

24th Brazilian Material Science and Engineering Congress – 24th CBECiMat

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This special issue contains a selected papers presented at the 24th Brazilian Congress on Materials Science and Engineering (24th CBECiMat), which was held in Águas de Lindóia-SP, Brazil, from November 6th to 10th, 2022.

Since its inception in 1974, the Brazilian Congress on Materials Science and Engineering - CBECiMat, has been a cornerstone event in the realm of Materials Science and Engineering, playing a pivotal role in fostering collaboration and advancing knowledge within the community. This biennial event, now in its 24th edition, has garnered longstanding acclaim and enjoys the steadfast support of the Brazilian Ceramic Association (ABCERAM), the Brazilian Association of Metallurgy, Materials, and Mining (ABM), and the Brazilian Polymer Association (ABPol). In particular, the 24th CBECiMat was hosted by the Department of Materials Engineering at the Federal University of São Carlos, Brazil (DEMa/UFSCar), commemorating its 50th anniversary as the pioneering materials engineering program in Brazil. Due to the Coronavirus (COVID-19) pandemic the event was postponed for two years to gather the Materials Science and Engineering community safely during five exciting days of fruitful exchanges and discussions.

The conference boasted approximately 840 registered participants from across the nation (representing 24 federative units) and worldwide, complemented by 7 plenary sessions, 145 oral presentations, and 2044 poster presentations². We are thrilled to announce that this special edition pledges to offer a comprehensive compilation of the most recent and captivating advancements in Materials Science and Engineering, reflecting the dynamic and ever-evolving nature of the field. In fact, the conference convened to explore a broad spectrum of cutting-edge materials and processes, such as new materials for civil and mechanical construction, corrosion phenomena, eco-materials and recycling, and biomaterials.

Our heartfelt appreciation to our esteemed reviewers, whose expertise and dedication have been instrumental in curating a selection of articles of the utmost quality. Our gratitude is also extended to the generous support received from Brazilian financing agencies CNPq, FAPESP, FINEP, and CAPES and to our industry partners, including Anton Paar, CBMM, Dpunion, Horiba, Malvern Panalytical, Netzsch, Tescan, KCEN ReoTerm, ZwickRoell, Arotec, Leica, Mbraum, Shimadzu, Altmann, CCDM and Duraprinter3D, for their invaluable contributions. Finally, we extend our appreciation to all individuals who have directly or indirectly contributed to the success of this important event and warmly invite them to join us for the upcoming edition in November 2024, set to take place in the city of Fortaleza-CE, Brazil.

References

- 1. UFSCar: Universidade Federal de São Carlos. Departamento de Engenharia de Materiais [homepage on the Internet]. São Carlos: UFSCar; 2024 [cited 2024 Mar 15]. Available from: https://www.dema.ufscar.br/pt-br
- ABC: Associação Brasileira de Cerâmica. ABM: Associação Brasileira de Metalurgia, Materiais e Mineração. ABPol: Associação Brasileira de Polímeros. 24º Congresso Brasileiro de Engenharia e Ciência dos Materiais – CBECiMat [Internet]; 2022 Nov 6-10; Águas de Lindóia. Anais. São Paulo: Metallum Congressos Técnicos e Científicos; 2022 [cited 2024 Mar 15]. Available from: https://www.metallum.com.br/24cbecimat/