

## ELECTRONIC MATERIALS ADVANCED FUNCTIONAL AND STRUCTURAL THIN FILMS AND COATINGS

Functional thin films and coatings continue to be an innovative area in physics, materials science, chemistry and engineering. This symposium encompasses all aspects of advanced thin films and nanomaterials for modern optical, photonic and electronic devices with applications in photovoltaics, sensing and display technologies. Moreover, coatings & engineered surfaces for reducing corrosion and wear as well as making use of lubricant-free (green) production and coatings for biomedical and healthcare applications are of interest.

This symposium will include, but will not be limited to the following topics:

- 1. Thin films and nanostructures for optoelectronics
  - Fundamental studies and modelling, photonics, plasmonics, sensors, flexible electronics
  - Multifunctiona materials & devices
- 2. Coating technologies and surface structuring for tools
  - Fundamentals & applications of lubricant-free (green) production
  - Methods to improve wear resistance and reduce friction
  - Functionalizing surfaces & interfaces
- 3. Multifunctional biomaterials, innovative approaches to new concepts and applications.
  - Functionalities of coatings/surface modifications
  - Methods to improve biocompatibility, cell proliferation and growth, antimicrobial behavior and metallic ion release, load-bearing prostheses, corrosion resistance, wear resistance, etc. under in vitro and in vivo conditions.

## **ORGANIZERS**

Adele Carrado, IPCMS - CNRS, France Ramana Chintalapalle, University of Texas at El Paso, USA Gerald Ferblantier, Icube Laboratory - Strasbourg University, France Nancy Michael, University of Texas at Arlington, USA

## SYMPOSIUM SPONSORS

TMS Functional Materials Division TMS Thin Films and Interfaces Committee

Abstract Deadline is July 1, 2020. Submit online at www.programmaster.org/TMS2021.

Questions? Contact programming@tms.org