



1st International Conference on Materials Science and Applications

1-3 November 2024

Sousse, Tunisia

<https://tamsa-tunisia.com/>

ICMSA2024 is organized by the National Center of Materials Science (CNRSM) in Borj Cedria Technopark, Tunisian Association of Materials Science and Applications (TAMSA), and the Tunisian Association of Ceramics (ATCer).

Under the auspices of
Tunisian ministry of higher education and scientific research
(MESRS)

About ICMSA2024

We are pleased to invite you to take part in the 1st International Conference on Materials Science and Applications, ICMSA2024, which will be held from 1 to 3 November 2024 at Barceló Concorde Green Park Palace , Port El Kantaoui, Sousse , will host leading international experts from industry and academia and aims to provide talks, workshops and round tables where they can present and discuss their findings in all fields of materials science including polymer, ceramic, composite, green and sustainable materials, nanotechnology, mining, healthcare, energy, metallurgy, food safety and circular economy. The main objectives of the conference are to support research and innovation, promote scientific knowledge exchange, build new and strengthen existing partnerships and collaborations all over the world. Virtual options will be provided for the keynote presentation and plenary session.

We believe that the Conference will bring together industry executives and engineers, junior and senior scientists, stakeholders and policy makers, professionals and academics from the whole Materials Science & Engineering value chain.

TOPICS

Following the demands and trends of modern society, ICMSA2024 shall address a wide range of technological developments and future challenges regarding Materials Science with an emphasis on Sustainable Development Goals and Circular Economy aspects.

ICMSA2024 covers a broad list of topics as follows:

1. Nanomaterials and Materials for Energy

- Nanomaterials : synthesis and characterization and modeling
- Nanomaterials for energy , environment and catalysis
- Nanomaterials for electronics, photonics and magnetism
- Nanomaterials for biosensors and applications
- Metal Organic Framework (MOF)
- Graphene Technology
- Solar Energy Materials
- Catalysis and Energy Materials
- Carbon Materials in Energy
- Batteries and Fuel Cell Materials
- Emerging Materials for Energy Applications
- Hydrogen Technology

2. Biomaterials, Green Materials and Environmental applications

- Sustainable Materials
- Natural Green Materials
- Artificial Green Materials
- Biowaste Materials
- Non-toxic Materials
- Materials for toxic gases treatment
- Materials for water treatment and water reuse

3. Materials for civil Engineering

- Construction and building Materials
- Cement and Concrete Materials
- Low Carbon and Green Building Materials

4. Structural Materials and Computational Materials Science

- Integrated Computational Materials engineering
- Atomistic Methods
- Materials Computation
- Mathematical Models
- Nano-electromechanics and energy
- Density Functionnal Theory
- Molecular Dynamics

5. Polymer Science and Engineering materials

- Advances in polymers synthesis
- Molecularly imprinted polymers (MIPs)
- Advanced membranes & porous materials
- Conductive and thermoelectric polymers
- Rheology and physical properties of polymers
- 3D printing
- Hydrogels and soft nanocomposites
- Polymers and industry

6. Ceramic and composite materials

- Ceramic Engineering Materials
- Composite Materials

7. Mineral materials and applications

- Mining and processing of raw materials
- Clays Materials
- Phosphate Industry
- Extraction of Salts from natural Brines
- Plaster and Gypsum
- Sand and Silica Sand Valorization

8. Circular economy : Recycling and reuse of waste materials

- Materials Recycling
- Biomass Valorization
- Electronic Waste Valorization
- Sustainable Construction Materials from Waste, Industrial and Agricultural by-products
- Circular Economy – Connecting Economic, Environmental and Social gains

9. Mechanical Engineering and Metallurgy for materials science

- Traditional Metallurgy and metal working processes
- Alloys
- Extraction Procedures
- Mechanical Metallurgy
- Corrosion Phenomena

10. Advanced Materials for Medicine, Agriculture and Food Safety

- Biopesticides
- Smart and active packaging
- Biofertilizers
- Food Safety
- Sustainable Agriculture
- Biomaterials in medical devices
- Biocompatibility of polymer-based materials
- Bio Device fabrication
- Diagnostic Devices
- Wearable and Mobile Devices
- Smart Nano-bio Devices
- Drug Delivery Systems

11. Artificial Intelligence and Industry 4.0 for Materials Science

- AI Application to Non-Destructive Evaluation (NDE & Data)
- Data Management: Curation, Collection, and Verification
- Image Processing
- Machine Learning Algorithm Development for Materials Science
- Machine Learning/Deep Learning applied to Manufacturing Process Optimization
- Machine Learning/Deep Learning applied to Discovery of Materials
- Robotics & Automation



Important Dates

- 1st Announcement : 30 June 2023
- 2nd Announcement : 4 March 2024
- Abstract submission open: 4 March 2024
- Abstract submission deadline: 15 September 2024
- Abstract Acceptance: 1 October 2024
- Registration deadline : 15 September 2024
- Conference opening: 1 November 2024
- Full paper submission deadline: 30 November 2024

Abstract Submission

Abstract submission can be carried out through the ICMSA2024 website. For abstract submission and guidelines please follow this link :

<https://tamsa-tunisia.com/abstracts/>

Registration

Instructions for registration are available at the ICMSA2024 website:

<https://tamsa-tunisia.com/registration/>

For any clarification, please contact the Conference Secretariat at:

icmsa2024@gmail.com

Registration Fees

	From Inside Tunisia and Maghreb Countries	From Outside Maghreb Countries
Student	550 TND	350 Euros
Academic	600 TND	450 Euros
Industrial	750 TND	1000 Euros
Accompanying Person (double room occupancy)	350 TND	300 Euros
One Day Participation	180 TND	-

Single room supplement: 40 TND/night

For children (00-02 Years) with 02 adults : Free

For children (02-12 Years) with 02 adults : discount of 50% (max 02 children)

For children (02-12 Years) with 01 adult : discount of 30%

The registration fees for ICMSA2024 includes full board accommodation during 2 nights (double occupancy room), all inclusive soft formula, in Barcelo, Concorde Green Park Hotel located in the wonderful touristic resort of Sousse region, including :

- breakfasts,
- lunches,
- coffee breaks,
- diners.

Participants will also be allowed to attend all scientific sessions (lectures, oral and posters' communications).

Program

The 1st International Conference on Materials Science and Applications ICMSA2024 will be held at Barceló Concorde Green Park Palace , Port El Kantaoui located in wonderful touristic resort of Sousse region. Welcoming participants, distribution of documents and check in will start on Friday 01/11/2024 from 08:30. Departure from the hotel will be on Sunday 03/11/2024 at 12:30 before lunch.

The program of ICMSA2024 will include:

- Plenary Lectures (35 min + 5 min discussion)
- Keynotes (25 minutes)
- Oral Presentations (15 minutes)
- Posters Presentations

Scientific Committee



Pr. Jamel BOUAZIZ

Chairmen of the Scientific Committee

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Noureddine RAOUAFI; FST; Tunisia
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Rakia SHABOU; ISTEUB; Tunisia
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Feten AMMAR; INNORPI; Tunisia
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Hassib TOUNSI; FSS; Tunisia
Mourad AMARA; USTHB; Algeria

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Neila CHTOUROU; APII; Tunisia
ElMohsen MISSAOUI; CETTEX; Tunisia
HAFEDH SAAOUDI; Centre Technique de Cuir et Chaussures; Tunisia
Chawki EL HENI; ELFOULEDH; Tunisia
Mohamed GDOURA; POULINA; Tunisia

Organizing Committee



Dr. Halim HAMMI

Chairmen of the Organizing Committee

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Honorific Committee



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Chairmen of the Honorific Committee



Pr. Adel M'NIF



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