

FEMS EUROMAT23

03 - 07 Sep 2023 (Frankfurt)

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FEMS EUROMAT is the most important international congress in materials science and technology in Europe. It continues a successful congress series promoting the transfer of knowledge and the exchange of experience between academia and industry. **Submission deadline: 31 January 2023**

Area H: Materials for Circularity and Sustainability

H09: Materials Circularity for Sustainability

With the transition to a circular economy and to contribute to the global agenda on zero carbon footprint for sustainable infrastructure, EuroMat encourages the introduction of fresh solutions and collaborations in Materials Circularity. Redesigning of circular materials to create, preserve and recover value, regeneration of raw materials free of toxic precursors and by-products, and hence, resolving key supply chain challenges. Value Retention Processes or VRPs are commonly applied to keep technical nutrients within a circular economy. Strategically adopting VRPs must identify policies in terms of Impact metrics; use of material and energy, emissions, waste production, cost advantage, and employment opportunity ensuring greater utility, service-life, and value of the products and their components. The session aims to address all aspects of circularity engineering related to VRPs, for diverse materials and processes of engineering applications. Pressing challenges will be viewed under the lens, such as innovation for making sustainable products, the potential for creating a more harmonised and aligned approach to policy, and legislation, Life Cycle Assessments in making a new material choice, and scalability of advanced materials. The current challenges, as well the latest technologies and solutions related to materials science and engineering, should be discussed; and introduced during the EuroMat conference in Frankfurt. Themes can be around:

1. Future of Sustainable Materials in Diverse applications.
2. Challenges and Strategies for mass adopting circular Materials.
3. Closed loop scaling of Repair, Reuse, Remanufacture, Refurnish, Redesign
4. Identifying advanced technologies in Accelerating Sustainable Innovation
5. Green Skills: Upskilling the Future Workforce
6. Role of Materials and Process Innovation
7. Key Challenges in Reuse and Breakdown of existing products
8. Sustainability Assessment of Materials Selection and related Processes
9. Policy Framework in Materials Circularity

Symposium Organizer



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