



## GSPFM<sub>2020</sub>

### Green & Sustainability in Polymers and Functional Materials: *Opportunity & Challenges*

#### GSPFM-2020

February 7-8, 2020

Indian Institute of Technology Kharagpur  
Kharagpur-721302, India



**Venue:** S. N. Bose Auditorium  
Academic area, IIT Kharagpur

Organized by  
Rubber Technology Centre

Under the aegis of  
SPARC Programme (MHRD, GoI)



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The symposium is organized under the SPARC programme (MHRD, Govt. of India). The objective of this symposium is to provide a platform to the research community to discuss and exchange their ideas and recent findings on Green & Sustainable Processes with special reference to the Polymeric materials. The recent advances in the Green polymerization techniques viz. Ultrasound polymerization technique in aqueous media, different Sustainable products developed in recent times will be discussed by experts from various fields. The symposium will host several plenary lectures, invited lectures, poster presentations and penal discussion.

Prof. Greg Qiao and Prof. Muthupandian Ashokkumar from the University of Melbourne, Australia are the foreign collaborators of this SPARC scheme project.

### Confirmed distinguished Speakers:

- ❖ Prof. Swaminathan Sivaram, IISER Pune, India
- ❖ Prof. Greg Qiao, University of Melbourne, Australia
- ❖ Prof. Muthupandian Ashokkumar, University of Melbourne, Australia
- ❖ Prof. Nikos Hadjichristidis, KAUST, Saudi Arabia

### Topics to be discussed during the Workshop:

- ✓ Ultrasonic polymerization process
- ✓ Functional polymers via Green polymerization process
- ✓ Polymers and functional materials from bio-resources
- ✓ Functional polymers in bio-application.

### Organizing Committee

- |              |  |
|--------------|--|
| Patron:      | Prof. V. K. Tewari, Director<br>IIT Kharagpur  |
| Chairperson: | Prof. Santanu Chattopadhyay, HoC<br>Rubber Technology Centre   |
| Conveners:   | Prof. Nikhil K. Singha<br>Dr. Narayan C. Das   |
| Members:     | <ul style="list-style-type: none"><li>• Prof. Greg. Qiao</li><li>• Prof. Muthupandian Ashokkumar</li><li>• All faculty members of RTC, IIT Kharagpur</li></ul> |

## About Rubber Technology Centre

Rubber Technology Centre (RTC) is a unique Centre, the first of its kind in our country. The first Rubber Technology Laboratory in our country for the purpose of teaching and research was established in 1955 in the Department of Applied Chemistry in IIT, Kharagpur under the collaborative program with the British Government (the Colombo Plan), the USA Government (Technical Collaboration Mission) and Ministry of Education, Government of India. The independent Rubber Technology Centre was established in 1981. The Centre acquired advanced processing testing and characterization equipment from Indo-British, Indo-French Collaborative Programs and also a large number of research projects from government organization and industries. During last three decades since its inception this Centre has done pioneering work in research and education in rubber and polymer science and technology. In 2014 it was awarded as the best Institute for education and research in Rubber Science and Technology by the 'Rubber Asia' magazine. The state of the art research program of the Centre is focused on the development of new functional advanced polymers & elastomers, novel processing technology, new polymer and rubbers from sustainable materials, polymer blends & alloys in developing advanced materials like nanocomposites, based on nano-clay, nano-silica, nanotitania, POSS novel block and graft copolymers, thermoplastic elastomers (TPE) and thermoplastic vulcanization (TPV). The research agenda of RTC also includes development of smart materials based on self-healable rubbers & polymers, shape-memory polymers, hydrophobic polymers, thermo-reversible core shell materials, multi-responsive hydrogels for targeted drug delivery magnetic-polymers, EMI shielding materials, radiation processing/crosslinking, reactive mixing etc. The Centre also worked on the innovative technologies for the development of different products, like green tire technology, inflatable seals, cables, conveyor belt, rubber roller, shoes, packaging etc. The Centre has close collaboration with the academia as well as many polymer and rubber industries in India and abroad.







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## Registration Form

Name:.....

Organization:.....

Position:.....

Address:.....

Abstract/Title:.....

Name of Authors: .....

Phone..... Fax.....

Email.....

Transaction ID..... Amount.....

Bank..... Date.....

Signature..... Date.....

### Correspondence

Prof. Nikhil K. Singha / Dr. Narayan C. Das  
Rubber Technology Centre | Indian Institute of Technology Kharagpur  
Kharagpur-721 302, West Bengal, INDIA  
Ph: +91 3222-283178/283190 | Fax: +91 3222-282292  
email: nks8888@yahoo.com, ncdas@rtc.iitkgp.ernet.in

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### Registration Fee

Delegates can register by completing the enclosed registration form and sending it as a scanned copy of the same through email along with the payment details. All payments and registration should be made online through <https://erp.iitkgp.ac.in/CEP/courses.htm>

Last date of registration: **24th of January, 2020**

Registration fee includes participation in symposium, workshop materials, book of abstracts, and meals during the workshop.

### Accommodation

Accommodation will be arranged in the IIT Guest houses and hostels spread across the campus.

### Abstract Submission

Please submit the abstract as per the format available in the IIT Kharagpur CEP website <https://erp.iitkgp.ac.in/CEP/courses.htm>

The abstracts need to be sent to [nks8888@yahoo.com](mailto:nks8888@yahoo.com) or [sadhan002@yahoo.co.in](mailto:sadhan002@yahoo.co.in)

| Category                      | Before<br>20.01.2020 | On spot  |
|-------------------------------|----------------------|----------|
| Academicians                  | 2000 INR             | 2500 INR |
| Research<br>Scholars/Students | 1000 INR             | 1200 INR |
| Delegates from<br>Industries  | 3500 INR             | 4000 INR |

### Important Dates:

Abstract submission (Last Date): **January 24, 2020**

Final request for accommodation: **January 27, 2020**

## About Indian Institute of Technology Kharagpur

Indian Institute of Technology Kharagpur (IIT KGP), the first and largest of 26 members IIT family was established in the year 1951 at Hijli detention camp at Kharagpur in West Bengal, India. This is probably one of the very few Institutions in the World which started its journey in a prison house. Since its inception in May 1951, this Institute has been transformed into a breeding ground for the dissemination of knowledge in the field of engineering and technology to reach the frame of a world class Institute. Not only it has preserved the traditional Gurukul Ashram Culture of India but also has emerged as one of the best Technological Institutes of The Modern World. The campus is very green, calm and quiet and free from urban noise and pollution, an ideal temple for education and research. The campus is imaginatively laid out with a beautiful lake, green parks, huge playgrounds, big auditoriums, students' hostels, residential zones for faculty and staff members, health centre, cultural-cum-social and recreational zones for campus community. The Institute campus has all elements to fall in love at first sight.

## Place and Climate

Kharagpur is about 130 km south-west of Kolkata and is well connected by rail and road with important metros like Delhi, Mumbai, Chennai, Bangalore and Kolkata and also with other important cities of India. It is known that Kharagpur Railway station has the 3<sup>rd</sup> longest railway platform in the World. The distance from Kolkata airport (an International airport) to Kharagpur is about 130 km and is travelled in about 2.5 hours by car. The climate at Kharagpur during early February is very pleasant. Temperature varies from 15-20°C.

