



5th International Conference Emerging Technologies in Materials Engineering – EmergeMAT 27-28 October 2022 – Bucharest, Romania

2nd CALL FOR PAPERS

The Scientific Committee and the Organizing Committee cordially invite you to attend the 5th EmergeMAT Conference between 27-28 October 2022.

The 5th Virtual EmergeMAT Conference focuses on bringing scientists, engineers, industry representatives and other stakeholders interested in developing new methods, concepts and materials using new and emerging technologies, such as: additive manufacturing, high pressure/high temperature processes and substitution of critical materials for energy, environmental protection and regenerative medicine.

Sections	Expected topics (<i>not exhaustive</i>)
SECTION 1 MATERIALS FOR ENERGY	<ul style="list-style-type: none">- Materials for improved metal ion batteries: advanced materials for metal ion-based batteries, electrochemical methods and new characterisation methods, etc.- Materials for solid oxide fuel cells, methods for synthesis, sintering and characterization.- New piezoelectric and thermoelectric materials for energy harvesting- Novel materials for thermal energy storage
SECTION 2: CRITICAL RAW MATERIALS	<ul style="list-style-type: none">- New materials and processes for sustainable replacement of critical raw materials in extreme conditions- Additive Manufacturing of novel metallic, ceramic, composite and hybrid materials for energy and biomedical applications- Circularity of advanced materials, new processes for their re-use and re-design
SECTION 3: NEW MATERIALS FOR ENVIRONMENTAL PROTECTION	<ul style="list-style-type: none">- Materials for industrial waste water purification- Materials for CO₂ adsorption- New materials for sensors and advanced detection
SATELITE EVENTS	<ul style="list-style-type: none">- RETECH Training workshop (Turkey-Romania ERAMIN project on Valorisation of Rare Earths Resources from Turkey)- Final meeting of Romanian-Norway MANUNET Project NYMPH

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:

- [Frontiers in Materials](#), Materials for Energy – Special issue, impact factor 3.515 (details to be announced by publisher)
- [Manufacturing Review](#) (eISSN: 2265-4224) is indexed in Scopus, Chemical Abstract, CrossRef, DOAJ.

Important dates

Abstract submission: 19 September 2022

Abstract feedback: 30 September 2022

Poster submission: 10 October 2022

Conference: 20-21 October 2022

Full paper submission (optional): 21 November 2022 (directly to the journal of choice, to be evaluated according to the journal's procedure)

General info

Templates will be available starting July 2022, at: <http://www.imnr.ro/> www.imnr.ro

The conference is organized as an all-virtual event.

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 1st Edition](#), 14-16 November 2018, Bucharest, ROMANIA

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

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

[EmergeMAT 4th Edition](#), 4-5 November 2020, Bucharest, ROMANIA

Acknowledgement

EmergeMAT 5th Edition is supported by project "Improving the performance and competencies of INCDMNR-IMNR in the field of innovation, digitalization and technology transfer (INOVADIT)", financed by the Ministry of Research, Innovation and Digitization through Program 1 – Development of the national research-development system, Subprogram 1.2 – Institutional performance – Projects for financing excellence in RDI, contract no. 9PFE/2021 (www.imnr.ro/inovadit).

Contact

National R&D Institute for Non-ferrous and Rare Metals – IMNR

Technology Transfer Center CTT AVANMAT

Mirela PETRICEANU, Email: mirela.petriceanu@imnr.ro

Miruna IOTA, Email: iota.miruna@imnr.ro

Phone: (+4021)3522046/ext.102

Fax: (+4021)3522049