



# SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(Deemed to be University)



## International Symposium on Chemistry for a Sustainable Future: *Bridging Science and Society*

**13-14 December 2024**

Organised by  
Department of Chemistry  
Sri Sathya Sai Institute of Higher Learning  
Prasanthi Nilayam, Puttaparthi  
Sri Sathya Sai District  
Andhra Pradesh - 515134

# DAY 1

- 9:00 AM **Inaugural Session**  
**Vedam Chanting, Ceremonial Lighting of the Lamp**
- 9:06 AM **Welcome Address**  
**Prof. Rajni Bhandari**  
Head, Department of Chemistry, Sri Sathya Sai Institute of Higher Learning
- 9:15 AM **Inaugural Address**  
**Prof. B. Raghavendra Prasad**  
Vice-Chancellor, Sri Sathya Sai Institute of Higher Learning
- 9:30 AM **“Electrosynthesis: An Emerging Green and Powerful Strategy in Organic Synthesis”**  
**Prof. Gautam Brahmachari**  
Laboratory of Natural Products & Organic Synthesis, Department of Chemistry, Visva-Bharati University, Santiniketan, West Bengal
- 10:20 AM **“Chemical Concepts and their Role in Designing Nanomaterials for Energy and Environmental Applications”**  
**Prof. K.R.S. Chandrakumar**  
Scientist ‘G’, Bhabha Atomic Research Centre, Department of Atomic Energy Homi Bhabha National Institute, Mumbai, Maharashtra
- 11:10 AM **“Development of Efficient Heterogeneous Catalysts for Transfer Hydrogenation, Carbon Dioxide Conversion and Plastic Upcycling Reactions”**  
**Prof. Venkata Krishnan**  
School of Chemical Sciences, IIT Mandi, Himachal Pradesh
- Lunch Break (12:00 - 1:15 PM)**
- 1:20 PM **“Aligning Clean Air and Climate Action: Selected Insights from a Decade of Atmospheric Chemistry Research Over South Asia to Foster Transdisciplinary Research”**  
**Prof. Vinayak Sinha**  
Dept. of Earth and Environmental Sciences, IISER Mohali, Punjab
- 2:10 PM **“Materials and Processes for Energy Storage Applications”**  
**Dr. B. Venkata Sarada**  
Scientist ‘F’, Centre for Solar Energy Materials, International Advanced Research Centre for Powder Metallurgy & New Materials, Hyderabad, Telangana
- Tea Break (3:00 - 3:20 PM)**
- 3:20 PM **Faculty Presentations**  
**Department of Chemistry**  
**Sri Sathya Sai Institute of Higher Learning**

# DAY 2

8:45 AM **Panel Discussion**  
“Implementing Sustainable Practices in Academia”

9:30 AM **“Surface Solutions as Enablers for Sustainable Manufacturing”**  
**Dr. Vishal Khetan**  
Global Innovation Manager Coatings, Oerlikon Surface Solutions AG,  
Liechtenstein

10:20 AM **“Sun and Sustainability: Materials for Solar-Thermal Conversion”**  
**Prof. Chandramouli Subramaniam**  
Department of Chemistry, IIT Bombay, Mumbai, Maharashtra

11:10 AM **“The Frontiers of AI Research”**  
**Dr. Sampath Koppole**  
Products and Solutions Lead, Healthcare and Life Sciences, Google,  
Switzerland

**Lunch Break (12:00 - 1:15 PM)**

1:20 PM **Demonstrations by Student Clubs**  
Department of Chemistry  
Sri Sathya Sai Institute of Higher Learning

2:10 PM **Poster Session**  
Department of Chemistry  
Sri Sathya Sai Institute of Higher Learning

**Tea Break (3:00 - 3:20 PM)**

3:20 PM **Oral Presentations by Research Scholars**  
Department of Chemistry  
Sri Sathya Sai Institute of Higher Learning

4:00 PM **Concluding Remarks**

4:05 PM **Vote of Thanks**

4:10 PM **Mangala Arathi to BHAGAWAN SRI SATHYA SAI BABA**

## ABOUT THE SYMPOSIUM

This international symposium will explore the pivotal role of chemistry in addressing pressing global sustainability challenges. It will feature cutting-edge advancements in green chemistry and innovative approaches to sustainable manufacturing processes. Key discussions will encompass theoretical frameworks and the application of nanomaterials for environmental monitoring and remediation, with a particular emphasis on atmospheric chemistry and sustainable technologies.

Additionally, the symposium will also focus on the intersection of artificial intelligence and its application in developing solutions within healthcare and life sciences that uphold ecological integrity while enhancing human well-being. Participants will explore innovative industrial practices that demonstrate the potential of Chemistry to advance environmental stewardship and strengthen economic resilience.

Through a collaborative exchange of knowledge and insights, this international symposium aims to inspire emerging researchers to enhance their engagement in the ever-sublime theme of sustainability in chemistry.

### SYMPOSIUM CHAIRMAN AND CONVENOR

**Prof. Rajni Bhandari**

### CO-CONVENOR

**Dr. V N Ravi Kishore Vutukuri**

### ORGANIZING SECRETARY

**Dr. Kumar Sai Smaran**

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