

1st International Conference on Advanced Materials and Manufacturing (ICAMM-2024)

December 18 & 19, 2024



Organizing Institutes

JISIAR, JIS University, WB, India

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Mahatma Gandhi University, Kerala, India

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The Gdansk University of Technology, Poland

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Council for Scientific and Industrial Research
(CSIR), South Africa

&

The Institut Jean Lamour (IJL), France

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I.M. Sechenov First Moscow State Medical
University (Sechenov University), Russia

JIS Institute of Advanced Studies and Research (JISIAR), JIS University, Kolkata, India, aligning with the dynamic evolution of professional education methodology, has started an academic and industry based research institute with four of its Centers- Centre for Interdisciplinary Sciences, Centre for Health Science & Technology, Centre for Data Sciences, and Centre for Renewable & Sustainable Energy Studies. The goal of this institute is to become one of the most important post graduate and research institutes of the country by realizing the urgent need to fill the gap between academic curriculum and industry's demand. JISIAR has a number of quality programs at Masters, Ph.D, and postdoctoral levels.

Centre for Interdisciplinary Sciences (CIS) is committed to pursuing cutting edge research in design and development of novel polymeric materials, bioprinting, advanced manufacturing, drug-design, nanomedicines, and sensors and theranostics, along with graphene technology in energy, health and environmental sectors adhering to the industrial norms for green and sustainable alternatives.

Host: Dr. Prosenjit Saha, JISIAR, JIS University

Mahatma Gandhi University, Kottayam, Kerala, India is established on 2nd October, 1983 in Kerala, India. The university produces undergraduate, postgraduate and PhD degrees with its thirty university departments, one international and inter-university center, seven inter-university centers, nine inter school centers, one national center, three international centers, seventy nine govt./aided affiliated colleges including ten autonomous colleges, one hundred ninety four unaided affiliated colleges and two hundred twenty five recognized research centers. The institution's educational focus covers a broad spectrum, embracing the interdisciplinary as well as conventional disciplines of Science and Humanities besides professional disciplines.

Host: Prof. Sabu Thomas, Mahatma Gandhi University

Council for Scientific and Industrial Research (CSIR), South Africa is a leading scientific and technology research organization in South Africa that researches, develops, localizes and diffuses technologies to accelerate socioeconomic prosperity in South Africa. The **Advanced Polymer Composite (APC) research group** is a leader in the research and development of high-performance sustainable biocomposites and bioplastics. The group develops production processes for downstream beneficiation of conventional polymers and bioplastics for the plastics industry. The Bioplastics and biocomposites platform within APC group develops sustainable (bio) polymer materials and composites based on biomass-derived fillers/additives and their production processes.

Host: Prof. Maya Jacob Jhon, CSIR-South Africa

The Institut Jean Lamour (IJL) is a fundamental and applied research laboratory in material science. It is a joint unit (UMR 7198) of the CNRS and Université de Lorraine and it is attached to the CNRS Institute of Chemistry. It is a multi-thematic laboratory covering materials, metallurgy, nanosciences, plasmas, surfaces and electronics in response to societal challenges such as energy, environment, the industry of the future, mobility, the preservation of resources and health. Its research work ranges from the design of materials to their industrial applications, and is carried out by twenty five groups organized into four scientific departments and a technological research team. It is supported by eight technical platforms and four support services. The IJL is mainly based in Nancy, France, on the Artem campus. With up to six hundred people including trainees, one hundred fifty partner companies, three hundred peer-reviewed articles published each year, thirty two thesis defenses each year, thirty partner countries in the framework of academic collaborations, the Institut Jean Lamour is one of the largest Institute for materials in Europe.

Host: Prof. Didier Rouxel, Institut Jean Lamour

Gdańsk University of Technology ranks among the top 11 Polish universities in the prestigious Academic Ranking of World Universities (ARWU). It is recognized as the second-best research university in Poland according to the 'Initiative of Excellence - Research University' competition hosted by the Ministry of Science and Higher Education. The Polymer Technology Department, part of the Faculty of Chemistry, focuses on advancing polyurethane technology and other polymer materials using sustainable practices. Key research areas include Utilizing renewable raw materials to synthesize polyurethanes and other polymers, including modifications with vegetable oils, bio-isocyanates, and bio-glycols, as well as chemical recycling processes such as glycolysis and glycerolysis; Developing environmentally friendly synthesis methods for creating biomedical, bioactive, and biodegradable polymers; - Researching sustainable methods for rubber recycling using thermomechanical processes; - Developing advanced polymer composites and nanocomposites. This extensive research and development initiative strives to close the gap between academic innovation and industrial application, focusing on sustainability and the enhancement of material properties.

Host: Prof. Janusz Datta and Prof. Józef T. Haponiuk, the Gdańsk University of Technology

I.M. Sechenov First Moscow State Medical University (Sechenov University) is the top medical university in Russia. Its history begins in 1758 as the medical faculty at Imperial Moscow University. By the 260th Anniversary, the University has grown into academic, research and resource Center of Excellence in the Russian healthcare system. Sechenov University develops Medicine of the Future based on strong academic foundation in clinical medicine, expanding frontiers in advanced multidisciplinary research. Sechenov University trains over 18,000 students from all over the world in a wide range of specialties: general practitioners, surgeons, oncologists, urologists, anesthesiologists, etc. Clinical campus of Sechenov University was established in 1897. It was considered as one of the best and largest teaching hospitals in Europe. Today, the modern fully renovated University Hospitals have: 4 000 staff members, 3 000 hospital beds and over 30% of high-tech surgeries (Da Vinci robotic surgeries).

Host: Prof. Tatiana Demina, and Prof. Peter Timashev, Sechenov University

About Kolkata and Howrah

Kolkata (formerly known as Calcutta) is the capital of the state West Bengal, India. Founded as an East India Company trading post, it was India's capital under the British Raj from 1773–1911. Today it is well known for its grand colonial architecture, art galleries and cultural festivals. Kolkata is known for Rabindranath Tagore, Swami Vivekananda, Shri Ramkrishna, Sir Jagadish Chandra Bose, Acharya Prafulla Chandra Ray, Satyendra Nath Bose, Satyajit Ray, and so many famous people. Kolkata, in fact, has a deep connection with the five Nobel Prize winners having links-by birth or work with this city.

There are several visiting places in Kolkata like Victoria Memorial, Birla Mandir, Dakshineswar Kali Temple, Zoological Garden, Birla Planetarium, Belur Math etc.

Howrah is located on the western bank of the Hooghly River, opposite its twin city of Kolkata. It is 20 min Taxi Distance from the centre place of Kolkata. Howrah is connected to the famous Grand Trunk Road (commonly abbreviated to GT Road)- one of South Asia's oldest and longest major roads. This city also hosts "Great Banyan Tree", estimated to be more than 250 years old, at Acharya Jagadish Chandra Bose Indian Botanic Garden The tree alone occupies an area of 4.67 acres.

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Abstract Submission

Abstract shall be submitted in maximum two A4 pages including Title, Author (s), Affiliation, Text, Figure, Table, and References. 12 point font, Times New Roman, 1.5 spacing. Language of the abstract would be English, no translational facilities are available.

Abstract to be sent at : icamm2024.cis@gmail.com

Corresponding authors will be communicated over email if their abstracts get selected for oral/poster presentation. The dimension of the poster is vertical height - 120 cm and horizontal width 80 cm. The poster will be placed vertically. Abstracts reviewed and recommended by our international expert committee will be published in reputed international journals.

Venue

Venue: JISMSR-JISIASR Campus, Santragachi, Howrah, WB, India

**** All delegates have to arrange their own accommodation. Organizer may help in finding the accommodation on request against actual cost**

Program Highlights

The event will be organized in hybrid mode, and will be based on the recent advances and emerging challenges in the field advanced materials including polymers, 2-D materials, nano-materials and biomaterials are at the forefront of most of the current technological developments and play a vital role in many industries and applications. This Conference will provide a premier interdisciplinary platform and bring together leading academic scientists, researchers, faculty members, students and industry experts to exchange and share their research experiences, knowledge, results and future trends and needs on all aspects of materials and manufacturing innovations. With diverse oral and poster presentations, plenary talks, keynote, and invited presentations from eminent researchers, this event would be a perfect venue not only to share your expertise but also to widen the horizon of your knowledge. It would offer a conducive environment for the participants to exchange ideas and initiate collaboration with other members from scientific institutions and industries throughout the globe. The leading scientists and researchers will be attending this event to share and discuss their work on the recent development of advanced materials and manufacturing processes.

Conference Themes

The conference will have following topical themes covering nearly the entire range of Advanced Materials and Manufacturing.

Theme-1: Materials for 3D/4D Printing and Additive Manufacturing

- Biomedical applications of polymers and nanocomposites
- Biomaterials, tissue engineering, and nanomedicine

Theme-2: Material Processing and Applications

- Rubber nanocomposite
- Sensors and theranostics
- Drug design, drug delivery
- Protein aggregation

Theme-3: 2-D Materials and Beyond

- Sensor materials and applications
- Photodynamic therapy and quantum dots

Theme-4: Plasma and Energy Materials

- Piezoelectric and triboelectric materials
- Waste utilization and green technologies

Theme-5: Paint and Coating Technology

- Paints and corrosion
- Surface science and engineering
- Fiber reinforced polymer composites

Important Dates

Conference dates: December 18 and 19, 2024 (9:00 AM to 5:30 PM)

Mode of conference: Offline and partly Online

Last Date of abstract submission: October 20, 2024

Acceptance notification to the author(s): October 27, 2024

Last date of full paper submission: November 15, 2024

Last date of early bird registration: October 30, 2024

Registration

Registration fee is mandatory for all participants (including Speakers) for attending the conference. Conference kit will be provided to all the participants. Registration fee may be paid through electronically along with filled registration form/ LINK available in our website (www.jisiasr.org). Please complete the registration and pay the fees and send the details to the organizer at icamm2024.cis@gmail.com

Participants	Types	Before Oct 30, 2024	After Oct 30, 2024	Details
Indian Speakers. Delegates	Students	INR 1500	INR 2000	Conference kits, Breakfasts, lunches, dinner, and tea/coffee at the conference venue and Gala Dinner
	Postdoc	INR 2500	INR 3000	
	Faculty members/ Scientists	INR 3500	INR 4000	
	Industrial Delegates	INR 9000	INR 10000	
	Accompanying person	INR 2500	INR 3000	
International Speakers. Delegates All Online participants	Students	USD150	USD200	This includes local hospitality/accommodation and pick up and drop off from Kolkata airport), Conference kits, Breakfasts, lunches, dinners, and tea/coffee at the conference venue, and a Gala Dinner
	Postdoc	USD200	USD250	This includes local hospitality/accommodation, Conference kits, Breakfasts, lunches, dinners, tea/coffee at the conference venue, and a Gala Dinner.
	Faculty members/ Scientists	USD350	USD400	
	Accompanying person	USD150	USD200	Local hospitality/accommodation and pick up and drop off
Online Participant	INR 1500 (Student), INR 3000 (Faculty/ Scientist), USD 50 from abroad			Digital Certificate and entry link to joint each session

Salient Features

- There will be best oral & poster presentation award (Theme wise)
- Best Young Researcher award (Theme wise)
- Reputed Publishers as Publishing partners
- Open forum for networking and collaboration with Global scientific community
- Institutional support for startup and incubation for interested and talented researchers/ participants

Sponsorship

The sponsorship from institutions, organizations and industries to support this event will be appreciated and acknowledged. Based on the nature of sponsorship, conference organizer will provide the opportunities which may include complimentary registration with conference kit, business stall in the conference site, company logo in conference documents, complimentary pages in the souvenir, and business incubation support extended by JIS group.

Please visit www.jisiasr.org and click on "ICAMM 2024" for more details
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Important contacts:
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+91-9449566017 (For abstract submission and registration)

