





DEPARTMENT OF HUMANITIES & SCIENCES (PHYSICS)

In Association with

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





SAI RAM ENGINEERING COLLEGE

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

















ABOUT THE INSTITUTION

Sri Sai Ram Engineering College, Chennai was established in the year 1995 by MJF. Ln. Leo Muthu, Chairman of Sapthagiri Educational Trust, is a non-profitable and non-minority institution. A well defined vision, highly committed mission and dedicated leadership facilitate Sri Sai Ram Engineering College to be in the best of educational institutions in the country. Since its inception, our institution has grown into a vast conglomerate of magnificent buildings, state of the art and sophisticated laboratories, internet centres, modern library and a superlative sports complex-each a land mark in itself across 300 acres. Its quiet and idyllic surroundings, comprising of the architecturally and aesthetically designed buildings, the sports playgrounds and the lush greenery make it one of the most preferred destinations for the aspirants of Engineering studies. The College is affiliated to Anna University and is also approved by the All India Council for Technical Education, New Delhi. Sri Sai Ram Engineering College has developed into a reputed Engineering Institution with NAAC Accreditated with 'A+' Grade and ISO 9001:2015 certifications and in this present year, all the Engineering Courses got accredited by the National Board of Accreditation.

ABOUT INDIAN ASSOCIATION FOR CRYSTAL GROWTH (IACG)

The objectives of the Indian Association for Crystal Growth (IACG) are to promote, encourage and develop the theory and practice of growth of Crystals, to organize Conferences, Seminars, Workshops, Hands on Training etc., in various parts of the country, to educate the people at various levels and offer a proper platform for reporting and discussing new developments in the field of Crystal Growth. To date we have about 800 Crystal Growth research active life members. IACG has successfully organized Twenty Four Crystal Growth seminars, many of them with 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 has an enviable record of having organized 18 International conferences and 22 National Conferences. ISPA also has organized 20 State Level Technical Seminars in Physical Sciences for PG and M.Phil. students, since 1999. 8 Veteran scientist Awards, 45 Life Time Achievement Awards and 75 ISPA Dr. S. Gunasekaran Awards are given to researchers who have made excellent contributions in the field of Research, during Conferences/Seminars organized by ISPA.

HUMANITIES AND SCIENCES

Equipped with a vision to shape the probing minds of aspiring technocrats and induced upon the mission to impart scientific knowledge coupled with technical skills, using innovative and interesting methods of teaching, the department of humanities and sciences has striven hard to understand the educational goals of the institution. Department of Humanities and Sciences mould the students in the right attitude towards Physics, Chemistry, Mathematics and English to render the complete basics of Engineering. Efforts are on to set up a full-time research lab in the fields of Engineering Physics, Engineering Chemistry and Applied Mathematics.

DEPARTMENT OF H & S (PHYSICS)

The department faculties nurture the students to understand the modern technological aspects of Physics, in the process of seeking technical competence. The Physics laboratory provides professional ambience that promotes greater level experiments like Hall measurement, Semiconductor diodes, Transistor circuits, JFET Oscillator, laser and optical fibres and enables the students to get hands-on training with a view to strengthen their knowledge. Our department faculties are working in various areas of research such as crystal growth, crystallography, thin film, nanomaterials, solar cells, photonics, bio-materials, laser spectroscopy and are engaged in guiding the research scholars. Recently the Functional Materials Research Laboratory (FMRL) is established in the Department of Physics with well equipped research instruments to synthesize all the types of functional materials such as nanomaterials, crystalline materials, ceramic materials, solar cell materials and so on.

ABOUT THE CONFERENCE

The recent scientific and technological developments are pillars of modern aspects of science and engineering. This could be possible by the fruitful exchange of ideas and effective collaboration among scientists, engineers and researchers from different dimensions of science, technology and industry. In this connection, Functional Materials Research Laboratory (FMRL), Physics Department of Sri Sai Ram Engineering College, Chennai in association with Indian Association for Crystal Growth (IACG) and Indian SpectroPhysics Association (ISPA) has brought up a unique platform for students, researchers and academia to experience lectures/talks from experienced scientists across the nation.

Functional Materials Research Laboratory (FMRL), Physics Department is very glad to conduct the National Conference on Modern Functional Materials (NCMFM-2023) from 23rd to 24th of March 2023. During the conference, participants shall experience the quintessence of science and technology and upgrade their knowledge from the renowned national scientific expertises in various fields of advanced materials and device technology.

FOCUSING AREAS

- BULK CRYSTAL GROWTH
- NOVEL CRYSTAL GROWTH TECHNIQUES
- NLO AND LASER CRYSTALS
- ELECTRO OPTIC AND ACOUSTO-OPTICS
- COMPUTATIONAL SCIENCE
- LASER SPECTROSCOPY
- MOLECULAR SPECTROSCOPY
- MAGNETIC MATERIALS
- CERAMIC TECHNOLOGY
- THIN FILM TECHNOLOGY
- NANOMATERIALS
- QUANTUM DOTS
- THERMOELECTRIC MATERIALS
- BIO-MATERIALS
- PHOTOVOLTAIC MATERIALS
- SUPERCAPACITOR ELECTRODE MATERIALS
- LI-ION BATTERIES
- FUEL CELLS
- SENSORS
- SOLAR CELL DEVICES

REGISTRATION DETAILS

This national conference 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 complete the registration form attached herewith and submit the pdf file to the conference e-mail id:

ncmfm2023@sairam.edu.in.

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 DD in favour of "SRI SAIRAM ENGINEERING COLLEGE" Payable at Chennai. Online fund transfer is also encouraged.

BANK ACCOUNT DETAILS

Bank Name : City Union Bank

Account Name : Sri Sairam Engineering College, Account

Number : 510909010112273, Branch : Poonthandalam,

IFSC Code : CIUB0000634, MICR No.: 600054125.

AWARDS FOR RESEARCH SCHOLARS

Abstracts related to the conference topics are only invited and the best 3 oral presentations will be awarded a cash prize and merit certificates. The selection will be based on the performance of the candidate's presentation and the decision of the experts panel will be final.

RESEARCH PUBLICATIONS

Selected manuscript will be published in SCOPUS / SCI Indexed Journals

The participants who are willing to send their research outcomes may send one page abstract according to the required format (attached herewith) to

ncmfm2023@sairam.edu.in on or before 28 February 2023

IMPORTANT DATES

Last date for the submission of Abstract : **28.02.2023**Notification for acceptance of Abstract : **05.03.2023**

Last date for Registration : 15.03.2023

ADVISORY COMMITTEE

Prof. Mariusz Marchewka, Polish Academy of Sciences, Poland

Prof. S. Lourdudoss, KTH, Sweden

Dr. Ajayan Vinu, The University of Newcastle, Australia

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

Dr. John V Kennedy, National Isotope Centre, GNS Science, New Zealand

Dr. Kentaro Tashiro, National Institute for Materials Science (NIMS), MANA, Japan

Dr. R. Judit Lisoni, Universidad Austral de Chile, Chile.

Dr. Yuui Yokota, Institute for Materials Research, Tohoku University, Japan

Prof. J. K. Rath, Dept. Of Physics, IITM, India

Prof. C. Vijayan, Dept. Of Physics, IITM, India

Prof. R. Jayavel, Centre for Nanoscience and Technology, Anna University, India.

Dr. M. Arivanandhan, Centre for Nanoscience and Technology, Anna University, India.

Dr. S. Ganesamoorthy, UGC-DAE, Kalpakkam, India.

Dr. G.M. Bhalerao, UGC-DAE, Kalpakkam, India.

Dr. S. Kalainathan, VIT University, Vellore, India.

Dr. N. Vijayan, National Physical Laboratory, New Delhi, India

Dr. Binay Kumar, University of Delhi, New Delhi, India

Prof. C. Venkateswaran, University of Madras, India

Prof. G. Anbalagan, University of Madras, India

Dr. J. Senthil Selvan, University of Madras, India.

Prof. S. Balakumar, University of Madras, India.

Dr. G. Ravi, Alagappa University, India

Dr. P. Murugakoothan, C Kandaswami Naidu College for Men, India.

Dr. J. Madhavan, Loyola College, India.

Dr. R. Mohankumar, Presidency College, India.

Dr. A. Kalpana, Anna University, India

Prof. J. Kumar, Vice Chancellor, Madurai Kamaraj University, Madurai, India

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.

NATIONAL SPEAKERS (TENTATIVE)

Prof. Karuna Kar Nanda, Materials Research Centre, IISc. Bangalore.

Prof. Sushobhan Avasthi, Centre for Nano Science and Engineering, IISc. Bangalore

Prof. J.K. Rath, Dept. Of Physics, IITM, India

Prof. P. Ramasamy, Dean (Research), SSNCE, India.

Prof. S. Gunasekaran, Dean (Research), St. Peters University, India.

Prof. R. Jayavel, Centre for Nanoscience and Technology, Anna University, India.

Dr. G.M. Bhalerao, UGC-DAE, Kalpakkam, India.

Dr. S. Kalainathan, VIT University, Vellore, India.

Dr. N. Vijayan, National Physical Laboratory, New Delhi, India

Prof. S. Balakumar, University of Madras, Chennai, India

Dr. M. Sathish, CSIR-Central Electrochemical Research Institute, Karaikudi, India.



ORGANIZING COMMITTEE

Chief Patron:

Dr. Sai Prakash LeoMuthu

Chairman & CEO, Sairam Institutions

Patron:

Dr. K. Porkumaran, Principal.

Co-Patron:

Dr. S. Ramakrishnan, H.O.D./ H & S

Convener:

Dr. N. Sivakumar, Convener, NCMFM-2023

Organising Secretary:

Dr. P. Maheswari

Treasurer:

Prof. T. K. Subramaniam

Local Organizing Committee

Dr. R. Premanand

Dr. G. Sathish Kumar

Dr. S. Sathiyamoorthi

Dr. G. Ramanathan

Dr. N. Srinivasan

Ms. M. Dhivya

Dr. S. Balamurugan

Dr. E. Brindha

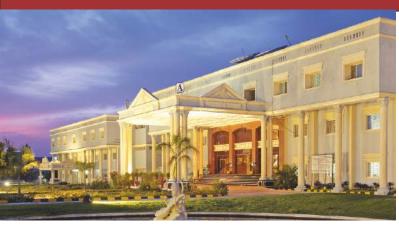
Dr. C. Meganathan

Dr. S. Dinesh

Dr. A. Sathiya Priya

Dr. K. Silambarasan

FMRL-RIIC team Students



Address for correspondence:

Dr. N. SIVAKUMAR, Convener, NCMFM-2023

Functional Materials Research Laboratory (FMRL), Department of H & S (Physics). Sri Sai Ram Engineering College. Sai Leo Nagar, West Tambaram, Chennai-600 044

Mobile: +91 88073 37714 e-mail: ncmfm2023@sairam.edu.in.



Accredited by NBA and NAAC "A+"
ISO 9001:2015 Certified and MHRD NIRF ranke

Campus: Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

Administrative Office: "Sai Bhavan", 31B, Madley Road, T.Nagar, Chennai - 17. Ph: 044-4226 7777.

www.sairamgroup.in







We build a better nation through quality education.



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

Department of Humanities and Sciences (Physics)

National Conference on MODERN FUNCTIONAL MATERIALS (NCMFM-2023)

23.03.2023 & 24.03.2023

REGISTRATION FORM

Name	:	
Designation	:	
Category	:	
(Student/Research Scholar /Postdoc./Faculty/Industry)		
Organisation	:	
Conference theme (Select from focusing area of the conference)	:	
Address for correspondence	:	
Contact No.	:	
E-mail ID	:	
Date:		Signature

FORMAT OF ABSTRACT

Title : Times New Roman, Font 24

Author(s) name : Times New Roman, 14

Affiliation : Times New Roman, 14

Abstract : Max. 250 words (1Fig. with 600 dpi),

Times New Roman, size 12

Keywords : Limit the number of key words to 5

(Times New Roman 12)

References : Limit the reference to 6

(Times New Roman, 12)

Reference style :

Reference to a

journal publication : [1] N. Sivakumar, G. Anbalagan, R. Jayavel, The

art of writing a scientific article, J. Sci.

Commun. 163 (2010) 51-59.

Reference to a book : [1] S. Jhon peter, E.B. White, The Elements

of Style, fourth ed., Longman, New York,

2000.