

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 A: Functional Materials

A02: Nanowires and Nanomaterials Growth

Nanowires and, in general, nanomaterials are promising building blocks for a wide variety of existing and emerging applications. Different strategies for the controlled synthesis of nanomaterials have been demonstrated, ranging from gas-phase synthesis to liquid processing.

Thin films and particle-based nanomaterials are widely used in commercial products, while the broad application of nanowires is still hampered by reams of materials and device challenges. Breaking down existing barriers, creative solutions are required to implement these exiting nanomaterials in functional super-/heterostructures, to prepare new materials and to control interfaces.

This symposium will showcase recent progress in the field of nanomaterials growth and illustrate opportunities to advance the state-of-the-art. Innovative new interdisciplinary research directions with contributions from a wide field of disciplines, including materials science, chemistry, physics, and engineering, shall be highlighted. This wide field of researchers with interests in different facets of nanowire, nanoparticle, and thin film growth and their integration in devices will provide an excellent environment for developing new ideas for transformative research in this area.

The following topics are of particular interest:

(i) New insights to nucleation and growth of nanomaterials influencing phase, composition or properties by in situ analyses; (ii) synthesis and fabrication strategies enabling new materials compositions or geometries; (iii) methods for a direct fabrication of interconnects between individual nanostructures or interconnected networks; (iv) methods that improve throughput and purity of the nanomaterials; (v) controlling interfaces and materials properties in composite materials; (vi) understanding of material properties and device performance in emerging applications including nano-bio-interactions, transport behaviour, batteries, etc. In general, any area of materials research where nanomaterials are expected to outperform current state-of-the-art materials.

Symposium Organizer



Priv.-Doz. Dr. Sven Barth
Goethe-Universität Frankfurt



Prof. Dr. Hannah Joyce
University of Cambridge



Prof. Dr. Kevin M. Ryan
University of Limerick



Univ.Ass. Dipl.-Ing. Dr.techn. Masiar Sistani
TU Wien



Prof. Dr. Kimberly Dick Thelander
Lund University

