



# International Conference Emerging Technologies in Materials Engineering – EmergeMAT -6<sup>th</sup> Edition

9-10 November 2023 – Bucharest, Romania

## 1<sup>st</sup> CALL FOR PAPERS

The Scientific Committee and the Organizing Committee cordially invite you to attend the 6<sup>th</sup> EmergeMAT Conference in the period 9-10 November 2023.

The 6<sup>th</sup> EmergeMAT Conference will be organized in hybrid format and will focus on bringing together students, scientists, engineers, industry representatives and other stakeholders interested in developing new methods, concepts and materials using new and emerging technologies, as well as materials modelling.

Sections	Expected topics ( <i>not exhaustive</i> )
SECTION 1 MATERIALS FOR ENERGY	<ul style="list-style-type: none"><li>- Materials for improved metal ion batteries: advanced materials for metal ion-based batteries, electrochemical methods and new characterisation methods, etc.</li><li>- Materials for solid oxide fuel cells, methods for synthesis, sintering and characterization</li><li>- New piezoelectric and thermoelectric materials for energy harvesting</li><li>- Novel materials for thermal energy storage</li></ul>
SECTION 2: CRITICAL RAW MATERIALS	<ul style="list-style-type: none"><li>- New materials and processes for sustainable replacement of critical raw materials in extreme conditions</li><li>- Additive manufacturing of novel metallic, ceramic, composite and hybrid materials for energy and biomedical applications</li><li>- Circularity of advanced materials, new processes for their re-use and re-design</li></ul>
SECTION 3: NEW MATERIALS FOR ENVIRONMENTAL PROTECTION	<ul style="list-style-type: none"><li>- Materials for industrial waste water purification</li><li>- Materials for CO<sub>2</sub> adsorption</li><li>- New materials for sensors and advanced detection</li></ul>
SECTION 4 Materials Modelling and Simulation	<ul style="list-style-type: none"><li>- Atomistic modelling of materials for energy storage</li><li>- Atomistic modelling of materials for biomedical applications</li><li>- Process modelling</li></ul>

**Presentation:** Oral presentations

E-posters (template provided), to be uploaded by organizers on the conference website.



### Publishing

Abstracts will be published in the Conference Abstract Book (ISSN 2602-0416).

Full papers can be published – *following a peer-review process* – in:

- **Materials** – 2<sup>nd</sup> Special Issue Emerging Technologies for Material Engineering, [https://www.mdpi.com/journal/materials/special\\_issues/ASQ0K7R1F2](https://www.mdpi.com/journal/materials/special_issues/ASQ0K7R1F2), impact factor 3.748
- [Manufacturing Review](#) (eISSN: 2265-4224) is indexed in Scopus, Chemical Abstract, CrossRef, DOAJ.

### Important dates

Abstract submission: 29 September 2023

Abstract feedback: 9 October 2023

Poster submission: 16 October 2023

Conference: 9-10 November 2023

Full paper submission (optional): 21 November 2023 (directly to the journal of choice, to be evaluated according to the journal's procedure)

### General info

Templates will be available starting with June 2023, at: <http://www.imnr.ro/> , <https://imnr.ro/wp/en/emerging-technologies-in-materials-engineering-emergemat/>

The conference is organized as a hybrid event. Details for Conference rooms will be announced in July 2023.

Working language is English.

Participation is free of charge.

Best poster prizes will be awarded for young scientists (*Young Scientists Award Competition*).

### Previous editions

[EmergeMAT 1<sup>st</sup> Edition](#), 14-16 November 2018, Bucharest, ROMANIA

[EmergeMAT 2<sup>nd</sup> Edition](#), 6-8 November 2019, Bucharest, ROMANIA

[EmergeMAT 3<sup>rd</sup> Edition](#), 29-30 October 2020, Bucharest, ROMANIA

[EmergeMAT 4<sup>th</sup> Edition](#), 4-5 November 2021, Bucharest, ROMANIA

[EmergeMAT 5<sup>th</sup> Edition](#), 27 – 28 October 2022, Bucharest, ROMANIA

### Acknowledgement

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