INVITED SPEAKERS

Prof. Prasad Calvam

Director of Mizzou CERI Greg L. Gilliom Professor of cyber security Department of Electrical Engineering and Computer Science University of Missouri Columbia

Dr. R. Nagalakshmi

Associate Professor Department of Physics National Institute of Technology, Tiruchirappalli.

Dr. A. Dennyson Savarirai

Assistant Professor Department of Chemistry Dongguk University-Seoul campus Seoul, South Korea.

Dr. E. V. Ramana

Associate Researcher i3N, Department of Physics University of Aveiro, Portugal.

Dr. B. Riscob

Scientific Officer-D Microwave and ECE Diagnostics Institute for Plasma Research Gandhinagar, Gujarat.

Dr. T. C. Sabari Girisun

Assistant Professor Nanophotonics Laboratory School of Physics Bharathidasan University, Tiruchirappalli.

Dr. Muthu Senthil Pandian

Research Scientist (Grade-II) Photovoltaic Devices Laboratory SSN Research Centre SSN Institutions, Chennai.

Dr. R. Thangappan

Assistant Professor Department of Energy Science & Technology Periyar University, Salem.

Dr. S. Ramalingam

Associate professor PG & Research Department of Physics A. V. C. College, Mayiladuthurai.

HONORARY CHAIRS

Dr. R. Raj Muhamed

Associate Professor PG & Research Department of Physics Jamal Mohamed College, Tiruchirappalli.

Dr. K. Selvaraju

Associate Professor PG & Research Department of Physics Govt. Arts College, Arivalur.

ORGANIZING COMMITTEE

Patrons

Shri. R. Panchapakesan, Managing Trustee

Shri. P. Ramani, Executive Director

Dr. P. Kannan, Director-Academics

Co-Patrons

Shri. M. Muthusamy, Secretary

Dr. M. Vasuki, Principal

Dr. S. Kala, Dean, Quality & Research

Convener

Dr. M. Sornambal

Head & Associate Professor PG & Research Department of Physics

Coordinator

Dr. S. Rizwana Begum

Associate Professor PG & Research Department of Physics

Organizing Secretaries

Dr. S. Karthiga & Dr. S. Shanmuga Sundari

Assistant Professor

PG & Research Department of Physics

Organizing Committee Members

Dr. K. Seethalakshmi, Associate Professor

Mrs. A. Bhuvaneswari, Assistant Professor/Senr.

Dr. A. G. Anitha, Associate Professor

Dr. P. K. Manimozhi, Assistant Professor

Dr. R. Kavitha, Assistant Professor

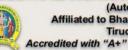
Mrs. T. Malini, Assistant Professor

Dr. K. Maniammal, Assistant Professor

Dr. S. Kanchana, Assistant Professor

Dr. B. Srimathy, Assistant Professor

SEETHALAKSHMI RAMASWAMI COLLEGE



(Autonomous) Affiliated to Bharathidasan University Tiruchirappalli Accredited with "A+" Grade by NAAC (4th cycle)



PG & RESEARCH DEPARTMENT OF PHYSICS Dr. A.P.J. ABDUL KALAM SCIENCE CLUB



organize

2nd INTERNATIONAL VIRTUAL CONFERENCE ON MATERIALS SCIENCE AND APPLICATIONS -2024

ICMSA-2024

01.02.2024 & 02.02.2024



Selected abstracts/full length articles will be published in ISBN proceedings

ABOUT THE COLLEGE

Seethalakshmi Ramaswami College, a pioneer women's institution in India affiliated to Bharathidasan University was founded by Padmabhushan Sri. N. Ramaswami Ayyar in 1951 and attained autonomous status in 1987. It is one of the most renowned educational institutions, moulding women graduates in Indian tradition and culture and it has a unique history of academic excellence. It is one of the first seven colleges accredited by National Assessment and Accreditation council. The College has been accredited with A+ grade by NAAC (4th cycle) in 2019. The College has been funded with research grants from UGC, DBT star college scheme, DST-FIST, ICSSR and TANSCHE. Three granted patents, seven published patents and one filed patent demonstrate the active involvement of the faculty members in research. The college has commendable NCC, Air wing, Sports and Folk-Arts units. The holistic education imparted to the young women in higher education by the institution makes them transformative leaders fostering global competence.

ABOUT THE DEPARTMENT

The Department of Physics, established in the year 1966, is one of the renowned research departments in the college. The department was elevated to a research centre during the year 1979 with 11 research supervisors and so far, 24 Ph.D degrees have been awarded. The department is known for reputed teaching and research which has a team of highly qualified, dedicated and experienced faculty members. The department celebrated its golden jubilee in the year 2016 and continues to serve the women community with quality education. The department is granted with DST- FIST at the department level during the period 2006 - 2011 and 2014 - 2019 under the college level. The B.Voc. programme on "Electronic circuit designer and Electrician" was sanctioned by UGC in the year 2018 under the skill based education through National Skill Qualification Framework (NSQF).

SCOPE OF THE CONFERENCE

The focus of this conference is to bring and unite the international scholars working in the field of material science. The objective of this conference is to share and discuss both theoretical ideas and practical knowledge about the new trending problems, approaches, applications, technological advancements, proficiencies and standards in the field of material science. The young researchers are provided with opportunities to share their findings and to improve their research through oral and poster presentations.

THEMES

- Biopolymers
- Energy storage devices
- Glasses & Ceramics
- Instrumentation
- Luminescence
- Material characterization
- Magnetic Materials
- Nonlinear Optics
- Nanotechnology
- Optoelectronic Devices
- Photonics
- Polymer Composites
- Semiconductor Materials
- Superconducting Materials
- Thin Film Technology
- Ultrasonics & Spectroscopy

CALL FOR PAPERS

Faculty & research scholars who are willing to participate/ present papers can register using the following registration link. https://forms.gle/eGikwWaZaTj28R709

Authors are requested to send the abstract in word format to the following e-mail id. icmsaphysrc@gmail.com

e-Certificate will be provided to all the registered participants.

GUIDELINES FOR ABSTRACT SUBMISSION

One page abstract (not exceeding 300 words) using MS word in the following format

Font & Size : Times New Roman, 12pts.

Title : Bold, Single line spacing.

Title page : Title, author(s), affiliation.

Mobile number & e-mail ids.

Name of authors : Italics.
Alignment : Justified.
Line spacing for content :1.5pts.

Selected abstracts will be published in proceedings with ISBN.

IMPORTANT DATES:

Abstract Submission : 12.01.2024 Date of acceptance : 21.01.2024 Registration Deadline : 26.01.2024

FEE & PAYMENT MODE

Faculty: Rs. 300/-

Research scholars: Rs. 200/-

Students: Rs. 200/-

ONLINE PAYMENT ACCOUNT DETAILS

Account Name : Seethalakshmi Ramaswami College

Account Number: 110112327605 IFSC Code: CNRB0016365

MICR: 620015053

Bank: Canara Bank, S.R.College Branch.

FOR FURTHER DETAILS CONTACT

Dr. S. Rizwana Begum - +91 95859 87404

Dr. S. Karthiga - +91 84280 39389

Dr. S. Shanmuga Sundari - +91 94880 29062

e-mail: icmsaphysrc@gmail.com

ALL ARE CORDIALLY INVITED

SEETHALAKSHMI RAMASWAMI COLLEGE



(Autonomous)
Affiliated to Bharathidasan University
Accredited with A+ by NAAC (4th cycle)
Tiruchirappalli, Tamilnadu



2nd International Conference on

MATERIALS SCIENCE AND APPLICATIONS

(ONLINE)



ICMSA'24

1st & 2nd February 2024

Organised by



PG AND RESEARCH DEPARTMENT OF PHYSICS

ICMSA'24 Programme Schedule

Day 1 - February 1, 2024

9.30 -10.30 am Prayer

Welcome Address Dr. M. Sornambal

Associate Professor & Head

PG and Research Department of Physics Seethalakshmi Ramaswami College

Tiruchirappalli

Presidential Address Dr. M. Vasuki

Principal

Seethalakshmi Ramaswami College

Tiruchirappalli

Special Address Dr. A. Dhanalakshmi

Professor and Former Head

PG and Research Department of Physics Seethalakshmi Ramaswami College

Tiruchirappalli

10.30 - 11.15 am Inaugural Address

Plenary Talk-I

Terbium (Tb) Based Intermetallic Compounds for Low-

Temperature Magnetocaloric Applications

Dr. R. Nagalakshmi

Professor, Department of Physics

Intermetallics and Nonlinear Optics Laboratory

National Institute of Technology

Tiruchirappalli

11.15 am - 12.00 Plenary Talk-II

Noon

Advances in Engineering Metal-Organic Frameworks

for Energy Storage Applications

Dr. A. Dennyson Savariraj

Assistant Professor

Department of Chemistry

Dongguk University

Seoul Campus

South Korea

12.00 - 12.45 pm	Plenary Talk-III	Peculiar Nonlinear Absorption Behaviors in Graphene
		Hybrids
		Dr. T.C. Sabari Girisun
		Assistant Professor
		Nanophotonics Laboratory School of Physics
		Bharathidasan University
		Tiruchirappalli
12.45 - 1.30 pm		Lunch Break
01.30 - 03.00 pm		Paper Presentation
03.00 - 03.45 pm	Plenary Talk-IV	Nanomaterial Characterization Using Molecular
00.00 - 00.43 pm	Tionary Tank IV	Spectroscopy and Computational Tools
		Dr. S. Ramalingam
		Associate Professor
		PG & Research Department of Physics
		A.V.C. College
		Mayiladuthurai
03.45 - 04.30 pm	Plenary Talk-V	Caloric Applications in Dimensionally Modified
		Structures: An Experimental Study
		Dr. E. Venkata Ramana
		Associate Researcher
		i3N, Department of Physics
		University of Aveiro
		Portugal
04.30 – 5.30 pm	Plenary Talk-VI	Material Discovery Using an Intelligent Autonomous
		Research Robot
		Dr. Prasad Calyam
		Director of Mizzou CERI
		Gerg L. Gilliom Professor of Cyber Security
		Department of Electrical Engineering & Computer Science
		University of Missouri

Columbia

Day 2 - February 2, 2024

09.30-10.15 am Plenary Talk-VII Hierarchical Nanostructured Electrode Materials for

Energy Storage Devices

Dr. R. Thangappan

Assistant Professor

Department of Energy Science & Technology

Periyar University

Salem

10.15-11.30 am Poster Presentation

11.30-12.15 pm Plenary Talk-VIII Development of Device Quality Technologically

Important Nonlinear Optical (NLO) and Ferroelectric

Single Crystals

Dr. Muthu Senthil Pandian

Research Scientist (Grade-II) Photovoltaic Devices Laboratory

SSN Research Centre SSN Institutions

Chennai.

12.15 – 1.30 pm Lunch Break

Valedictory session

02.00-02.15 pm Felicitation Dr. S. Kala

Dean of Quality & Research

Associate Professor Department of Botany

Seethalakshmi Ramaswami College

Tiruchirappalli

02.15-3.00 pm Valedictory Address Role of Microwave Absorbers in Technology

Dr. B. Riscob

Scientific Officer-D

Microwave and ECE Diagnostics

Institute for Plasma Research Department of Atomic Energy

Gujarat

Gandhinagar

3.00 - 3.15 pm

Report Presentation

3.15 - 4.00 pm

Feedback Announcing the Best Poster & Oral Presentation Vote of Thanks

ORGANISERS

PATRONS

Shri R. Panchapakesan, Managing Trustee Shri. Ramani Panchapakesan, Executive Director Dr. Kannan Panchapakesan, Director-Academics

CO-PATRONS

Shri. M. Muthusamy, Secretary
Dr. M. Vasuki, Principal
Dr. S. Kala, Dean of Quality & Research
Associate Professor, Department of Botany

CONVENER

Dr. M. SornambalAssociate Professor & Head
PG and Research Department of Physics

ORGANISING SECRETARIES

Dr. S. Rizwana Begum, Associate Professor Dr. S. Karthiga, Assistant Professor Dr. S. Shanmuga Sundari, Assistant Professor

ORGANISING COMMITTEE

Dr. K. Seethalakshmi, Associate Professor
Mrs. A. Bhuvaneswari, Assistant Professor/Senr.
Dr. A. G. Anitha, Associate Professor
Dr. P. K. Manimozhi, Assistant Professor
Dr. R. Kavitha, Assistant Professor
Mrs. T. Malini, Assistant Professor
Dr. K. Maniammal, Assistant Professor

Dr. S. Kanchana, Assistant Professor **Dr. B. Srimathy**, Assistant Professor

For Queries:



+91 95859 87404 +91 84280 39389 +91 94880 29062 icmsaphysrc@gmail.com

