

## IMPORTANT INFORMATION

### Presentations

Authors of papers selected for presentation in the Conference will be expected to give oral presentation or poster presentation during the conference. All accepted abstracts will be published in the Abstract Book/CD.

## Registration Fees

### Foreign Delegates

**Delegates:** \$ 600 (this includes local hospitality/accommodation and pick up and drop off from Kolkata airport)

**Accompanying person:** \$ 300 Students: \$ 350

### Indian Delegates and Delegates from SAARC Countries

**Industry:** ₹10,000 (₹12,000 after December 6, 2019)

**Academia / Research Institute:** ₹5,000 (₹6,000 after December 6, 2019)

**Students:** ₹3,000 (₹3,500 after November 10, 2016)

**Accompanying Person:** ₹2,000 (₹2,500 after December 6, 2019)

Registration fee for Indian delegates and those from SAARC countries includes conference kit (for delegate only), lunch and dinner. Accommodation will be charged separately.

Registration procedure will be provided in the second circular and on the website.

### Sponsorship

(for more details, please contact the Chairperson or Organizing Secretary)

Platinum Sponsor : ₹3,00,000

Gold Sponsor : ₹2,00,000

Silver Sponsor : ₹1,00,000

Bronze Sponsor : ₹75,000

Sponsor : ₹60,000

### Advertisements in Souvenir

(for more details, please contact the Chairperson or Organizing Secretary)

Back cover full: ₹50,000

Inside front cover page: ₹30,000

Full page (inside): ₹20,000

Half page (inside) : ₹10,000

### Mini Expo

A mini expo will be organized during the conference.

Limited stalls will be available (for more details, please contact the Chairperson or Organizing Secretary)

## IMPORTANT DATES

**Deadline for Abstracts:** 15 September, 2019

**Notification for acceptances:** 15 October, 2019

**Last date for online registration:** 30 November, 2019

## Format for Abstract

**Title of the Presentation for ICFM 2020**  
(Times New Roman 14 pt Bold)

Presenting Author, \*Corresponding Author and 3rd Author  
(12 pt underline presenting author and asterisk corresponding author)

<sup>a</sup>Affiliated Institution Name, Address (12 pt italic)

<sup>b</sup>Additional Affiliated Institution Name, Address

The abstract should be written using 12 point Times New Roman font and summarize the technical content of the oral or poster presentation. Use single spacing throughout. The page margins should be 3 cm (1.18") on all sides for a standard A4 page (21 x 29.4 cm). The abstract should be limited to 400 words and the text body should be justified on both sides. The abstract, inclusive of any figures, tables or references, should not exceed one (1) standard A4 page. Any abstract that does not follow the above-mentioned guidelines will be rejected.

All submitted abstracts will be reviewed according to the standard reviewing procedures and assigned by the technical program committee to the appropriate session for oral and poster presentations.

Keywords: Provide a maximum of five keywords.

\*Corresponding Author: Name and E-mail Address (Times New Roman 12 pt Bold)

In order to submit your abstract, please go to the ICFM2020 website and create an account. Once you do this, you can then submit your abstract online via the website.

## INVITED SPEAKERS

**Prof. Pulickel M Ajayan**, Rice University, USA

**Prof. Dr. Brigitte Voit**  
Leibniz-Institut für Polymerforschung Dresden,  
Germany

**Prof. Priya Darshan Vashishta**  
University of Southern California, USA

**Dr. Yogendra Kumar Mishra**  
Kiel University, Germany

**Prof. Kerstin Blank**  
Max Planck Institute of Colloids and Interfaces,  
Germany

**Prof. Reiko Oda**  
Institut Européen de Chimie et Biologie, France

**Prof. Rohan Mishra**  
Washington University in St. Louis, USA

**Dr. Vikas Rana**  
Peter Grünberg Institut, Germany

**Prof. Krishna C. Mandal**  
University of South Carolina, USA

**Prof. Golap Kalita**  
Nagoya Institute of Technology, Japan

**Dr. Dietmar Appelhans**, IPF Dresden

**Dr. Juergen Pionteck**, IPF Dresden

**Dr. Gerhard Maier**, Germany

**Prof. Amitava Patra**, IACS, Kolkata

**Prof. Rajeev Ranjan**, IISc Bangalore

**Prof. S. B. Krupanidhi**, IISc Bangalore

**Prof. A. K. Nandi**, IACS Kolkata

**Prof. Satish Patil**, IISc Bangalore

**Dr. S. T. Aruna**, NAL Bangalore

**Prof. Somnath Bhowmick**, IIT Kanpur

**Prof. Saurabh Ghosh**, SRM University, Chennai

**Prof. Pralay Maiti (tentative)**, IIT BHU

**Prof. Priyadarshi De**, IISER Kolkata

**Prof. Kamal K. Kar (tentative)**, IIT Kanpur

**Prof. Uday Maitra**, IISc Bangalore

**Prof. Supratim Banerjee**, IISER Kolkata

**Prof. Viswanath Balakrishnan**, IIT Mandi

**Prof. Chandni Usha**, IISc Bangalore

**Prof. Arindam Ghosh**, IISc Bangalore

**Prof. Tarun K. Mandal**, IACS Kolkata

**Dr. Arup Dasgpta**, IGCAR Kalpakkam

**Prof. D. Basak**, IACS Kolkata

**Prof. Bhanu Nandan**, IIT-Delhi

**Prof. Narayan Pradhan**, IACS Kolkata

**Dr. D. S. Bag**, DMSRDE Kanpur

**Prof. Manickam Jayakanan**, IISER Pune

**Prof. Suhrit Ghosh**, IACS Kolkata

**Prof. Raja Shunmugam**, IISER Kolkata

**Prof. Tushar Jana**, Univ. of Hyderabad

**Dr. S. M. Senthil Kumar**, CECRI Karaikudi

**Prof. Udayan Ganguly**, IIT Bombay

**Prof. Atindra Nath Pal**  
S. N. Bose National Centre for Basic Sciences

**Prof. Aweek Bid**, IISc Bangalore

**Prof. C. S. Rout**, JAIN University, Bangalore

**Prof. H. S. Nanda**, IIDMJ, Jabalpur

**Prof. S. K. Swain**, VSSUT, Sambalpur

**Prof. D. K. Pradhan**, NIT Rourkela

**Prof. Tapas K. Mandal**, IIT Roorkee

**Prof. B. Dey**, Visva-Bharati University

**Prof. E. Bhoje Gowd**, CSIR-NIIST, Trivandrum

**Prof. S. Ghosh**, IIT Mandi

**Prof. R. R. Koner**, IIT Mandi

**Prof. D. Mandal**, INST Mohali

**Prof. D. Chatterjee**, IIT Palakkad

**Prof. A. Chowdhury**, IIT Patna

**Prof. U. Manna**, IIT Guwahati

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**Prof. P. Sahoo**, MSC, IIT Kharagpur

## Contact Address

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Chairperson, ICFM-2020

**Prof. D. Pradhan**

Organizing Secretary, ICFM-2020

**Materials Science Centre**

**Indian Institute of Technology Kharagpur**

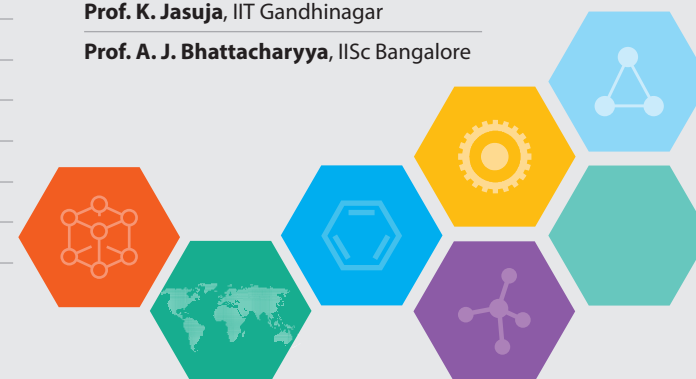
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Please check the website: [www.icfm2020kgp.in](http://www.icfm2020kgp.in) for the latest information



# ICFM 2020

## INTERNATIONAL CONFERENCE ON FUNCTIONAL MATERIALS

## MATERIALS SCIENCE CENTRE

### INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

January 6 - 8, 2020





# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Indian Institute of Technology (IIT), Kharagpur, the first institution in India of its kind in India, was established in the year 1951 near Kharagpur at the Hijli Detention Camp in Midnapore district in the state of West Bengal. The institute started its academic program with only ten Departments, 224 students and 42 teachers in August 1951 in various buildings of the detention camp. The Honorable Pandit Jawaharlal Nehru, the first Prime Minister of India, laid the foundation stone of the New Building in March 1952. Starting from this modest beginning, the Institute has expanded today to have 19 Departments, 9 academic Centres for inter-disciplinary teaching and research and 12 Schools in a lush green, serene campus which is free from urban noise and pollution, representing the modern "Gurukul Ashram" of the developed India. B.Tech., M.Sc., M.Tech., M.B.A., L.L.B. and Ph.D. degrees are offered in different branches of engineering and sciences through various departments, centres and schools. In addition to regular academic programs, the Institute offers video conferencing based synchronous distance education, M.Tech. programs in select branches of engineering, and E-MBA program on weekends at Kolkata, Bhubaneswar and also at Kharagpur campuses. Short term courses are organized in various areas throughout the year as part of Continuing Education Programme. The Institute has constituted 4 verticals for multi-disciplinary research in areas like (a) Nanoscience and Technology, (b) Environmental Science and Engineering, (c) Bioscience and Medical Technology, and (d) Energy Engineering. A 600 bed specialized Medical School has been approved and is being set up. There is a Science and Technology Entrepreneur's Park, both on campus and off campus, which acts as a conduit with the external world in order to facilitate technology transfer and to convert research outcome of IIT faculty into commercially viable propositions. The Institute prides itself in having the Rajendra Mishra School of Engineering Entrepreneurship and the Rajiv Gandhi School of Intellectual Property Law which are powerful adjuncts to developing entrepreneurship among students and faculty. The Institute is a self-contained township laid out over 2100 acres, with over 15,000 inhabitants. There are about 600 faculty, 1000 non-teaching employees and 11000 students on the campus.

## MATERIALS SCIENCE CENTRE

Materials Science Centre at IIT Kharagpur, the first academic centre of its kind in India, was established in 1971 for teaching and research in various types of materials. The Centre's initial research facilities were funded from a Russian Grant but the faculty built various research facilities mainly from sponsored R & D grants. The Centre has acquired various sophisticated processing, test and analytical equipment through various funding agencies from India and abroad that are required for the basic and applied research on Polymers, Ceramics, Semiconductors and Composites. The Centre has strong industry interaction for research and teaching. The faculty of our Centre act as consultants to many industries and other sectors. Patenting, technology development and transfer to industry are a strong forte of the Centre. The state-of-the-art research program of the Centre is focused on the development of new materials and products, novel processing technologies, polymer blends and alloys, nanomaterials, nanofluids, nanocomposites, smart materials, high performance polymers for membrane based separation and polymer electrolytes, ceramic gas sensors, electrode materials for lithium ion batteries, natural fiber reinforced concretes, multiferroic ceramic and thin films, band gap engineering in semiconducting materials, quantum well, quantum wire, quantum dots, heteroepitaxy and materials for thermoelectrics, photovoltaics and graphene electronics, biomedical application of polymers and ceramics to name a few. A significant number of the Centre's faculty are involved in working with one of the four vertical multi-disciplinary areas created by the Institute. The Centre offers a two-year M. Tech. program and an integrated M. Tech. – Ph. D. program in Materials Science and Engineering covering various aspects of Polymer, Ceramics, Semiconductor and Composites to work on goal oriented research from very fundamental aspects to technology development. There are 25 M. Tech. students on the average per year and there are about 60 research scholars presently working towards their Ph. D. degrees at the Centre.

## ABOUT THE CONFERENCE

The conference is a continuation of the ICFM series of conferences organized by the Materials Science Centre at IIT Kharagpur. The primary objective of this conference is to exchange knowledge among researchers, practicing engineers, technologists about the state of art in functional materials and their applications. Motivating young scientists, budding technologists and entrepreneurs in these fields to enrich their knowledge by interacting with their peers in their respective areas is a prime goal of the conference.



### CONFERENCE TOPICS

- Functional polymers, glasses, ceramics, semiconductors and composites
- Energy materials-Batteries, supercapacitors etc.
- Sensors and actuators
- Photonic materials
- Multi ferroic and magnetic materials
- Membranes and applications
- Carbon and related materials and their applications
- 2D Materials
- Other nano materials and their applications
- Green and biomaterials
- Drug design and delivery
- Theoretical modelling/computer simulations of functional materials
- Metals and Alloys
- Glasses and Glass Ceramics
- Electro and Photo catalysis



### ACCOMMODATION

Accommodation will be arranged on request in Guest Houses / hotels. Charges will be paid by the participants.



### VENUE & DURATION

The conference will be held at the Indian Institute of Technology, Kharagpur during January 6 - 8, 2020.



### CONFERENCE LANGUAGE

English



### PLACE AND CLIMATE

Kharagpur is about 120 km south-west of Kolkata and is well connected by rail and road with important metro cities like Delhi, Mumbai, Chennai, Bangalore and Kolkata and also with other important cities in India. The distance from Kolkata airport (an International airport) to Kharagpur is about 150 km and is travelled in about 3 hours by car. The climate at Kharagpur during early-January is quite pleasant. Temperature generally varies from 12 -15°C. Taxis from Kharagpur station cost approximately ₹150/-. Autorickshaws and cycle rickshaws are also available.

## MAJOR RESEARCH FACILITIES AVAILABLE AT MATERIALS SCIENCE CENTRE

