FEMS EUROMAT 23

03 - 07 Sep 2023 (Frankfurt am Main)

euromat2023.com

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. **Extended submission deadline: 15 March 2023**

Area F: Materials for Healthcare

F08: Surface Modification of Biomaterials and Coatings

The main objective of this call is to cover a broad spectrum of up-to-date topics related to surface modification of biomaterials and coating deposition for healthcare applications. Surface modification of biomaterials and coatings are applied for many biomedical and bioengineering applications in order to impart important characteristics, such as biocompatibility, tissue integration, resistance to corrosion, bioactivity, antimicrobial and antivirus properties, etc. New advanced materials and technologies are rapidly being developed for this purpose, and with this session, we aim to discuss the recent advances in surfaces and interfaces for health at the micro-/nano-scale level. A special focus will be given to the development of coatings for biomedical implants and devices. Additionally, challenging clinical issues such as infections have recently drawn significant attention to the development of infection-free surfaces. Therefore, designing surfaces and coatings having the ability to eradicate microbes and viruses is of outmost importance, especially in clinical settings, where such properties are highly requested.

Abstracts are expected to focus on the design, preparation, processing, characterization, properties, and performances of such surfaces and coatings. A variety of surface modification and deposition methods will be considered. Modeling and theoretical investigations contributing to the understanding of phenomena occurring at the surfaces and interfaces in the multidisciplinary field involving physics, chemistry, engineering, and biology will be considered. To summarize, all challenges and breakthroughs connected to surface modification and coatings for health are welcome.

The topics of interest of this symposium include, but are not limited to:

Coatings, Coatings Deposition, Laser Assisted Techniques, Electrophoretic Deposition, Plasma-assisted Techniques, Thin films, Biomaterials, Nanomaterials, Calcium phosphates, Bioactive Glasses, Ceramics, Biodegradable Materials, Biomedical Implants, Material-Implant Interface, Osseointegration, Biomimetic Surface, Biodegradable Surfaces, Surface Functionalization, Micro- and Nano-scale Topographies, Modeling of Surfaces and Interfaces, Surface Characterization, Self-assembling, Anti-microbial Surfaces, and Coatings.

*This symposium is cooperating with the **European Journal of Materials (EJM)**.*

Symposium Organizer


Prof. Dr. Annabel Braem
KU Leuven


Prof. Dr. Dušan Galusek
Alexander Dubček University of Trenčín


Prof. Dr. Julietta V. Rau
Italian National Research Council (CNR)

DGM