



## **“The 2nd International Conference on Innovations in Molecular Structure & Instrumental Approaches (ICMSI-2025)”**

**Date:** 04/05/2025 & 05/05/2025

**Time:** 09:00 AM TO 04:00 PM

**Venue:** RK University, Main Campus, Rajkot

**Guest:** 1) Dr. Hitesh Saravaia

2) Prof. Nigel Richards

3) Prof. Anoja Attanayake

4) Dr. A.V. Biradar

5) Dr. Jignesh Kamdar

6) Dr. Ashish Tanna

**Targeted Audience & Participants:** Students, Faculties, Researchers & Academicians

**No. Of Participants:** 200+ Students & 10+ Faculties

### **Brief Description of the Event:**

RK University successfully organized the 2nd International Conference on Molecular Structure & Instrumental Approaches (ICMSI-2025) on 7th–8th April 2025, bringing together a vibrant community of 210 participants from across India and abroad. The conference witnessed the participation of students, researchers, academicians, and industry experts, creating a dynamic platform for knowledge exchange and collaborative exploration in the field of molecular sciences. The conference aimed to bridge the gap between theoretical advancements and practical applications by focusing on emerging trends in molecular structure analysis, instrumentation, and interdisciplinary research. ICMSI-2025 provided an enriching environment where scientific ideas converged, fostering innovation and encouraging participants to explore transformative approaches in modern science. A key highlight of the conference was its focus on cutting-edge analytical and visualization techniques. Sessions on cryo-electron microscopy (cryo-EM), single-molecule fluorescence, and advanced optical microscopy demonstrated their revolutionary impact on molecular visualization and biomedical research. These discussions enabled participants to understand how precision tools are reshaping the study of complex molecular systems.



The conference also emphasized the growing role of computational chemistry and artificial intelligence in molecular design. Presentations showcased how AI-assisted approaches are accelerating drug discovery, optimizing chemical synthesis, and enhancing therapeutic development. This integration of digital technologies with chemical sciences highlighted a forward-looking approach toward solving real-world challenges. In addition, ICMSI-2025 explored innovations in advanced and sustainable materials, including supramolecular polymers, biopolymers, synthetic cells, and molecular nanostructures. These sessions underscored the importance of eco-friendly materials and their applications in healthcare, environmental sustainability, and biotechnology. Emerging domains such as gene editing and gene therapy were also discussed, reflecting their immense potential in personalized medicine and next-generation healthcare solutions. The scientific program featured a well-balanced blend of oral and poster presentations, allowing participants to present their research findings and engage with experts. Contributions from global speakers enriched the academic depth of the conference and provided exposure to international research perspectives. The conference was graced by eminent dignitaries and experts. Keynote addresses by Dr. Hitesh Saravaia (CSMCRI, Bhavnagar) and Prof. Nigel Richards (Cardiff University, UK) offered valuable insights into drug discovery and chemical sciences. International speakers, including Prof. Anoja Attanayake (University of Ruhuna, Sri Lanka) and Dr. A.V. Biradar (CSIR-CSMCRI, Bhavnagar), shared their expertise in molecular biochemistry and advanced instrumentation. The presence of distinguished guests Dr. Ashish Tanna and Dr. Jignesh Kamdar further added value to the conference through their academic and professional contributions. A significant milestone of ICMSI-2025 was the launch of the conference abstract book, ensuring the wider dissemination of research and ideas presented during the event. The conference also celebrated young talent by recognizing outstanding contributions. The Royal Society of Chemistry (UK) awarded the best oral and poster presentations, encouraging excellence and innovation among emerging researchers. Overall, ICMSI-2025 successfully emerged as a hub of scientific dialogue, innovation, and collaboration, enabling participants to explore advanced research methodologies and interdisciplinary applications. The conference reinforced RK University's commitment to promoting excellence in molecular sciences, fostering technology-driven research, and contributing to solutions in healthcare, sustainability, and beyond.

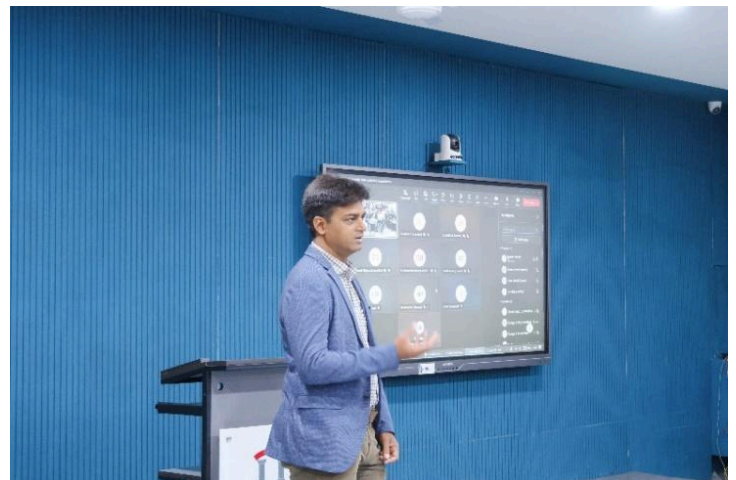
### **Objective of Event:**

The objective of this event is to the sessions, and outcomes of the 2nd International Conference on Molecular Structure & Instrumental Approaches (ICMSI-2025) held at RK University on 7th–8th April 2025. It aims to highlight the latest advancements in molecular science, instrumentation, and research methodologies, as well as showcase the contributions of

participants, speakers, and experts. The report also seeks to capture how the conference facilitated knowledge exchange, interdisciplinary collaboration, and practical applications in areas such as healthcare, pharmaceuticals, material sciences, and sustainable technologies.

### Outcome of Event:

ICMSI-2025 successfully brought together researchers, academicians, and students to share advanced knowledge and practical approaches in molecular science and instrumentation. Participants gained insights into emerging techniques in imaging, computational chemistry, gene editing, and material design, fostering cross-disciplinary understanding. The presentations and discussions highlighted solutions to real-world challenges in healthcare, pharmaceuticals, and sustainability. Recognition of outstanding oral and poster presentations encouraged high-quality research and practical contributions. Overall, the conference strengthened academic collaboration, facilitated global knowledge exchange, and reinforced RK University's commitment to advancing scientific research and applied technologies.





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