







DEPARTMENT OF HUMANITIES & SCIENCES (PHYSICS)

In Association with

Indian Association for Crystal Growth (IACG)
Indian SpectroPhysics Association (ISPA)

INTERNATIONAL SEMINAR ON

MODERN FUNCTIONAL MATERIALS (ISMFM-2024)

21.11.2024, Thursday

Organized by

Functional Materials Research Laboratory (FMRL)





















SAI RAMENGINEERING COLLEGE

An Autonomous Institution
West Tambaram, Chennai - 44
www.sairam.edu.in

ABOUT THE INSTITUTION

Sri Sai Ram Engineering College, Chennai, was founded in 1995 by MJF. Ln. Leo Muthu, Chairman of Sapthagiri Educational Trust, as a non-profit, non-minority institution. With a clear vision, a strong mission, and dedicated leadership, the college has risen to become one of the top educational institutions in the country. Since its establishment, it has expanded significantly, boasting impressive buildings, state—of—the-art laboratories, internet centres, a modern library, and an outstanding sports complex, all spread across 300 acres. The serene campus, with its aesthetically designed structures, sports facilities, and lush greenery, makes it a top choice for Engineering Aspirants. Affiliated with Anna University and approved by the All India Council for Technical Education (AICTE), New Delhi. Sri Sai Ram Engineering College is certified with the Educational Organization Management System (EOMS) IS/ISO 21001:2018, NBA accreditation to all eligible programs, and NAAC accreditation with A+. NIRF ranked it in the 100-150 band, and Diamond rated it by QS-I-GAUGE.

ABOUT INDIAN ASSOCIATION FOR CRYSTAL GROWTH (IACG)

The Indian Association for Crystal Growth (IACG) aims to advance and foster the theory and practice of crystal growth. Its objectives include organizing conferences, seminars, workshops, and hands-on training across the country to educate individuals at various levels and provide a platform for discussing and reporting new developments in the field. Currently, IACG has around 500 active life members involved in crystal growth research. To date, the association has successfully conducted 26 Crystal Growth seminars, many of which have seen international participation.

ABOUT INDIAN SPECTROPHYSICS ASSOCIATION (ISPA)

Indian SpectroPhysics Association (ISPA) is a brain child of Veteran Professor and Scientist Dr. S. Gunasekaran. ISPA was started on April 23, 1998, it is a registered society under whose auspices, conferences, workshops and seminars are organized. ISPA is the peak of a strong belief that enlightening young minds and empowering them to pursue research through Spectroscopy. ISPA has an enviable record of having organized 16 International conferences and 18 National Conferences. ISPA also has organized 20 State Level Technical Seminars in Physical Sciences for PG and M.Phil. students, since 1999. Indian SpectroPhysics Association (ISPA) finds its place in encouraging renowned and young scientists by honouring them with ISPA Awards in the recognition of the research findings of the scientists. 15 Veteran scientist Awards, 54 Life Time Achievement Awards, 86 ISPA Dr. S. Gunasekaran Awards, Dr. S. Mohan Awards, are given to researchers who have made excellent contributions in the field of Research, during Conferences/ Seminars organized by ISPA. An international consortium has been made with the Medical University of Sofia for a tune of 1000 crore for a research project., Visit www.ispa.org.in for more details.

HUMANITIES AND SCIENCES

With a vision to nurture the inquisitive minds of aspiring technocrats and a mission to impart scientific knowledge alongside technical skills through innovative and engaging teaching methods, the Department of Humanities and Sciences has worked diligently to align with the educational goals of the Institution. The Department shapes students' attitudes towards Physics, Chemistry, Mathematics, and English, providing a strong foundation in the core principles of Engineering. Efforts are underway to establish a dedicated Research Labs for Engineering Physics, Engineering Chemistry, and Applied Mathematics.

DEPARTMENT OF H & S (PHYSICS)

The faculty of the Department guide students in understanding the modern technological aspects of Physics, fostering their technical competence. The Physics laboratory offers a professional environment that encourages advanced experiments, such as Hall measurement, Semiconductor diodes, Transistor circuits, JFET oscillators, Lasers, and Optical fibers, providing hands-on training to deepen students' knowledge. Faculty members are actively engaged in research across various fields, including Crystal growth, Crystallography, Thin films, Nanomaterials, Solar cells, Photonics, Biomaterials, and Laser spectroscopy, and they also mentor Research Scholars. Functional Materials Research Laboratory (FMRL) was established in the year 2021 in Sri Sai Ram Engineering College equipped with advanced instruments for synthesizing functional materials such as nanomaterials, crystalline materials, ceramic materials, and solar cell materials for the development of various Opto-Electronic applications.

ABOUT THE CONFERENCE

Recent advancements in science and technology form the foundation of modern scientific and engineering progress. These breakthroughs are made possible through the productive exchange of ideas and meaningful collaboration among Scientists, Engineers, and Researchers from diverse fields of Science, Technology, and Industry. In this context, the Functional Materials Research Laboratory (FMRL) at the Department of Physics, Sri Sai Ram Engineering College, Chennai, in association with the Indian Association for Crystal Growth (IACG) and the Indian SpectroPhysics Association (ISPA), has created a unique platform for Students, Researchers, and Academia to engage with lectures and talks from esteemed scientists across the globe.

Functional Materials Research Laboratory (FMRL), Physics Department is pleased to host the International Seminar on Modern Functional Materials (ISMFM-2024), starting on November 21st 2024. During the seminar, participants will have the opportunity to explore cutting-edge developments in Science and Technology, enhancing their knowledge through insights from distinguished eminent world renowned experts in the fields of advanced materials and device technology.

FOCUSING AREAS

- Rietveld Refinement Crystalline
 Structure Analysis
- Density Functional Theory
- Crystallography Structure Solution
- Optical Components and its applications
- Design of Nanolasers Lumerical Simulations
- Studies on porous Anodic Materials
- Development of perovskite Solar Cells

REGISTRATION DETAILS

This international seminar is open to UG/PG students of Science and Engineering, Researchers, Faculty members and Scientists from Universities, Colleges, R&D institutes and Researchers from Industry. Certificate will be provided for all the registered participants. The interested participants are requested to fill the Google form attached. For any seminar-related queries, please contact us via email given below.

e-mail id: head.fmrl@sairam.edu.in

BANK ACCOUNT DETAILS

Bank Name : City Union Bank Account Name : SEC FMRL

Account Number : 500101012732625

Branch : Poonthandalam

Address : Citi Union Bank

Sri Sairam Engineering College Campus, Sai Leo Nagar, Chennai 600044

IFSC Code : CIUB0000634, MICR No.: 600054125

FEE DETAILS

Faculty / Scientist : Rs. 350/-Research Scholar : Rs. 300/-UG/PG Students : Rs. 200/-Industries : Rs. 500/-

Registration fee includes course materials, lunch, refreshment and certificate. The registration fees may be paid through any mode of online fund transfer to the given bank account.

BEST INTERACTION AWARDS

Best 3 interactions will be awarded with a cash prize and certificates.

IMPORTANT DATES

Last date for Registration **18.11.2024**

REGISTRATION LINK



https://shorturl.at/TMq6B

ADVISORY COMMITTEE

Prof. Mariusz Marchewka, Polish Academy of Sciences, Poland.

Dr. Ajayan Vinu, The University of Newcastle, Australia.

Prof. S. Lourdudoss, KTH-Royal Institute of Technology, Sweden.

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Prof. S. Narayana Kalkura, Crystal Growth Centre, Anna University, India.

Prof. K. Baskar, Indian Institute of Information Technology, Manipur, India.

Prof. D. Arivuoli, Crystal Growth Centre, Anna University, India.

Prof. S. Moorthy Babu, Crystal Growth Centre, Anna University, India.

Dr. K. Shanthi, Crystal Growth Centre, Anna University, India.

Dr. Sasikala Ganapathy, Crystal Growth Centre, Anna University, India.

Dr. Shubra Singh, Crystal Growth Centre, Anna University, India.

INVITED SPEAKERS

Prof. Sebastian Lourdudoss, Department of Applied Physics, KTH-Royal Institute of Technology, Stockholm, Sweden.

Prof. Annie Ng, Nazarbayev Univeristy, Astana, Kazakhstan.

Dr. Dhruv Saxena, Postdoctoral Researcher, Queen Mary University of London.

Dr. C. Venkateswaran, Department of Nuclear Physics, University of Madras, Chennai

Dr. Ranjit Kumar Nanda B, Department of Physics, IITM, Chennai.

Dr. P. K. Sudhadevi Antharjanam, Scientific Staff, SAIF, IITM Chennai.



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Dr. M. Syed Ibrahim

FMRL Research Scholars and RIIC team Students

Address for correspondence:

Dr. N. SIVAKUMAR, Convener - ISMFM-2024

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We build a better nation through quality education.