

# 4<sup>th</sup> INTERNATIONAL CONFERENCE ON

# SOFT MATERIALS (ICSM-2020)

Preceded by pre-conference workshop on Polymers for Energy Conversion and Storage



**December 13<sup>th</sup> - 18<sup>th</sup>, 2020 (Online Mode)** 

Organized by

**Soft Materials Research Society, Jaipur** www.smrsi.org

Malaviya National Institute of Technology, Jaipur www.mnit.ac.in



http://smrsi.org/icsm2020

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**OCTOBER** 

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**CALL FOR ABSTRACTS**  **ABSTRACT DEADLINE** 

**ABSTRACTS NOTIFICATION** 



**EARLY BIRD REGISTRATION CLOSES**  NOVEMBER

**ONLINE REGISTRATION CLOSES** 

### **CONFERENCE TOPICS**

**BIOLOGICAL** SOFT MATTER

- Dynamics of complex fluids
- Liquid crystals
- Self-Assembly
- Self-propelled particles

**COLLOIDS AND INTERFACE** 

- Gels and hydrogel
- · Nano and microfluidics
- Surfactants & lipids

**POLYMERIC MATERIALS** 

- · Biodegradable polymers
- Elastomers
- Membranes
- Polymer Interfaces
- Polymer separation and filtration

**POLYMER PHYSICS** 

- Amorphous and structured polymers
- Physical properties of Soft Materials
- Rheological aspects in polymers
- Theory and simulation of polymers

**POLYMER FOR BIOLOGICAL APPLICATIONS** 

- Bio-Inspired Materials
- Bioimaging
- · Biosensors and bioMEMS
- Drug Design and Delivery
- Tissue Engineering

**SOFT MATERIALS** FOR ELECTRONICS **APPLICATIONS** 

- Flexible electronics and storage
- Organic electronics
- Patterned Nanostructures
- Sensors

**FUNCTIONAL MATERIALS** 

**MATERIALS** 

**FOR ENERGY** 

**APPLICATION** 

- Block Copolymers nanolithography
- Functional Polymer
- Nanocomposites and Hybrid Materials
- Polymer Nanocomposites
- Soft Nanofabrication
- Battery and Fuel Cells
- Biofuels and bioenergy
- Hydrogen Energy (Generation, Separation, Sensing, and Storage)
- Solar Cells (Organic and Hybrid)
- · Thermoelectric Materials

Dear Colleagues,

We are pleased to announce the fourth edition of International Conference on Soft Materials (ICSM 2020) during 13-18 December 2020. After carefully observing the recent developments around the world and the threat of the COVID-19 pandemic, we have decided to conduct this conference as a Virtual event by taking the attendee's safety into consideration. On behalf of the organizing committee, it is my pleasure to invite scientists, academicians, young researchers and students from all over the world to attend the 4th ICSM 2020 through virtual mode.

Over the years, the ICSM conference has developed a strong reputation and dedicated to all aspects of soft materials. We are putting our efforts to bring together, once again, a multidisciplinary group of leading Plenary and Invited Speakers from all over the world to promote and enhance recent achievements in the field of soft materials.

In particular, we would like to welcome the students/postdoc in this exciting forum to address a wide range of issues and their solution for the better future of our society.

The exchange of knowledge and the discussions amongst participants will be favoured during the conference. In this conference, we have also scheduled one day workshop on Polymers for Energy Energy Conversion and Storage Applications.

Looking forward to a professionally exhilarating and enjoyable another excellent conference (ICSM 2020) through virtual mode.

A heartily welcome!!

#### Dr. Kamlendra Awasthi

On behalf of Organizing Committee ICSM 2020 E-mail: kawasthi.phy@mnit.ac.in, icsm@smrsi.org

### **WORKSHOP ON POLYMERS FOR ENERGY CONVERSION AND STORAGE APPLICATIONS**

The increasing concerns about environmental issues caused by fossil fuels, and the demand for renewable energy have trigged extensive research into efficient energy conversion and storage systems. In this scenario, polymeric materials are increasingly finding extensive applications in the fields of energy generation, conversion and storage. A number of recent technological advances in controlling the molecular structure of polymershave allowed the polymeric properties to be more finely tuned and successively led to these new advances and novel applications. This workshop on Polymers for Energy Conversion and Storage Applications would cover these recent advances in the form of comprehensive lectures by renowned scientists across the globe, and will include topics onbut not limited to the synthesis and properties of a large number of polymer systems for applications in areas (tentative) as mentioned below.

- Design and synthesis strategies for polymeric electrolytes/separators/binders/catalysts,
- Fabrication of bio-implantable soft nanostructures with electroactive polymers for thin-film transistors and photovoltaic applications,
- Energy conversion processes (catalysis and photocatalysis) utilizing polymeric materials, use of polymeric materials in the field of solar fuels (hydrogen production, CO2 reduction, etc.),
- Energy storing processes with polymeric materials through batteries: alkali metal (Na/K/Ca/Mg/AI) ion batteries, redox-flow batteries, supercapacitors, etc.

For details visit: http://smrsi.org/icsm2020

#### **PUBLICATIONS**

Selected papers from the conference will be published in the Peer-Review Journals as per their review policy and there will be no liability to the organizers for the publication. Information and guidelines for preparing the manuscript will be updated soon.

## **CONTACT US**

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For more details and updates, kindly visit: http://smrsi.org/icsm2020/