailments

Tata Education and Development Trust

Development of Automated microfluidic -Surface Plasmon Coupled Emission Chip towards Real Time Protein & DNA detection

Centre for Advanced Sensor Technology, University of Maryland, USA

BIOSCIENCES

Augmenting Postgraduate Teaching & Research Facilities in Dept. of Biosciences DST FIST

Detection of Antimicrobial Resistance Genes in Bacterial Cultures and Clinical Isolates

OMIX Research and Diagnostic Laboratories Pvt. Ltd.

Perturbation in Metabolic pathways might drive Avascular Necrosis of Femoral Head by modulating bone biology: Mechanisms, Potential biomarkers and therapeutic targets DST

Mechanism of ATP secretion and the role of ATP-activated P2 receptors in the Microglial Inflammatory response: implications for Multiple sclerosis

Department of Biotechnology (DBT)











SSSIHL FACULTY CONTINUED TO PUBLISH THEIR RESEARCH FINDINGS IN HIGH IMPACT JOURNALS DURING THE ACADEMIC YEAR 2017/18.

SCIENCES

Publications in peer reviewed Journals

- Srinath M S and V Chandrasekaran, Isogeny-based Quantum-resistant Undeniable Blind Signature Scheme, International Journal of Newtork Security, 20(1), 9-18, (2018).
- Saranya C R, K S P Sowndarya and Y Lakshmi Naidu, A linear-time Algorithm for paired Neighbourhood Set on Circular-Arc Graphs, International Journal of Mathematics Trends and Technology, 51(1), 12-15, (2017).
- P Murali Krishna and Pallav Kumar Baruah, High Performance Kafka Powered Scalable Real Time Rule engine Model for event stream processing, *International Journal* of Scientific & Engineering Research, 9(2), 1830-1836, (2018).
- J Bhanu Teja, Pallav Kumar Baruah, Satya Sai Mudigonda and Phani Krishna Kandala, Application of High Performance Computing for Calculating Reserves for a Company, *International Journal of Scientific & Engineering Research*, 9(2), 1821-1830, (2018).
- Ramesh Sharma, S Balasubramanian and N Uday Kiran, Some Remarks on Ricci Solitons, *Journal of Geometry*, 108(3), 1031-1037, (2017).
- Arka Ghosh, A Hybrid Method for selection of tile sizes, Journal of Electronics, Electrical and Computational Systems, 6(8), 458-466, (2017).
- 7. A N Sai Prasanna R, Raghunatha Sarma and S Balasubramanian, A Study on Improving Branch Prediction Accuracy in the context of Conditional Branches, *International Journal of Engineering Technology Science and Research*, 4(8), 654-662, (2017).

- 8. K B Chand and K R Tyada, Constrained Shape Preserving Rational Cubic Fractal Interpolation Functions, **Rocky Mountain Journal of Mathematics**, 48(1), 75-105, (2018)
- 9. K B Chand and K R Tyada, Shape preserving constrained and monotonic rational quintic fractal interpolation functions, *International Journal of Advances in Engineering Sciences and Applied Mathematics*, (2018). DOI: doi. org/10.1007/s12572-018-0207-z
- Sai Pavan Prashanth Sadhu, Sasidhar Siddabattuni, Sai Muthukumar V and K B R Varma, Enhanced dielectric properties and energy storage density of surface engineered BCZT/PVDF-HFP nanodielectrics, Journal of Material Science: Materials in Electronics, 29(8), 6174-6182, (2018).
- Lakshmi Adinarayana Avinash Chunduri, Aditya Kurdekar, Sandeep Patnaik, Rajasekhar, Saikiran Aditha, Chinnakota Prathibha, and Venkataramaniah K, Single Step Synthesis of Carbon Quantum Dots from Coconut Shell: Evaluation for Antioxidant Efficacy and Hemotoxicity, Journal of Materials Sciences and Applications, 3(6), 83-93, (2017).
- S Sai Krishna, M Muralikrishna and R Gowrishankar, Understanding Thermoelectric behaviour of Materials using COMSOL, Journal of Applied Physical Science International, 9(3), 79-89, (2017).
- Sai Pavan Prashanth Sadhu, Sasidhar Siddabattuni, Bharathi Ponraj, Muralikrishna Molli, V Sai Muthukumar and K B R Varma, Enhanced dielectric properties and energy storage density of interface controlled ferroelectric BCZTepoxy nanocomposites, *Composite Interfaces*, 24(7), 663-675, (2017).
- Murali Ravi and Siva Sankara Sai Sanagapati, A Practical Design and Implementation of a Low-Cost Platform for Real-Time Diagnostic Imaging, *IEEE Access*, 5(8), 24952-24958, (2017).
- 15. Hari Nandakumar, Adithya K S and Shailesh Srivastava, Sub-4-micron full-field optical coherence tomography on a budget, **Sadhana**, 43(6), (2018).

- 16. Sposito Alex J, Aditya Kurdekar, Zhao Jiangqin and Hewlett Indira, Application of nanotechnology in biosensors for enhancing pathogen detection, *WIREs Nanomed Nanobiotechnol*, (2018).
- 17. E Rajsekhar, K L Narasimham, Aditya Kurdekar, L A Avinash Chunduri, Sandeep Patnaik and K Venkataramaniah, Mass attenuation coefficient measurements of some nanocarbon allotropes: a new hope for better low cost less-cumbersome radiation shielding over a wide energy range, Journal of Nuclear Physics, Material Sciences, Radiation and Applications, 5(2), 255-261, (2017).
- Sandeep Patnaik, Aditya Kurdekar, Lakshmi Adinarayana Avinash Chunduri, Chinnakoti Prathibha and K Venkataramaniah, Naproxen-Gelucire Nanoformulations for Improved Solubility and Dissolution Rate of Poorly Water-Soluble Drug Naproxen, *Journal of Drug Design and Medicinal Chemistry*, 3(6), 77-85, (2017).
- Swayamsiddha Kar, Sai Manohar Chelli, Sai Giridhar Sarma, Kandanur, Srinivas Nanduri, Siva Kumar Belliraj, and Nageswara Rao Golakoti, *In silico* Modeling of New C-12 Substituted-14-Deoxy-Andrographolide Derivatives as Potent Anticancer Leads, *Journal of Pharmacology & Clinical Toxicology*, 5(4), 1083-1089, (2017).
- Sai Giridhar Sairam, Chelli Janardhana, Srikanth Sola, Asha Barooah, Sai Kiran Javvaji, Jiten Jaipuria, Vijayalakshmi Venkateshan and Carani Balaraman Sanjeevi, The role of Lp-PLA2 and biochemistry parameters as potential biomarkers of coronary artery disease in Asian South Indians: a case-control study, *Cardiovascular Therapy and Diagnosis*, 7(6), 589-597, (2017).
- Pradeep Kumar Badiya, Sai Gourang Patnaik, Venkatesh Srinivasan, Narendra Reddy, Chelli Sai Manohar, Raman Vedarajan, Noriyoshi Mastumi, Siva Kumar Belliraj and Sai Sathish Ramamurthy, Ag-protein plasmonic architectures for surface plasmon-coupled emission enhancements and Fabry-Perot modecoupled directional fluorescence emission, *Chemical Physics Letters*, 685, 139-145, (2017).



- 22. Chelli Sai Manohar, A Manikandan, P Sridhar, A Sivakumar, B Siva Kumar and Sabbasani Rajasekhara Reddy, Drug repurposing of novel quinoline acetohydrazide derivatives as potent COX-2 inhibitors and anti-cancer agents, *Journal of Molecular Structure*, 1154, 437-444, (2018).
- 23. Pradeep Kumar Badiya, Jayakumar T P, Venkatesh S and Sai Sathish Ramamurthy, Spacer Layer Engineering for Ultrasensitive Hg(II) Detection on Surface Plasmon Coupled Emission Platform, **Nanotechnology Reviews**, 6(4), 331-338, (2017).
- 24. Manne Anupam Kumar, Sai Gourang Patnaik, V Lakshminarayanan and Sai Sathish Ramamurthy, Elecrochemical Determination of Ethanol by a Palladium Modified Graphene Nanocomposite Glassy Carbon Electrode, *Analytical Letters*, 50(2), 350-363, (2017).
- 25. Pradeep Kumar Badiya, Venkatesh Srinivasan, Sai Prasad Naik, Bebeto Rai, Narendra Reddy, S Prathap Chandran, V Sai Muthukumar, Muralikrishna Molli and Sai Sathish Ramamurthy, Low-Cost Plasmonic Carbon Spacer for Surface Plasmon-Coupled Emission Enhancements and Ethanol Detection: a Smartphone Approach, *Plasmonics*, 13(2), 519-524, (2018).
- Nehra A, Yarramala D S, Bandaru S and Rao C P, Cyclohexyl-diimine capped lower rim 1,3-di-derivatized calix[4]arene conjugate as sensor for Al3+ by spectroscopy, microscopy, titration calorimetry and DFT computations, *Supramolecular Chemistry*, 30(7), 619-626, (2018).
- 27. Sai Giridhar Sairam, Chelli Janardhana, Srikanth Sola, Asha Barooah, Sai Kiran Javvaji, Jiten Jaipuria, Vijayalakshmi Venkateshan and Carani Balaraman Sanjeevi, Diagnostic role and association of Lp-PLA2 with coronary artery disease in a South Indian population, *Indian Heart Journal*, 69(2), S13-S14, (2017).
- 28. Naga Sai Visweswar Kambhampati, Swayamsiddha Kar, Sai Siva Kumar Pinnepalli, Janardhana Chelli and Mukesh Doble, Microbial cyclic β-(1→3),(1→6)glucans as potential drug carriers: Interaction studies between cyclic

- β-glucans isolated from Bradyrhizobium japonicum and betulinic acid, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, 203, 494-500, (2018).
- 29. SwayamsiddhaKar, Rohit Kumar Mishra, Ashutosh Pathak, Anupam Dikshit and G Nageswara Rao, *In silico* modeling and synthesis of phenyl and thienyl analogs of chalcones for potential leads as antibacterial agents, *Journal of Molecular Structure*, 1156, 433-440, (2018).
- 30. Manne Anupam Kumar, Sai Gourang Patnaik, V Lakshminarayanan and Sai Sathish Ramamurthy, Synergistic Hybrid Catalyst for Ethanol Detection: Enhanced Performance of Platinum Palladium Bimetallic Nanoparticles Decorated Graphene on Glassy Carbon Electrode, Journal of Analytical Chemistry, 73(3), 266-276, (2018).
- 31. Sasidhar Siddabattuni, Sri Harsha Akella, Abilash Gangula, Sivakumar B and L A Avinash Chunduri, Dielectric Properties Study of Surface Engineered NanoTiO2/Epoxy Composites, *Bulletin of Materials Science*, 41(13), 1526, (2018).
- 32. G Krishna Prasad, S S P Prashanth, S Srivastava, G Nageswara Rao, D Rajesh Babu, Synthesis, characterization, second and third order non-linear optical properties and luminescence properties of 1,10-phenanthroline-2,9-di(carboxaldehyde phenylhydrazone) and its transition metal complexes, *Open Chemistry*, 15(1), 283-292, (2017).
- 33. Krishna Prasad Gannavarapu, Megha Thakkar, Sidhartha Veerapaga, Liping Wei, Rajesh Babu Dandamudi and Somenath Mitra, Novel diatom-FeOx composite as highly active catalyst in photodegradation of Rhodamine-6G, *Nanotechnology Reviews*, 7(3), 247-255, (2018). DOI: doi. org/10.1515/ntrev-2017-0218
- 34. Swayamsiddha Kar, Adithya K S, Pruthvik Shankar, Jagadeesh Babu N, Shailesh Srivastava and Nageswara Rao G, Nonlinear optical studies and structure-activity relationship of chalcone derivatives with *in silico* insights, *Journal* of Molecular Structure (Elsevier), 1139, 294-302, (2017).

- Kandanur S G S, Nanduri S and Golakoti N R, Synthesis and biological evaluation of new C-12(α/β)-(N-) sulfamoylphenylamino-14-deoxy-andrographolide derivatives as potent anti-cancer agents, *Bioorganic & Medicinal Chemistry Letters*, 27(13), 2854-2862.
- 36. R S Sai Murali, G Nageswara Rao and R Basavaraju, Looking Through The Lens of a Conservation Biologist: Life of Medicinal Plants in the Eastern Ghats of Andhra Pradesh, India, *International Journal of Conservation Science*, 8(2), 333-347, (2017).
- 37. Karthi S Iyer, B S Vijayakumar and A S Viswanathan, The Enigma of Biofilms, *Current Science*, 115 (2018).
- 38. Nivedita Hariharan, Samathmika Ravi, Bulagonda Eswarappa Pradeep, Koushik Narayan Subramanyam, Bibha Choudhary, Subhashini Srinivasan and Prakash Khanchandani, A novel loss-of-function mutation in HACE1 is linked to a genetic disorder in a patient from India, *Human Genome Variation*, 5, 17061, (2018).
- 39. Bhavani Manivannan, Deepak Gowda, Pradeep Bulagonda, Abhishek Rao, Sai Suguna Raman and Shanmuga Vadivoo Natarajan, Surveillance, Auditing, and Feedback Can Reduce Surgical Site Infection Dramatically: Toward Zero Surgical Site Infection, **Surgical Infections**, 19(3), (2018). DOI: 10.1089/sur.2017.272
- Girish T N, B E Pradeep, and Ravi Parkash, Heat and humidity induced plastic changes in body lipids and starvation resistance in the tropical fly Zaprionus indianus during wet and dry seasons, *Journal of Experimental Biology*, 221(9), (2018).
- 41. Niranjana Mahalingam, Bhavani Manivannan, Balaram Khamari, Shivakumara Siddaramappa and Sudeshna Adak, Detection of antibiotic resistance determinants and their transmissibility among clinically isolated carbapenem resistant Escherichia coli from South India, *Medical Principles and Practice*, (2018). DOI: 10.1159/000489885
- 42. B E Pradeep, Bhavani Manivannan, Niranjana Mahalingam, Manmath Lama, Pachi Pulusu Chanakya, Balaram Khamari,

- Sudhir Jadhao, Madavan Vasudevan and Valakunja Nagaraja, Comparative genomic analysis of a naturally competent Elizabethkingia anophelis isolated from an eye infection, *Scientific Reports*, 8(1), 8447, (2018). DOI: 10.1038/s41598-018-26874-8
- 43. T N Girish, B E Pradeep and Ravi Parkash, Drosophila as a Powerful Modern Tool for Teaching Concepts in Biology and Biomedical Research, *International Journal of Zoological Investigations*, 3(1), 21-28, (2017).
- 44. Girish T N, Pradeep B E and Ravi Prakash, Impact of Global Climate Warming on Animal Ecology and Human Health, *International Journal of Zoological Investigations*, 3(2), 179-187, (2017).
- 45. Aswath Narayanan, Prakash Khanchandani, Roshan P, Chandrashekar Reddy Ambati, Arun Roy, Xu Han, Ritesh N Bhoskar, Srinivas Ragampetta, Francis Gannon, Balasubramanian Karanam, Vijaya Mysorekar, Sai Muthukumar V and Venketesh Sivaramakrishnan, Avascular Necrosis of Femoral Head: A Metabolomic, Biophysical, Biochemical, Electron Microscopic and Histopathological Characterization, *Scientific Reports*, 7(1), (2017). DOI: 10.1038/s41598-017-10817
- 46. Arumugam N, Almansour A I, Suresh Kumar R, Altaf M, Padmanaban R, Sureshbabu P, Angamuthu G, Kotresha D, Manohar T S and Venketesh S, Spiropyrrolidine/spiroindolizino [6,7-b]indole heterocyclic hybrids: Stereoselective synthesis, cholinesterase inhibitory activity and their molecular docking study, *Bioorganic Chemistry*, 79, 64-71, (2018).
- 47. Sangeetha K N, Sujatha S, Muthusamy V S, Anand S, Shilpa K, Jyothi Kumari P, Sarathkumar B, Thiyagarajan G and Lakshmi B S, Current trends in small molecule discovery targeting key cellular signaling events towards the combined management of diabetes and obesity, *Bioinformation*, 13(12), 394-399, (2017).
- 48. Sai Praneeth Thota, Sai Manohar Thota, Saikrishna Srimadh Bhagavatham, Kaja Sai Manoj, Vijaya Sayee Sai Muthukumar, Sivaramakrishnan Venketesh, Praveen V Vadlani and Siva umar Belliraj, Facile one-pot hydrothermal synthesis of stable and biocompatible fluorescent carbon dots from lemon grass herb, *IET*

- **Nanobiotechnology,** 12(2), 127-132, (2018).
- 49. Kumar R S, Abdulrahman I A, Natarajan A, Althomili D M Q, Basiri A, Kotresha D, Thota Sai Manohar and Venketesh S, Ionic liquid-enabled synthesis, cholinesterase inhibitory activity, and molecular docking study of highly functionalized tetrasubstituted pyrrolidines, *Bioorganic Chemistry*, 77, 263-268, (2018).
- Shobha IR and Andallu B, Antioxidant, antidiabetic and hypolipidemic effects of aniseeds (Pimpinella anisum L.): In vitro and in vivo studies, Journal of Complimentary Medicine and Alternative Healthcare, 5(2), 2017.
- 51. Ghoora M D and Srividya N, Storage effects on phytochemicals, antioxidant activity and sensory quality of fenugreek (Trigonella foenum-graecum L.) microgreens and mature leaves, *International Journal of Food and Nutritional Science*, 6(4), 59-68, (2017).
- 52. M Srijaya and B Shanthti Priya, Impact of gamma irradiation and osmotic dehydration on quality characteristics of guava (Psidium guajava) slices, **Asian Journal of Dairy and Food Research**, 36(3), 197-205, (2017).
- 53. Dhanya K and Srijaya M, Development of Functional Sapodilla Flakes with Neutraceutical and Health Regulatory Components and their Quality Characteristics during Storage, *International Journal of Food and Nutritional Sciences*, 7(1), 45-55, (2018).
- 54. Sumana A and Aruna M, Formulation and quality evaluation of agathi (Sesbania grandiflora (L.) Poir) leaves enriched pizza base a healthier substitute for the regular pizza base, *International Journal of Home Science*, 3(2), 383-386, (2017).
- 55. Sumana A and Aruna M, Functional quality, sensorial and shelf life characteristics of Agathi (Sesbania grandiflora (L). Poir leaves enriched breads, *Functional Foods in Health and Disease*, 7(6), 429-441, (2017).
- Sumana, E Sreedevi and M Aruna, Health enhancing properties of an edible flower sesbania grandiflora (I) poir (agathi) based processed product, *Indian Research Journal of Pharmacy and Science*, (2018).

Conference Presentations / Proceedings

- 57. V Sai Raam, S Balasubramaniyan and Darshan Gera, Multiple Face-Component Analysis: A Unified Approach towards Facial Recognition Tasks, 2nd International Conference on Man and Machine Interfacing, IEEE MAMI 2017 (21-23 Dec 2017) Bhubaneswar, Odisha.
- 58. Manuj Subhankar Sahoo, Pallav Kumar Baruah, HBasechainDB – A Scalable Blockchain Framework on Hadoop Ecosystem, **Asian Conference on Supercomputing Frontiers, SCFA 2018** (27 Mar 2018) Singapore.
- 59. B Abhinay, K Anirudh, J Bhanu Teja and Pallav Kumar Baruah, A Fast GPU-based Global Sampling Method for Alpha Matting on High Resolution Images, *IEEE International Conference on High Performance Computing, Data, and Analytics*, Student Research Symposium (18 Dec 2017) Jaipur, India.
- 60. Manuj Subhankar Sahoo, Digendra Rai, P Sai Laskhman, Pallav Kumar Baruah and Adarsh Saraf, HBasechianDB2.0 - A Scalable Blockchain Framework on Hadoop Ecosystem, *IEEE International Conference on High Performance Computing, Data, and Analytics*, Student Research Symposium (18 Dec 2017) Jaipur, India.
- 61. Manoj Kumar, Digendra Rai, Abhishek Gupta, Pallav Kumar Baruah, Parallel Implementation of Screen Content Video Compression based on Block Classification Scheme, *IEEE International Conference on High Performance Computing, Data, and Analytics*, Student Research Symposium (18 Dec 2017) Jaipur, India.
- 62. P Murali Krishna and Pallav Kumar Baruah, Scalable Real Time Rule Engine Model, IEEE International Conference on High Performance Computing, Data, and Analytics, Student Research Symposium (18 Dec 2017) Jaipur, India.
- 63. K Sathyanarayanan, Kota Chetan Satyanarayan, R Sai Varun and Pallav Kumar Baruah, Parallel Implementation of Neighbourhood Repulsed Metric Learning, *IEEE International Conference on High Performance Computing, Data, and Analytics*, Student Research Symposium (18 Dec 2017) Jaipur, India.

- 64. B V K Bharadwaj and Pallav Kumar Baruah, Oscillation Criteria for Higher order Coupled Systems, *International Conference on Applied Analysis, Mathematical Modeling and Computing Techniques (ICAAMMCT 2018)* (15-17 Mar 2018) Gandhigram Rural Institute, Gandhigram, Tamil Nadu.
- 65. Anil Kumar Reddy, Sai Vikas, Raghunatha Sarma, Gurudat Shenoy and Ravi Kumar, Segmentation and Classification of CT Renal Images using Deep Networks, ICSCSP-2018: Springer International Conference on Soft Computing and Signal Processing (22-23 Jun 2018) Malla Reddy College of Engineering And Technology, Hyderabad.
- 66. Sai Shyam Sharma, Sanik Thapa and Chaitanya Pavan Tanay, A Robust Colour Video Watermarking Technique using DWT, SVD and Frame Difference, 7th International Conference on Pattern Recognition and Machine Intelligence (PReMI'17) (5-8 Dec 2017), Kolkata.
- K S P Sowndarya and Y Lakshmi Naidu, Perfect Domination for Bishops, Kings and Rooks on Square Chessboard, International Conference on Recent Trends in Graph Theory and Combinatorics (ICRTGC-2018) (26-29 Apr 2018) Cochin University, Kerala.
- 68. Abhilash Achanta, Balla Ananda Rao, Sai Sundar Kandarpa, Siva Sankara Sai S, Krishna Chaitanya V and Krishna Kumar, Radio over Fiber link design for the Fronthaul of cellular communication systems, 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (17 Dec 2017) Bhubaneshwar, Odisha.
- 69. L A Avinash Chunduri, Sandeep Patnaik, Aditya Kurdekar, Saikiran Aditha, C Prathibha and K Venkataramaniah, Single step Hydrothermal Synthesis of Amine Functionalized Carbon Quantum Dots from Citric acid for early Diagnosis of HIV Infection, *Andhra Pradesh Science Congress* (7-9 Nov 2017) Visakhapatnam, Andhra Pradesh.
- 70. Sandeep Patnaik, L A Avinash Chunduri, Aditya Kurdekar, Saikiran Aditha, C Prathibha and K Venkataramaniah, Novel Nanoformulations for overcoming the challenge of poor water solubility of some Nonsteroidal Anti-inflammatory Drugs, Andhra Pradesh Science Congress

- (7-9 Nov 2017) Visakhapatnam, Andhra Pradesh.
- 71. Ruman Dutta, Sai Krishna S, Gowrishankar R, Subhanu G J and Siva Sankara Sai S, Fragmentation-Aware Routing, Wavelength and Spectrum Assignment (RWSA) Scheme in Flex-grid Optical Networks, 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (17 Dec 2017) Bhubaneshwar, Odisha.
- B V Avinash, M Sai Siva Ramakrishna, Gowrishankar R and Siva Sankara Sai S, A Docker based test-bed for GMPLS simulation, 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (17 Dec 2017) Bhubaneshwar, Odisha.
- 73. Muralikrishna Molli, Bharadwaj Chowdary, Sai Muthukumar and R Gowrishankar, Nonlinear optical transmission of nanocrystalline FeSe2 in the ultrafast excitation regime, *International Conference on Condensed Matter and Applied Physics (ICC 2017)* (24-25 Nov 2017) Govt. Engineering College, Bikaner, Rajasthan. AIP Conference Proceedings 1953, 030273 (2018). DOI: doi.org/10.1063/1.5032608
- 74. Muralikrishna Molli, Bharadwaj Chowdary, Sai Muthukumar and R Gowrishankar, Nonlinear Optical transmission of Nanocrystalline Cu2Se in the ultrafast excitation regime, *International Workshop on Advanced Materials* (*IWAM 2017*) (19-21 Dec 2017) National Institute of Science and Technology, Berhampur, Odisha.
- S Sairam, Ranjan Rai and Muralikrishna Molli, Studies on temperature coefficient of resistivity of Cu2Se -V2O5 nanocomposite, *International Conference on Condensed Matter and Applied Physics (ICC 2017)* (24-25 Nov 2017) Govt. Engineering College, Bikaner, Rajasthan. AIP Conference Proceedings 1953, 030266 (2018). DOI: doi.org/10.1063/1.5032601
- 76. Bharadwaj Chowdary, Kaushik Jayaraman and Muralikrishna Molli, Effect of sulfur doping on thermoelectric properties of Sodium Tantalate A first-principles study, International Conference on Condensed Matter and Applied Physics (ICC 2017) (24-25 Nov 2017) Govt. Engineering College, Bikaner, Rajasthan. AIP

- Conference Proceedings: 1953, 110005 (2018). DOI: doi.org/10.1063/1.5033030
- 77. Murali Ravi, Shashidhara TG, Angu Sewa, Sivaramakrishnan S and Siva Sankara Sai S, MBMIR: An efficient Image Reconstruction technique for rapid algorithmic implementation, *IEEE International Conference on High Performance Computing, Data, and Analytics* (18 Dec 2017) Jaipur, India.
- 78. Pamarti Viswanath, Sadhu Sai Pavan Prashanth, Muralikrishna Molli, Jaschin Prem Wicram, and Sai Muthukumar V, Optical and vibrational spectroscopy of Ba0.85Ca0.15Zr0.1Ti0.9O3 modified lithium borate glass ceramics, 62nd DAE Solid State Physics Symposium (26-30 Dec 2017) Bhabha Atomic Research Centre, Mumbai. AIP Conference Proceedings: 1942, 070035 (2018). DOI: doi.org/10.1063/1.5028833
- 79. Gowrishankar R and P C Sood, Two-particle structure in odd-odd nucleus, 62nd DAE-BRNS Symposium on Nuclear Physics (20-24 Dec 2017) Thapar University, Patiala, Punjab. Conference Proceedings: 62 (2017), 134-135.
- 80. P C Sood, and Gowrishankar R, Non-Coriolis Band Mixing in Deformed Nuclei, *62nd DAE-BRNS Symposium on Nuclear Physics* (20-24 Dec 2017) Thapar University, Patiala, Punjab. Conference Proceedings: 62 (2017), 214-215.
- 81. B Siva Kumar and Thota Sai Praneeth, Groundnut Shell as renewable alternative source for biofuels, carbon dots and ultracapacitors, 105th Annual Session of the Indian Science Congress Association (16-20 Mar 2018) Manipur University, Imphal, Manipur.
- 82. Sahida Sharma and B Andallu, Heavy metals in soil, water, vegetables and fruits in the fields close to cement and slab industries in Anantapur District, *Specialised, Ayurvedic & Innovative Nutrition* (16-17 February 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 83. S K Belliraj, T S Praneeth and P V Vadlani, Biomass processing for renewable energy applications: Microbial consorti, *3rd Green* & *Sustainable Chemistry Conference* (13 May 2018) Berlin, Germany.
- 84. Pradeep Kumar Badiya, Sai Sathish Ramamurthy, Surface Plasmon-Coupled

- Emission based determination of biologically and chemically important molecules, *Dr. K V Rao Research Awards* **2017-18 in Physics** (17 Mar 2018) Hyderabad.
- 85. G Krishna Prasad and D Rajesh Babu, One Pot, Microwave Assisted Green Synthesized Metals Decorated/ r-GO Hybrids as Electrocatalysts in HER, Hydrogen Energy and related Advanced Materials (HEAM) Scientist 2018 (5 Mar 2018) University of Kerala, Trivandrum.
- 86. Chelli Sai Manohar and B Sivakumar, Elucidating the soft spot CYP3A4 Metabolic Profiling of small molecule kinase inhibitors, *Breaking Barriers through Bioinformatics*& Computational Biology (31 Jul 2017) Supercomputing Facility for Bioinformatics and Computational Biology (SCF-Bio), IIT, Delhi.
- 87. B E Pradeep, M Bhavani, M Niranjana, Manmath Lama, P Chanakya, K Balaram, J Sudhir, V Madavan and V Nagaraja, Elizabethkingia anophelis, an emerging opportunistic pathogen involved in diverse human infections, *Infectious Diseases: Biology to Intervention Strategies*, The World Academy of Science Regional Office for Central & South Asia (TWAS-ROCASA) (7-9 Sep 2017) Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore.
- 88. Mukul Anand and R Basavaraju,
 Phytochemical profile and
 pharmacological potential of Tecoma
 stans, National Conference on
 Advanced Research in Pharmaceutical
 and Chemical Sciences Emerging
 Challenges in Practice (15-16 Sep 2017)
 Jawaharlal Nehru Technology University
 Oil Technological and Pharmaceutical
 Research Institute (JNTU-OTPRI),
 Anantapur, Andhra Pradesh.
- 89. Thirnahalli Nagaraj Girish, Heat and humidity trigger plastic changes in body lipids and starvation resistance in the tropical Zaprionus indianus, *Integrative Biology 2018* (26 Feb 2018) Bangkok, Thailand.
- Lakshmi Priya and Tapasya Anand,
 Effect of different drying techniques on
 certain phytochemicals and antioxidant
 activity of two fruit samples, National
 Conference on Advanced Research in
 Pharmaceutical and Chemical Sciences

- Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University - Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 91. Ghoora M D and Srividya N, Elemental composition, phytochemical content and in vitro antioxidant activity of fenugreek micro, baby and mature leaves, 17th Global Dieticians and Nutritionists Annual Meeting (2-3 Oct 2017) Kuala Lumpur, Malaysia.
- Gayathri S and Meera M, Development of millet based cookies for better health, 26th Indian Convention of Food Scientists & Technologists (7-9 Dec 2017) CSIR-Indian Institute Chemical Technology, Hyderabad.
- Bharathi ST, Shende S, Haldipur A C, Ghoora M D and Nagarajan S, Nutritional profile, phytochemical content and agronomic biofortification studies in sunflower (Helianthus annus) sprouts, 26th Indian Convention of Food Scientists & Technologists (7-9 Dec 2017) CSIR-Indian Institute Chemical Technology, Hyderabad.
- 94. N Saiharini and A Padmaja, Extraction and characterization of Passion Fruit peel, **26**th **Indian Convention of Food Scientists & Technologists** (7-9 Dec 2017) CSIR-Indian Institute Chemical Technology, Hyderabad.
- 95. Vijaya M and Srijaya M, Effectiveness of using osmo active infusion substances alternative to sucrose in osmotic dehydration of selected fruits, 26th Indian Convention of Food Scientists & Technologists (7-9 Dec 2017) CSIR-Indian Institute Chemical Technology, Hyderabad.
- 96. Ghoora M D and Srividya N, Tropical microgreens: A nutritional and antioxidant-rich novel produce for enhancing rural and household food and nutritional security, 26th Indian Convention of Food Scientists & Technologists (7-9 Dec 2017) CSIR-Indian Institute Chemical Technology, Hyderabad.
- 97. Talari S, Ghoora M D and Srividya N, Effect of temperature, packaging and edible coating on the postharvest quality and shelf life of roselle (Hibiscus sabdariffa L.) microgreens, 26th Indian Convention of Food Scientists & Technologists (7-9

- Dec 2017) CSIR-Indian Institute Chemical Technology, Hyderabad.
- 98. Varsha, R Murkhandi and Sumana A,
 Evaluation of Shoe flower (Hibiscus rosasinensis) extract as biocolorant in a food
 model system, National Conference on
 Advanced Research in Pharmaceutical
 and Chemical Sciences Emerging
 Challenges in Practice (15-16 Sep 2017)
 Jawaharlal Nehru Technology University
 Oil Technological and Pharmaceutical
 Research Institute (JNTU-OTPRI),
 Anantapur, Andhra Pradesh.
- 99. E Vijaya and Sumana A, Prospects for biocolourants The next generation food additives in food industry, **National Conference on Advanced Research in Pharmaceutical and Chemical Sciences** Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 100. Keerthana H K and Srijaya M, Recent developments in osmotic dehydration technique for improving the post-harvest quality of fruits and vegetables, *National Conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice* (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 101. Gayatri S and Meera M, Storage stability millet based papaya enriched cookies, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences - Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University - Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 102. Lakshmi and Meera M, Analysis of Millet incorporated recipes, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 103. Meera M and Vimalakumari, Shelf Stability of underutilized green leafy vegetable incorporated dehydrated

- products, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences - Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University - Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 104. K Avantika and Meera M, Development of gluten free cookies for better health, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 105. Asharani Pichika and Meera M, Flax seed and Garden-cress seed Incorporated snack food, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 106. Bhawana Rai and A Padmaja,
 Development of passion fruit jelly,
 National Conference on Advanced
 Research in Pharmaceutical and
 Chemical Sciences Emerging
 Challenges in Practice (15-16 Sep 2017)
 Jawaharlal Nehru Technology University
 Oil Technological and Pharmaceutical
 Research Institute (JNTU-OTPRI),
 Anantapur, Andhra Pradesh.
- 107. A Padmaja, K Nageswari and N B L Prasad, Development of value added food products from green gram, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences - Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University - Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 108. Anusha B and Andallu B, Radical scavenging and reducing potential of Trachyspermum ammi L. (ajwain) plant extracts, National Conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical

- Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 109. Shagana M and Andallu B, Screening of Marathi mogga and Kapok buds for phytochemicals, **National Conference on Advanced Research in Pharmaceutical and Chemical Sciences Emerging Challenges in Practice** (15-16 Sep 2017) Jawaharlal Nehru Technology University Oil Technological and Pharmaceutical Research Institute (JNTU-OTPRI), Anantapur, Andhra Pradesh.
- 110. Shagana M and Andallu B, Isolation of phytochemicals from medicinally unexploited spices Marathi mogga and kapok buds, *Pharma Transpire 3rd International Conference on Design Development and Practice of Drugs* (1-2 Feb 2018) CES College of Pharmacy, Kurnool, Andhra Pradesh.
- 111. Anusha B and Andallu B, In vitro anti-inflammatory activity of ajwain (Trachyspermum ammi L.) plant extracts, *Pharma Transpire 3rd International Conference on Design Development and Practice of Drugs* (1-2 Feb 2018) CES College of Pharmacy, Kurnool, Andhra Pradesh.
- 112. Shagana M and Andallu B, Assessment of bioactivity (in vitro) of Marathi mogga (Kapok buds): Two varieties, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 113. Shobha IR and Andallu B, Anticarcinogenic potential of aniseeds (Pimpinella anisum L.) in human cancer cell lines, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 114. Anusha B and Andallu B, Phytochemical screening and assessment of medicinal properties of Trachyspermum ammi L (ajwain) plant, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 115. Kousalya S B, Hema Kumari K, Kaivalya S and Andallu B, Functional properties

- of spices, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 116. Kritika S and Sumana A, A comparative study of conventional processing methods of wheat-horse gram An underutilised legume, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 117. Gayathri S and Sumana A, Acceptability and Consumption of dark chocolates An Indian perspective, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 118. Anjali R, Narmada R, Pavani L, Sai Priya K S and Sumana A, Management of food needs and nutritional requirements in emergency situations, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 119. Pushkala R, Padmanabh and N Srividya, Applications of international software tools for community-based nutrition research, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 120. Bharathi U S T, Haldipur A C and Nagarajan S, Agronomic biofortification: A simple low cost strategy for the improvement essential minerals, phytochemicals and antioxidant quality of sunflower sprouts, International Conference on Specialised Ayurvedic and Innovative Foods and
 - Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 121. Haldipur A C, Nagarajan S, Antidiabetic plant metabolites, in vitro therapeutic potential and Ayurveda based evaluation of Kattuyanam and bamboo rice, *International Conference on Specialised*

- Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 122. G Pushpalatha, Iyer G Ananya, G Santoshi and M Srijaya, Emerging trends in food processing, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 123. Sailavanya K and Srijaya M, Development and storage stability of functional guava flakes, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 124. Keerthana H K and Srijaya M, Influence of process parameters on mass transfer rates during osmotic dehydration of jamun fruit (Syzygium cumini. L.) skeels using dynamic infusion technique, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 125. Amrutha Sai Vadde and Srijaya M,
 Assessment of nutritional status among
 school going children (7-11 years)
 of Anantapur district, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition*(*SAIFNS 2018*) (16-17 Feb 2018) Sri
 Sathya Sai Institute of Higher Learning,
 Anantapur Campus, Andhra Pradesh.
- 126. B Sai Suruthi, P Jeevana Sindhu, U Sai Mounica, Sparsh Sumniron Subba and A Padmaja, Current regulations for food labeling in India, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 127. N Saiharini and A Padmaja, Study on nutrient composition and in vitro bio active properties of passion fruit peel, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.

- 128. Pavani, Naresh K and Padmaja A,
 Development of cereal bar enriched with
 fruit and peanut meal, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition*(*SAIFNS 2018*) (16-17 Feb 2018) Sri Sathya
 Sai Institute of Higher Learning, Anantapur
 Campus, Andhra Pradesh.
- 129. S Saidharshini, A Thejaswi and N Srividya, Fasting as a healing therapy - Ayurvedic perspective and scientific evidence, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 130. V Harshini, Sai Gayathri H, Gracy Rai and N Srividya, Ancient food culture - What and why?, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 131. V. Amrutha Sai, V. Devi and N Srividya, Home remedies using spices and herbs for common ailments, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition* (*SAIFNS 2018*) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 132. Lakshmi, Shrijana Rasaily and N Srividya, Ayurvedic principles of diet for weight reduction, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 133. N Srividya, Gayathri S and Shagana M, Formulation and evaluation of vitamin fortified instant rasam mix, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition* (*SAIFNS* 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 134. Swati S, M D Ghoora and N Srividya,
 Comparative studies on pre and
 postharvest treatments with Aloe vera
 gel and CaCl2 on the shelf life quality of
 sunflower microgreens. International
 Conference on Specialised Ayurvedic
 and Innovative Foods and Nutrition
 (SAIFNS 2018) (16-17 Feb 2018) Sri

- Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 135. Ghoora M D and N Srividya, Nutritional quality and novel culinary applications of microgreens An emerging space age food crop, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 136. Lakshmi Priya and Tapasya Anand, Development of low cost millet based RTE mix for type 2 diabetic subjects, International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 137. Harshini Sanku, Deepika Pradhan, Sai Darshna, Mrunalini Madan and Tapasya Anand, Role of Indian traditional fermented foods in maintaining good gut health, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 138. Sai Sharanya P V, Prasamsa Rai, Jyothi N S, Sai Priya G and Meera M, Nutrition education strategies, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition* (*SAIFNS 2018*) (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 139. Asharani P and Meera M, Storage stability of garden cress seed and flax seed flour incorporated millet-based cookies, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 140. S Gayatri and Meera M, Development, analysis and consumer education of millet based functional foods, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 141. D Tejashri and Meera M, Formulation, nutrient analysis and acceptability of

- recipes prepared using composite millet flour, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 142. Avantika K and Meera M, Development and quality evaluation of quinoa incorporated composite flour cookies, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.
- 143. Lakshmi A and Meera M, Development and quality assessment of banana incorporated millet based functional cookies, *International Conference on Specialised Ayurvedic and Innovative Foods and Nutrition (SAIFNS 2018)* (16-17 Feb 2018) Sri Sathya Sai Institute of Higher Learning, Anantapur Campus, Andhra Pradesh.

MANAGEMENT & COMMERCE AND ECONOMICS & HUMANITIES

Publications in peer reviewed Journals

- 144. Saileela K and Swetha Thiruchauru, Capturing generations at work place, International Journal for Advance Research and Development, 3(12), (2017).
- 145. Bhavana and Swetha Thiruchanuru, Green Marketing: Gap Analysis in the Decision Making Process of a Green Consumer, *Journal of Business Management & Social Sciences Research*, 7(3), (2018).
- 146. Kothapalli Saileela and Swetha Thiruchanuru, An Empirical Study on Work Belief of Generation X and Generation Y in Digitial Era, *International Journal* of Computational Engineering & Management, 21(2), (2018).
- 147. M Hema Lavanya and N Jayaprada, A Review of Studies on Investor Protection, International Journal for Innovative Research in Science & Technology, 4(9), 94-99, (2018).
- 148. Kolluru Soumya and N Jayaprada, Review of Studies on Micro, Small and Medium

- Enterprises, *International Journal for Innovative Research in Science and Technology*, 4(9), 100-106, (2018).
- 149. Yogita Kansal and Ch Radhakumari, The 'Sir' Impact of Demonetization Measure of Long-Term Growth with Statistical Evidence, *International Journal of Management Studies*, 5, 751-758, (2017).
- 150. Yogita Kansal and Ch Radhakumari, The 'Sir' Impact of Demonetization – Measure of Innovation, International Journal of Advance Research, Ideas and Innovations in Technology, 3(6), 196-204, (2017).
- 151. Yogita Kansal and Ch Radhakumari, The 'Sir' Impact of Demonetization Measure of Rapidity of Growth, *International Journal of Engineering, Technology, Advanced Research and Management*, 1(12), 1-9, (2017).
- 152. N Sivakumar, Service Quality and Innovation in the Public Sector: A Human Values-Based Spiritual Framework, *ICPE Public Enterprise Half-Yearly Journal*, 23(1), 88-101, (2017).
- 153. B Niveditha and D G Padmavathy, Facebook marketing: A brief overview of its Development and Application, *Imperial Journal of Interdisciplinary Research*, 3(11), (2017).
- 154. Chinmie Mukhi and Padmavathy, Change Management and Different aspects impacting it - A critical review of literature, *Imperial Journal of Interdisciplinary Research*, 3(12), (2017).
- 155. Tania Thapar and G Padmavathy, An Emperical study on causes and effects of employee turnover intention in a public sector organization, *Imperial Journal of Interdisciplinary Research*, 3(12), (2017).
- 156. Sivakiran Guptha K and R Prabhakara Rao, The Volatility Behaviour of Emerging BRICS Stock Markets, *International Journal of Management and Development Studies*, 6(8), 95-111, (2017).
- 157. M R Geetha Bala, What is GST and the reason why it is making business and taxes simpler and easier, *International Research Journal of Multi-Disciplinary Studies (IRJMS)*, 4(8), 34-37, (2018).
- 158. Narendra Punati and Raghavender Raju G, Determinants of Crude Oil Prices in India, International Journal of Economics and

- **Management Studies**, 4(10), 1-9, (2017).
- 159. Ankush Sharma and Raghavender Raju G, Exchange Rate Pass-Through in India: A Post-Reform Period Analysis, *Journal of Economic Policy and Research*, 12(1), 74-89, (2017).
- 160. Dhruv Vyas and Raghavender Raju G, Determinants of Operational Efficiency of the Indian Banking Sector: A Panel Data Analysis, *IPE Journal of Management*, 7(2), 1-12, (2017).
- 161. Anil Sai Kumar Y and Raghavender Raju G, Foreign Exchange Risk Management of Selected Non-Financial Indian Firms, *GITAM Journal of Management*, 16(1), 108-122, (2018).
- 162. Rajbhushan J Nayak and V Pandit, Implications of Fiscal Policy on Growth: Alternative Scenarios, *International Journal of Business Quantitative Economics and Applied Management Research*, 4(2)(2017).
- 163. Sayel Basel and R Prabhakara Roa, Beta-Convergence of real per capita GDP in BRICS economies, *Indian Journal of Economics and Development*, 14, 309-315, (2018).
- 164. Shyam Thapa and Dinesh Kumar Choudhury, Time Series Analysis of Automobile Demand in India, International Journal of Creative Research Thoughts, 6(1), 143-150, (2018).
- 165. K U Gopakumar and V Pandit, Food Inflation in India: Protein products, *Indian Economic Review*, 52, 157-179, (2017).
- 166. Mallikarjuna M, Sivakiran Guptha K and Prabhakara Rao R, Modelling Sectoral Volatility of Indian Stock Markets, **Wealth: International Journal of Money, Banking and Finance**, 6(2), 4-9, (2017).
- 167. Sivakiran Guptha K and R Prabhakara Rao, The Volatility Behaviour of Emerging BRICS Stock Markets, *International Journal of Management and Development Studies*, 6(8), 95-111, (2017).
- 168. M R Geetha Bala, What is GST and the reason why it is making business and taxes simpler and easier, *International Research Journal of Multi-Disciplinary Studies* (*IRJMS*), 4(8), 34-37, (2018).
- 169. Narendra Punati and Raghavender Raju G, Determinants of Crude Oil Prices in India,



- 170. Ankush Sharma and Raghavender Raju G, Exchange Rate Pass-Through in India: A Post-Reform Period Analysis, *Journal of Economic Policy and Research*, 12(1), 74-89, (2017).
- 171. Dhruv Vyas and Raghavender Raju G, Determinants of Operational Efficiency of the Indian Banking Sector: A Panel Data Analysis, *IPE Journal of Management*, 7(2), 1-12, (2017).
- 172. Anil Sai Kumar Y and Raghavender Raju G, Foreign Exchange Risk Management of Selected Non-Financial Indian Firms, *GITAM Journal of Management*, 16(1), 108-122, (2018).
- 173. Rajbhushan J Nayak and V Pandit, Implications of Fiscal Policy on Growth: Alternative Scenarios, *International Journal of Business Quantitative Economics and Applied Management Research*, 4(2)(2017).
- 174. Sayel Basel and R Prabhakara Roa, Beta-Convergence of real per capita GDP in BRICS economies, *Indian Journal of Economics and Development*, 14, 309-315, (2018).
- 175. Shyam Thapa and Dinesh Kumar Choudhury, Time Series Analysis of Automobile Demand in India, International Journal of Creative Research Thoughts, 6(1), 143-150, (2018).
- 176. K U Gopakumar and V Pandit, Food Inflation in India: Protein products, *Indian Economic Review*, 52, 157-179, (2017).
- 177. Mallikarjuna M, Sivakiran Guptha K and Prabhakara Rao R, Modelling Sectoral Volatility of Indian Stock Markets, **Wealth: International Journal of Money, Banking and Finance**, 6(2), 4-9, (2017).
- 178. N Vani and Rajeshwari C Patel, Subtext in the Texts of Turgenev and Chekhov, *The Criterion*, 8(3), 1077-1085, (2017).
- 179. Vani Sri N and Rajeshwari C Patel, A Month in the Country and Uncle Vania: A Comparison of Turgenev and Chekhov, *Virtuoso*, 7(2), 5-10, (2017).
- 180. Siddhartha R and Rani P L, The Scramble for India: Decolonising Through the IPL, Research Journal of English Language &

Literature, 6(1), 234-240, (2017).

- 181. Rani P L, Nadine Gordimer: A Natural Blend of Creativity and Responsibility, *Virtuoso*, 7(1), 18-24, (2017).
- 182. Rath, Tapan and A K Behera, Travel across time and space in William Blake's London, *International Journal of Humanities & Social Studies*, 3(4), 7-9, (2017).
- 183. Rath, Tapan and A K Behera, Question of Identity and alienation in Jhumpa Lahiri's Interpretation of Maladies, *International Journal of Advanced Research*, 5(8), 335-336, (2017).
- 184. Rath, Tapan and A K Behera, Teaching Language through Literature, International Journal of Applied Research & Studies, 6(8), 1-5, (2017).
- 185. Mukhi, Mayur and A K Behera, Language of teen with special reference to I am Malala, *Journal of International Academic Research for Multidisciplinary*, 5(9), 129-133, (2017).
- 186. Mohan, Seera Sai and A K Behera, Language of Motivation in Robin Sharma's The Monk who sold his Ferrari, *Indian Journal of Applied Research*, 8(4), 14-16, (2018).
- 187. Swathi Metla, Stereotyping Women in the Fantastic, *Research Journal of English Language and Literature*, 6(1), 375-382, (2018).
- 188. M Praphulla, Sree Pulya Umaamaheswara Saasthrinaha kruthithwam, Rachanoddeshyaha, *Lalithaa Kavi Bharathi*, 9(1), 92-94, (2017).

Conference Presentations / Proceedings

- 189. Swetha Thiruchanuru, Tows Matrix:
 Analysis on Strategies of Small and
 Medium Scale Enterprises (SMEs) in India
 (with reference to Andhra Pradesh SMEs),
 National Conference on Performance,
 Problems and Prospects of MSMEs in
 India (28-29 Jul 2017) Govt. College
 Anantapur (Autonomous), Anantapur.
- 190. N Jayaprada, Role of Angel Investing for brightening up the MSMEs in India, National Conference on Performance, Problems and Prospects of MSMEs in India (28-29 Jul 2017) Govt. College Anantapur (Autonomous), Anantapur.

- 191. N Jayaprada, Income Tax Structure of Individual Assessee Enabling High Compliance in India, *National Seminar on Goods and Services tax, Income Tax, Financial Markets and Services (GSTIFMS-2018)* (29-30 Jan 2018) Sri Sai Baba National Degree College, Anantapur.
- 192. M S Sai Vinod and N Sivakumar,
 Categorizing Motivations of Corporate
 Environmental Responsibility as part of
 CSR in Indian Firms, 3rd International
 Conference on Economic Growth &
 Sustainable Development: Emerging
 Trends (10-11 Nov 2017) Mysore,
 Karnataka.
- 193. Yogita Kansal and Ch Radhakumari, The SIR impact of Demonetisation Measure of Long-term Growth, International Conference on Recent Trends in Technology and its impact on Indian Economy (24 Oct 2017) Bathinda, Punjab.
- 194. Aiswarya Padmnabhan and T R Rajeswari, Work Associates Perception of Quality of Work Life, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu.
- 195. Akshaya N and T R Rajeswari, Indoor Environmental Quality: A Cost Effective Tool to Accelerate Green Building Practices in IDBI Bank Branches, Tamil Nadu, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu
- 196. B Lokeshwari and T R Rajeswari, Education: An Enabler to Empower Women Entrepreneurs, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu.
- 197. Manasa Pola and T R Rajeswari, Financial Literacy of College Teachers: An Evaluation, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu.
- 198. Manjushree M K and T R Rajeswari, Karnataka Tourism: Trends and Patterns of Tourists Preferences over Destination Types, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu.

- 199. Padmalalitha TV and TR Rajeswari, Knowledge Management: The Astute Genome of an Organisation, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu.
- 200. Supriya Sharma and T R Rajeswari,
 Digital India: Reality or Dream?, **National Conference on Emerging Trends in Management Practices in the Globalised Era** (2 Feb 2018) Sivakasi, Tamil Nadu.
- 201. Akshaya N and T R Rajeswari, Green Buildings: A sustainable Approach to water management in IDBI Bank Branches, Tamil Nadu, 3rd International Conference on Economic Growth & Sustainable Development: Emerging Trends (10-11 Nov 2017) Mysore, Karnataka.
- 202. B Lokeshwari and T R Rajeswari, Stimulating and Sustaining Dynamics behind Women Entrepreneurs, 3rd International Conference on Economic Growth & Sustainable Development: Emerging Trends (10-11 Nov 2017) Mysore, Karnataka.
- 203. Manasa Pola and T R Rajeswari, Ripple Effects of Financial Literacy of Individuals, 3rd International Conference on Economic Growth & Sustainable Development: Emerging Trends (10-11 Nov 2017) Mysore, Karnataka.
- 204. Manjushree M K and T R Rajeswari,
 Sustainable Tourism: Assessing Awareness
 and Pro Sustainable Behaviour among
 Karnataka Tourists, 3rd International
 Conference on Economic Growth &
 Sustainable Development: Emerging
 Trends (10-11 Nov 2017) Mysore,
 Karnataka.
- 205. Padmalalitha T V and Rajeswari TR, Towards Greater Realism in Interweaving the Disciplines of Learning for Organisational Sustainability, 3rd International Conference on Economic Growth & Sustainable Development: Emerging Trends (10-11 Nov 2017) Mysore, Karnataka.
- 206. U Pranav and N Sivakumar, Towards identifying the underlying motivations of corporate social responsibility interventions in education sector, 3rd International Conference on Economic Growth & Sustainable Development: Emerging Trends (10-11 Nov 2017) Mysore, Karnataka.

- 207. M R Geetha Bala, What is GST and the reason why it is making business and taxes simpler and easier?, Innovative Strategies, Advances and Challenges in Commerce and Management (15-16 Feb 2018) Savitribai Phule Pune University, Pune.
- 208. M R Geetha Bala, GST and the reason why it is making Business and Taxes simpler and easier, *National Seminar on Goods and Services tax, Income Tax, Financial Markets and Services (GSTIFMS-2018)* (29-30 Jan 2018) Sri Sai Baba National Degree College, Anantapur.
- 209. M R Geetha Bala, A Constitution of India with special provisions for the Welfare of Women, **Role Of Women On Contemporary Issues and Challenges-National Perspective** (6-7 Feb 2018) Government Arts College, Anantapur.
- 210. M R Geetha Bala, Changes of Women Labour, in Labour Market during the Post Reform Period, International Seminar on Developmental Challenges of India after Twenty Five Years of Economic Reforms (16-18 Mar 2018) Banaras Hindu University, Varanasi, Uttar Pradesh.
- 211. P Lavanya, Effective classroom management, *International Conference on Innovative Trends in Teacher Education: Challenges and Strategies* (30-31 July 2017) S V University, Tirupati, Andhra Pradesh.
- 212. B Sai Soujanya Kumari, Comparative analysis: Policies and Programmes for Environmental Education in India and Abroad, National Seminar on Media, Politics and Higher Education (29-30 Aug 2017) Osmania University, Hyderabad.
- 213. Behera, A K, Language of Communication in Technical Education, *ELTAI Chapter at Sambhram* (May 2018) Sambhram Academy of Management Studies, Bangalore.
- 214. N Vani and Rajeshwari C Patel, Study of the Inexplicable in Chekhov's Ivanov (Through the Technique of Subtext), Globalization: Emerging Trends in English Language and Literature (18-20 Jan 2018) Osmania University, Hyderabad.
- 215. M Praphulla, Andubatulo unna sankethika vijnanam - Andipuchukune theeru, **An International Seminar on ITC and language learning: Trends, Issues and**

- **challenges** (21-22 Feb 2018) St. Ann's College for Women, Hyderabad.
- 216. M Praphulla, Sadasiva
 Brahmendrakruthulu Oka adhyayanam,
 A national seminar on Preservation
 and Promotion of Samskritham,
 Sangeetham, Naatakam & Naatyam
 (21 Nov 2017) Veda Samskruti Samithi,
 Hyderabad.
- 217. M Praphulla, Kiratharjuneeya mahakavye manaveeya moolyaani, **National seminar on Samskrithaandhrahindi Bhashaasu Ramayana Bharatha kathaadvayam -Manaveeya moulyaani** (14-15 Mar 2018) Sri Sai Baba National Degree College, Anantapur.

Books

- 218. N Venkatesha Rao, *Ramayana Pradeepa*, Hayagreeva Prakashana (Bangalore) (2018).
- 219. N Venkatesha Rao, *Katakopanishad*, Hayagreeva Prakashana (Bangalore) (2017).
- 220. Vijayasarathi Puchcha, **Athma Thathwardha Ramayanamu**, Blue Rose Publishers (2017). ISBN-13: 978-93-87038-51-6
- 221. Vijayasarathi Puchcha, *Vision and Experience of Truth*, Notion Press (2017).
 ISBN-13: 978-1947586697

Articles

- 222. N Venkatesha Rao, Eeshavasyopanishad, *Tatvachandrika*, 25(4), 29-30, (2017).
- 223. N Venkatesha Rao, Chandrika Vaishishtyam, *Tatvachandrika*, 25(3), 5-8, (2018).
- 224. N Venkatesha Rao, Commentaries of Kamballuru Ramachandra Teertha, *Tatvachandrika*, 25(2), 10-11, (2018).
- 225. N Venkatesha Rao, Doorath Durataram Yattu, *Tatvachandrika*, 25(3), 25-27, (2017).
- 226. N Venkatesha Rao, Gurumevabhigaccet., *Tatvachandrika*, 25(6), 10-11, (2018).
- 227. N Venkatesha Rao, Upanishad-Adyayanam, *Tatvachandrika*, 25(5), 29-30, (2017).

SPECIAL ANNUAL EVENTS

THE SPECIAL ANNUAL EVENTS RELATE TO THE DEVOTIONAL, CULTURAL, PHYSICAL AND SERVICE DIMENSIONS OF SRI SATHYA SAI VALUES-BASED INTEGRAL EDUCATION. THEY ARE ORCHESTRATED TO BRING OUT THE LATENT VALUES AND GOOD QUALITIES IN STUDENTS AND TEACHERS. A LOT OF PLANNING AND EFFORT GOES INTO EACH OF THESE EVENTS.

ALL STUDENTS PARTICIPATE IN THESE EVENTS IN ACCORDANCE WITH THEIR INDIVIDUAL SKILLS AND TALENTS.

SUMMER COURSE IN INDIAN CULTURE & SPIRITUALITY

9-11 Jun 2017

Education is no bookworm affair. The process must include the study and appreciation of all trades, professions and guilds. It must encourage the acceptance of the good and rejection of the bad. Spiritual education is not a distinct and separate discipline. It is part and parcel of all types and levels of education. In fact, it is the very foundation on which a lasting edifice can be built. Secular and spiritual education are like the two halves in the seeds of pulses – the germ that sprouts in-between is fed by both.

Sri Sathya Sai Baba Revered Founder Chancellor

The Summer Course in Indian Culture & Spirituality—blessed by Bhagawan Baba in the current format of three days—exposes students of the university to the rich cultural and spiritual heritage of Bharat. Moreover, it orients students into Bhagawan Baba's educational philosophy and gives them deep, first hand insights into how they can directly benefit from this unique institution.

The central themes of this year's event were lessons learnt from two particular discourses of Sri Sathya Sai Baba in 1984: Mama Dharma - Message of the Gita, and Karmanye vadhikaraste - Right to do action, not the fruits.

The morning sessions comprised of talks by external guests, a quiz on Bhagawan Baba's teachings, a musical presentation and panel discussions on Work, Worship and Wisdom and the SAlence of Diet and Health: Ancient and Modern Perspectives.

The evening sessions, at Sai Kulwant Hall, saw creative talks by students across the campuses of the university on topics such as Our Culture, Our Strength, Our Beloved Swami, The Bhagavad Gita, Tyageinaike Amrutatva Manashuhu, and Sai, the Essence of Sweetness.

The post-dinner paranayam sessions consisted of invited speakers—typically alumni and senior teachers of the university—sharing their unique and divine experiences in the physical presence of the Revered Founder Chancellor the university, Bhagawan Sri Sathya Sai Baba.

PRASANTHI VIDWAN MAHASABHA

5-11 Oct 2017

The evening programmes during seven days of the Veda Purusha Saptaha Jnana Yagna during Dasara are held at Sai Kulwant Hall, Prasanthi Nilayam under the

auspices of the 'Prasanthi Vidwan Mahasabha', where many speakers—primarily students and functionaries of Bhagawan's educational institutions—address the gathering on topics concerning spirituality and philosophy, Bhagawan's teachings and experiences of devotees.

The topics for Prasanthi Vidwan Mahasabha 2017 were: Origins of the Veda Purusha Yagna, The Greatest Mystery of the Universe, Faith in His Divinity, and The Mother Divine.

ANNUAL CONVOCATION

22 Nov 2017

Sri Sathya Sai Institute of Higher Learning (Deemed to be University) held its 36th Annual Convocation at Sai Kulwant Hall, Prasanthi Nilayam in the Divine Presence.

The chief guest was Prof. Anthony R West, Professor of Electroceramics and Solid State Chemistry, Dept. of Material Science and Engineering, University of Sheffield, U.K. Prof. West has dedicated has professional life to field of solid state chemistry with special interest in the synthesis of new oxide materials, their crystal structures and electrical properties.

The format, planning and execution of the SSSIHL convocation ceremony is second to none. The ceremonial procession was led by the university brass band, two students carrying the University Standards on either side of the Registrar (who carried the Ceremonial Mace). Other members of the procession included the Chancellor, Vice-Chancellor, Deans and the Heads of Departments along with the Chief Guest, members of the Sri Sathya Sai Central Trust and the Board of Management.

Following the invocatory veda chanting, the Vice-Chancellor, Prof. K B R Varma prayed to the Revered Founder Chancellor to declare the convocation open. The Convocation was then

45

declared open in the Divine voice of Bhagawan Baba.

The programme included speeches by the Vice-Chancellor, the chief guest and the Revered Founder Chancellor (video).

Following this, 470 candidates for the various programmes of study were admitted to their various degrees (undergraduate, postgraduate and professional programmes as well as 18 Gold Medallists, and 12 Ph.D. awardees) by the Honourable Chancellor, Justice M N Venkatachaliah, former Chief Justice of the Supreme Court of India.

Annual Convocation Drama

The evening session consisted of the Annual Convocation Drama, written, directed and performed by the students of the University.

Titled Sankeertana Saaram (the Soul of singing), the story focused on the personal voyages of two characters, Chakrapani (the lead singer) and Raghupathi, and the challenges they face in trying to take the Lord to every home in a world that only seeks the pursuits of pleasure, and how that quest ultimately leads them to the wise shores of the final destination that every heart beats for, the Lord Himself.

All-Round Gold Medallists

Kotha Hridhay Keerthana

Anantapur Campus - Master of Science in Food and Nutritional Sciences

Akshay Rao

Prasanthi Nilayam Campus - Master of Business Administration

Nitin Ranganathan

Brindavan Campus - Bachelor of Commerce (Honours)

Shiva Rama Krishna Naidu K

Muddenahalli Campus - Bachelor of Business Administration

Gold Medallists

Amrit Kumar, M.Tech. in Computer Science

TSSBabu, M.Tech. in Optoeletronics and Communications

Rahul Raju Pattar, M.Sc. in Mathematics

Santosh C R, M.Sc. in Physics

Sai Prasad Nayak, M.Sc. in Chemistry

Pankaj Kumar, M.Sc. in Biosciences

Sayel Basel, M.A. in Economics

LVSV Durga Prasad, B.Sc. (Hons.) in Mathematics

J Kaushik, B.Sc. (Hons.) in Physics

Jagadeeswara C B, B.Com. (Hons.)

M Adithya Krishna, B.B.A.

A V Sumanth Kumar, B.A. (Hons.) in Economics

Priti Saigal, M.B.A.

Ashrita C Haldipur, M.Sc. in Food Science and Nutrition

Sanjana Marwah, B.Ed.

Vaishali M, B.Sc. in Food Science and Nutrition

Vanitha Reddy Naina, B.Sc. (Hons.) in Chemistry

Shivani Sanjay Kshirsagar, B.A.

Ph.D. Awardees

Ajith Padyana - Computer Science

Novel Compression Techniques to Enhance I/O Performance of High End Computing Applications using Accelerators

C Prathibha – Physics

Adsorption Studies of Engineered Nanoadsorbents for Efficient Defluoridation of Potable Water

Aditya Dileep Kurdekar – Physics

Nanoparticle based Rapid Point of Care Diagnostic Assays for Differential and Accurate Detection of Recent and Chronic HIV Infections

Manne Anupam Kumar – Chemistry

Graphene based nanomaterials for electrochemical determination of biologically and chemically important molecules

Sai Giridhar S – Chemistry

Early detection of Coronary Artery Disease (CAD) in Indians: Study of biomarkers

Ramakrishna Motamarri – Chemistry

Quality Evaluation of Indigenous Cultivated Ganoderma spp. and Catalytic Activity of Biosynthesized Gold Nanoparticles from Marine Algae

Pradeep Kumar Badiya – Chemistry

Low-cost Biomaterials for Bioprocessing and Plasmonic Applications

A S Vishwanathan - Biosciences

Microbial Fuel Cells - Indicators of Performance

G S Srirangarajan – Management

Spirit at the Workplace (S@W): A Study of S@W in Business Organizations in India

Jhaveri Aman Sunil Priti - Management

Developing the Concept and Practice of 'Inclusive Business' for Poverty Alleviation: A Study of Select Organizations from India

G Raghavender Raju – Economics

Current Account of India's Balance of Payments Under The New Economic Policy Regime

Lalitha Sarma R - English Literature

The 'I' of Woman Through the Eye of Shakespearean Drama

ANNUAL SPORTS & CULTURAL MEET

11-15 Jan 2018

A display that best highlights the underpinnings of the system of Values-based Integral Education

The singular focus of all Sai students for the Annual Sports & Cultural Meet has always been to please Bhagawan Baba and make Him proud. On the other hand, Baba—with His divine vision—made sure that these pure feelings of Love were translated into the pursuit of excellence during the meet. One of the foremost of these facets was developing Self Confidence. From concept to performance, each event brought home challenges that seem impossible at first; but with dedication, teamwork and facing fears and doubts, they culminate into outstanding performances.

The other amazing aspect of Sports Meet was thriftiness. With meagre resources, students put together beautiful props, often with recycled materials. This brought to the fore not just creative energy and original ideas, but also a sense of unity to achieve excellence in a limited amount of time under immense pressure.

The fact that the Sports Meet has 100% participation from teachers and students is a feat in itself. This fact also encourages the cultivation of discipline. If one student is late for practice, the entire team is held up. Students therefore learn that whilst you may be the best in the team, it is more important to do *your* best for the team!

In this manner, Bhagawan Baba Himself evolved the culture behind the scenes of the Annual Sports & Cultural Meet to put in effect all the underlying principles of Sri Sathya Sai Values-based Integral Education for students and teachers.

Perhaps as He always said, The End of Culture is Perfection.

Sports Meet

11 Jan 2018

Anantapur, **Brindavan**, **Prasanthi Nilayam** and **Muddenahalli Campuses** presentations:

Pennyfarthing and Half Bikes, Fabric Gymnastics, Gymnasts, Wings, Gymnastics and Pyramid formations, Giant Wheel, Cultural Item (Depicting the Life of a Jawan), Bike Stunts, Zorbonauts, BrinHkers (Brindavan Hockey Players), Twilight Swings, Illuminati, Bhangrā from 'The Sai Gabroo Team', Janbaaz - The gallant stilt adventurers and The Inspirators.

Cultural Meet

12-15 Jan 2018

- o Drama presentation by students of the Brindavan Campus: Bhakta Purandara Dasa
- Cultural presentation by students of the Muddenahalli Campus: The One Step
- Drama presentation by students of the Prasanthi Nilayam Campus: Tripurantakam -A journey of transcendence

Prize Distribution Ceremony 15 Jan 2018

The Prize Distribution Ceremony celebrated the excellent performances in sports and cultural events during the Annual Sports and Cultural Meet and during the academic year 2017/18 by students.

It consisted of awarding cups and prizes to the students of all Sai educational institutions and brief speeches by a teacher of SSSIHL and a few students highlighting the significance of the event.

Ahtletic Champions

Devi Vavilapalli

Postgraduate, Anantapur Campus

Priyanka Antil

Undergraduate, Anantapur Campus

Ashish Baraily

Postgraduate, Prasanthi Nilayam Campus

Thota Sujendra

Undergraduate, Prasanthi Nilayam Campus

Soma Shreyas

Brindavan Campus

Krishnapuram Anil Kumar

Muddenahalli Campus

Cultural Champions

Kanchan Kumar

Postgraduate, Anantapur Campus

Shreelakshmi B

Undergraduate, Anantapur Campus

Yashwant Mukhia

Postgraduate, Prasanthi Nilayam Campus

Anup Mukhia

Undergraduate, Prasanthi Nilayam Campus

Sai Sankara Narayanan S S

Brindavan Campus

Ajay Mukund S

Muddenahalli Campus

Fine Arts Champions

A Bhavana

Postgraduate, Anantapur Campus

Sumani Rai

Undergraduate, Anantapur Campus































COMMUNITY SERVICE

EACH YEAR, STUDENTS AND TEACHERS OF THE UNIVERSITY WORK WITH LOCAL COMMUNITIES AROUND THE CAMPUSES THROUGHOUT THE YEAR. MANY OF THESE SERVICE ACTIVITIES ARE INSPIRED BY STUDENTS THEMSELVES. THEY REFLECT THE IMPACT OF THE UNIQUE EDUCATION THEY RECEIVE HERE. EXAMPLES OF THESE FROM 2017/18 INCLUDE:

CHEYUTHA (EDUCATIONAL SUPPORT)

Anantapur Campus, Ongoing

Postgraduate students of the campus have taken the initiative to tutor the campus contingent workers' school going children and semi-literate adults, in an effort to enhance the academic standard of the children and to aid in completing their home assignments (as majority of their parents are not literates). Adults are trained in basic reading, writing and arithmetic skill development.

NARAYANA SEVA

Anantapur Campus, Every month

Each month, food packets are distributed to the needy poor in the slums around Anantapur town. Approximately 270-300 packets, made from 25 kg. of Pulihora are distributed by four students and a teacher in the hostel auto rickshaw.

The activity exposes students to the marginalized people of society and their underprivileged living conditions.

ADOPTION OF LEPER COLONY

Anantapur Campus, 1986 to date

The students and staff of the Anantapur Campus Girls hostel have adopted a leper colony situated in the outskirts of the town of Anantapur since 1986, with the objective of making the inmates of the colony as self-sufficient as possible. One activity involves students making a variety of handicrafts like cards, bookmarks, rakhis and friendship bands, which in turn are sold to the inmates of the hostel. The money raised is utilized to buy monthly provisions and other basic requirements for the residents of colony. In addition to this, in 2017/18, a small shed was provided to protect the water purifying apparatus kept for the drinking purpose of the inmates.

CELEBRATING CHRISTMAS WITH VILLAGE CHILDREN

Muddenahalli Campus, Christmas 2017

On Christmas morning, the students of the campus visited Muddenahalli village for Christmas celebrations. The nagar sankeertan that commenced from the hostel wound its way into the village. The students offered lighted candles to the children who participated in the bhajan session held at the local Hanuman temple. After the prayers, the children were all offered chocolates as Christmas gifts.

OLD AGE HOME VISIT

Muddenahalli Campus, Feb and Apr 2018

Students of the campus, like earlier years, visited the Sai Dwarakamayee Vriddhashrama, an old age home housing about forty resident, at Sultanpet, Nandi village, about four kilometres from Muddenahalli. The visit would commence with veda chanting and bhajans followed by interaction with the elderly. They spent time enquiring about the well-being of their 'grandparents' and wished them good health. During the interaction, the boys sang songs and listened to stories.

For those residents who could not come to the prayer hall, the students visited them in their living rooms. The visit taught students the value of empathy and respect for elders.

SAI BANDHAN, A BOND OF LOVE

Brindavan Campus, Apr-May 2018

"For the enlightened ones, the entire world is one family," declare our scriptures.

A practical demonstration of this is done through the Sai Bandhan domiciliary outreach program, a collaboration between students of Brindavan Campus, SSSIHL and Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS), Whitefield, Bangalore.

The service programme involves students personally visiting patients who have been operated at the Hospital and enquire about their welfare and whether they are following the post-op regimen prescribed by the doctors. 125 students visited more than 600 patients this year.

For the patients, the program is a reminder that SSSIHMS is interested in their welfare even beyond their stay as an inpatient. In fact, many of them regularly volunteer to do service at the hospital. Students, on the other hand, experienced the difficult conditions that the poor patients have to live under and the enormous difference our hospital is making in their lives.

TRIBAL VILLAGE SERVICE

Brindavan Campus, 16-17 Apr 2018

Similar to the previous years, seventy-five students of I and II year undergraduate and I year postgraduate programmes volunteered to visit tribal schools in the remote forest villages of Kottayur Kollai and Siddhapuram, to serve their student population of 450. The service was supported by the Hosur Sri Sathya Sai Seva Samithi, Bangalore.

In preparation for the service, students packed health kits consisting of daily toiletries and collected old notebooks with blank sheets and stitched together new ones to be given to the children.

The service commenced with nagar sankeertan and veda chanting at a nearby village. Students then divided themselves into groups. One group installed Sai Deep, a device using a soda bottle and chlorinated water sealed in it to refract sunlight into the dark rooms of the tiled houses of the villagers.

Another group went to the schools and conducted classes on the importance of health and hygiene.

Our students conducted various games and competitions and awarded prizes. Much to their surprise, they found that there were students quite proficient and confident in giving speeches in English! There was a girl in Class VII from one of the backward villages who expressed her dream of becoming the collector so that she could bring about development in the area!

SSSIHL students were moved by the abject poverty of the villagers, but seeing the children radiate happiness even in their simple surroundings made them realize the lesson that happiness does not lie in possessions, but in contentment.





















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THE END OF EDUCATION IS CHARACTER

Sri Sathya Sai Baba