FEMS EUROMAT23

03. - 07.09.2023 (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. **Submission deadline:28 February 2023**

Area D: Characterization and Modeling

D06: 2D Materials- Characterization and Modeling

This symposium aims to provide insights into the latest developments for modeling and characterization of 2D materials and their heterostructures. It will also showcase results that apply conventional approaches to yield new understanding. It encompasses all 2D material systems, including graphene family materials, transition metal dichalcogenides (TMDs), 2D monochalcogenides, black phosphorus and related compounds, silicene and related compounds, transitional metal carbides and carbonitrides (MXenes), misfit layer compounds and planar oxides. It is interested in situations where 2D materials are combined, such as twisted heterostructures and homostructures to tune properties, heterostructures employing encapsulation for passivation or protection, and in-plane lateral heterostructures resulting from variable doping or deliberate synthesis. We also welcome submissions considering situations where a 2D material is combined with a different material to tune the behavior. Submitted papers may focus on induced or natural defects, understanding of edges and surfaces, or intrinsic bulk behavior. We welcome characterization results showcasing all types of advanced imaging and spectroscopy techniques applied to 2D systems, for example, Raman Scattering, optical microscopy, X-ray absorption spectroscopy (XAS), angular resolved photoemission spectroscopy (ARPES), transmission electron microscopy (TEM), scanning electron microscopy (SEM) low energy electron diffraction (LEED) and scanning probe microscopy (SPM). We welcome modeling and theory results concerning multiscale theoretical and computational approaches, including atomic, molecular, and continuum models. Furthermore, submissions demonstrating the combination of experiment and theory to solve a particular 2D materials problem are particularly welcome.

Symposium Organizer

Prof. Dr. Sarah Haigh
The University of Manchester

DGM