

Call for Abstract

SERBIA  
**MRS** Materials Research  
Society of Serbia

WELCOME TO  
*Twenty-seventh Annual Conference*  
**YUCOMAT 2026**

Herceg Novi, Montenegro, August 31 to September 4, 2026

endorsed by  
**FEMS**  
FEDERATION OF EUROPEAN  
MATERIALS SOCIETIES

SERBIA  
**MRS**  
Materials Research  
Society of Serbia  
**YUCOMAT**  
2026  
The conference is held in cooperation with  
Herceg Novi, August 31 to September 4, 2026

Materials science and engineering include the acquisition of knowledge about the synthesis and processing of materials, their composition and structure, properties and behavior, functions and potentials, as well as the application of that knowledge to various final products. Economic prosperity, quality of life, and a healthy environment are closely linked to improvements in existing and the development of new materials and processing technologies. These improvements and developments can significantly contribute to national priorities: energy saving, environmental and health protection, food, information and communications, infrastructure, transport, etc.

## ***MRS-Serbia***

**President of the Council:** Slobodan Milonjić

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## ***Date and venue***

The conference will be held on August 31- September 04, 2026, at the Hunguest Hotel Sun Resort Herceg Novi, Montenegro

## **Important dates**

**May 31, 2026** Abstract Submission Deadline

**July 10, 2026** Preliminary Conference Program

**July 15, 2026** Regular Registration Fee Deadline (required for presentations to be included in the Book of Abstracts)

**July 31, 2026** Final Conference Program (for the printed Book of Abstracts)

**August 20, 2026** Final Poster Abstract Submission Deadline (to be included only in the On-site Conference Program)

**August 31, 2026** The beginning of the conference

## ***Paper presentation and abstract preparation and publication***

The conference will consist of an invited plenary presentation (30 min) by leading experts in the field, an invited oral presentation (20 min), an oral presentation (15 min), and a poster presentation. Abstract in English and the registration form, should be submitted by July 15, 2026. The Scientific Committee will evaluate the submitted abstracts and, on the basis of their contents, assign the papers, taking into account author's wishes as much as possible, to the oral or poster presentation. Abstracts will be included in a book of abstracts and distributed to each participant at the conference registration.



**SYMPOSIUM A: Advanced Methods in Synthesis and Processing of Materials**

The symposium will focus on the following topics:

- Chemical methods in synthesis
- Synthesis via reactions in solid, liquid and gaseous phases
- Sol-gel methods
- Self-propagating high-temperature synthesis
- Electrochemical processing
- Plasma and laser processing and ion implantation
- Mechanochemistry
- Different processes for powder consolidation;
- Severe plastic deformation
- Synthesis and processing of materials under extreme conditions
- Different methods in synthesis of thin films
- Radiation processing

**SYMPOSIUM B: Advanced Materials for High-Technology Application**

The symposium will focus on the following topics:

- High-purity materials
- Diamond and related materials, graphene, fullerenes, and novel forms of carbons
- Boron nitride and other 2D materials
- Superconductors
- Electronic materials
- Electrode materials, including superionic conductors
- Catalysts
- Intermetallics, superalloys, and special steels
- Composites
- Smart materials
- New polymer materials
- Applications of advanced materials in high technologies
- Characterization of materials (analytical, microstructural, optical, spectroscopic, physicochemical, etc.)

**SYMPOSIUM C: Nanostructured Materials**

The symposium will focus on the following topics:

- Synthesis and processing of inorganic, organic and composite nanosized materials by physical, chemical and biological methods
- Low-dimensional semiconductor structures
- Modeling and simulation of synthetic, assembly and interaction processes
- Surface and interface phenomena
- Powders, coatings and compact nanostructured materials
- Characterization of nanostructured materials (mechanical, magnetic, chemical, catalytic, electrical, optical, tribological, etc)
- Application of nanostructured materials

**SYMPOSIUM D: Eco-Materials and Eco Technologies**

The symposium will focus on the following topics:

- The conference program entitled as "Eco-technologies" might be seen as the program for assembling various scientific achievements either from the field of material processing and evaluation, or from the design of technological processes.
- Technologies that benefit the earth climate by reducing greenhouse emissions, and provide the use of renewable energy source, such as photovoltaics, fuel cells, wind turbines or certain cogeneration technologies, might be seen as an example of the latter, as well as the technologies that focus on increasing productivity per unit of water or per any other unit of a precious natural resources.
- Materials produced with an aim of decreasing the amount of its toxic elements, or using safer pathways of production, whereby keeping its performance on a satisfying level, together with materials and technologies that implement the use of local resources, might belong to the class of eco-materials.

**SYMPOSIUM E: Biomaterials**

The symposium will focus on the following topics:

- New method for processing of advanced metal, ceramic, polymer and composite based biomaterials
- Molecular design biomaterials
- Biomimetics
- Correlation between synthetic parameters and structure and properties of biomaterials (powders, cements, fibres, composites, coatings, cements, surface modifications, etc.)
- Characterization of biomaterials
- Biological response to implants (experiments *in vivo* and *in vitro*)
- Clinical experiences in implantation of biomaterials

Conference website



**Plenary speakers from previous YUCOMAT conferences:**

**Andre Geim** (Nobel Prize winner), University of Manchester, United Kingdom  
**Andrea C. Ferrari**, University of Cambridge, Cambridge, United Kingdom  
**Andrey M. Minor**, University of California, USA  
**Andrey Rogach**, City University of Hong Kong, Hong Kong SAR  
**Arumugam Manthiram**, University of Texas, USA  
**Chad Mirkin** (Kavli Prize winner), Northwestern University USA  
**Gordana Vunjak-Novaković**, Columbia University, USA  
**Hua Zhang**, Hong Kong Institute for Clean Energy (HKICE), China  
**Hui-Ming Cheng**, Shenyang National Laboratory for Materials Science, Chi  
**Ivan Bozovic**, Yale University, New Haven, USA  
**Frank Caruso**, University of Melbourne, Australia  
**Jeffrey Brinker**, Sandia National Laboratories, New Mexico, USA  
**John A. Rogers**, Northwestern University, USA  
**Joseph T. Hupp**, Northwestern University, USA  
**Knut Urban** (Kavli Prize winner), RWTH-Aachen University, Germany  
**Konstantin S. Novoselov** (Nobel Prize winner), Institute for Functional Intelligent Materials, Singapore  
**Lei Jiang**, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing, China  
**Luis M. Liz-Marzán**, University of Vigo, Spain  
**Mark Hersam**, Department of Materials Science and Engineering, Northwestern University, USA  
**Markus Antonietti**, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany  
**Maurizio Prato**, Center for Cooperative Research in Biomaterials, Italy  
**Mercouri G. Kanatzidis**, Northwestern University, USA  
**Michael Stanley Whittingham** (Nobel Prize winner), Binghamton University, USA  
**Mohammad Khaja Nazeeruddin**, Ecole Polytechnique Federale de Lausanne, Sion, Switzerland  
**Paul Weiss**, UCLA, Los Angeles, CA, USA  
**Prashant V. Kamath**, University of Notre Dame: Notre Dame, IN, USA  
**Pulickel Ajayan**, Rice University, Houston, USA  
**Ramamoorthy Ramesh**, University of California, Berkeley, USA  
**Richard W. Siegel**, Rensselaer Polytechnic Institute, Troy, New York, USA  
**Robert Ritchie**, University of California, Berkeley, USA  
**Robert Sinclair**, Stanford University, Stanford, USA  
**Rodney S. Ruoff**, Center for Multidimensional Carbon Materials, Republic of Korea  
**Ruslan Z. Valiev**, Saint Petersburg State University, Saint Petersburg, Russia  
**Rui Luis Goncalves dos Reis**, University of Minho, Portugal  
**Samuel Stupp**, Northwestern University, USA  
**Shizhang Qiao**, School of Chemical Engineering, The University of Adelaide, Australia  
**Sotiris Pratsinis**, Particle Technology Laboratory, ETH Zürich, Zürich, Switzerland  
**Takuzo Aida**, The University of Tokyo, Japan  
**Velimir Radmilović**, University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia  
**Vladimir Torchilin**, Northeastern University, Boston, MA, USA  
**Xinliang Feng**, Max Planck Institute of Microstructure Physics, Dresden, Germany  
**Yoshio Bando**, Institute of Molecular Plus, Tianjin University, Tianjin, China  
**Younan Xia**, Georgia Institute of Technology, USA  
**Yury Gogotsi**, A. J. Drexel Nanomaterials Institute, Drexel University, Philadelphia, USA  
**Yu Huang**, University of California Los Angeles, USA  
**Zhong Lin Wang**, Institute of Nanoenergy & Nanosystems, Chinese Academy of Sciences, Beijing, China