

MNE

19th - 23th SEPTEMBER

LEUVEN | BELGIUM

2022

SAVE THE
DATE



CALL FOR PAPERS

Deadline for abstract submission: **May 2nd, 2022**

Acceptance : **June 5th, 2022**

MEETING HIGHLIGHTS

Micro and Nano Engineering (MNE) is the core international conference focusing on **micro- and nano-fabrication, manufacturing techniques**, as well as applications of the fabricated micro/nanostructures, devices and microsystems into **electronics, photonics, energy, environment, chemistry and life sciences**.

The 4-day conference format includes **3 parallel sessions, seven plenary talks, invited presentations, oral and poster presentations, a commercial exhibition and several awards** (MNE fellow award, Elsevier's Young Investigator award, best MNE poster award). For the first time, oral papers presented by students, based on their own work, will be considered for the new **MNE best student oral presentation award**. **Tutorials** will be organized on Monday afternoon, September 19th, 2022.

The MNE 2022 will include special sessions: the **Plasma Etch and Strip for Microtechnology (PESM)** and **Superconducting Micro- and Nano-Devices (SMND)** workshops.

CONFERENCE TOPICS

The **MNE2022** technical program committee welcome submissions of high-quality abstracts for 4 thematically focused technical tracks, as listed below. There are two different submission types: oral and poster.

- **Topic 1 - Novel Developments in Nano/Micro Fabrication Methods and Processes**
- **Topic 2 - Fabrication and Integration of Micro/Nano Structures, Devices and Systems**
- **Topic 3 - Micro/Nano Engineering for Physical and Chemical Applications**
- **Topic 4 - Micro/Nano Engineering for the Life Sciences**

MNE poster papers have equal weight to oral presentations. The program committee will decide on the final format of presentation. **Abstracts need to be submitted by May 2nd, 2022, at midnight (ECT time)**. The abstracts need to comply with the pre-determined MNE formatting – a MS word template is available at the submission page. Only electronic submissions through the abstract submission portal linked to the conference website will be accepted. Do not email files to the conference office. Abstract submission follows a two-stage process. The **detailed abstract** consist in a two-page description of achieved results, containing text and images, submitted as a single pdf file. It must clearly state the title of the paper, authors names and addresses, the purpose of the work, the way it advances existing knowledge, and specific new results that were obtained in rigorous experimental conditions and their significance. A brief summary, **200-word web page abstract**, will be used on the MNE2022 web pages and app. The abstract should be provided during the submission process in the requested text field on the submission web site. For questions related to the abstract submission flow, please contact the MNE2022 program office at program@mne2022.org.

For further details, check www.mne2022.org

All questions or inquiries for further information regarding this meeting should be directed to the Conference Office at : info@mne2022.org



TOPICS + SUBTOPICS

For each topic, there is a wide range of subtopics. Please note that you can only select subtopics within one topic.

Topic 1 - Novel Developments in Nano/Micro Fabrication Methods and Processes

- ▶ Lithography
- ▶ Patterning, including plasma and beam etching (**PESM workshop**)
- ▶ Materials
- ▶ Surface preparation and cleaning
- ▶ Computer-aided predictive nanofabrication

Topic 2 - Fabrication and Integration of Micro/Nano Structures, Devices and Systems

- ▶ Nanofabrication (other than nanopatterning), nanomanipulation, transfer, bonding technology
- ▶ “Smart” (multi-)functional surfaces with wetting, optical or biological functionality; Plasma surface engineering
- ▶ Use of metamaterials, 2D materials into innovative devices
- ▶ Fabrication and Integration of MEMS/NEMS and nanodevices
- ▶ Thermoforming (2D-to-3D shaping), injection molding, soft embossing, 3D Nanomanufacturing, 3D Microprinting and rapid prototyping, additive microfabrication
- ▶ System design, simulation and Integration
- ▶ Micro- and nano-manufacturing
- ▶ Inspection, process control and manufacturability testing
- ▶ Packaging technology and reliability

Topic 3 - Micro/Nano Engineering for Physical and Chemical Applications

- ▶ ICT
- ▶ Energy
- ▶ Physical and chemical sensors
- ▶ Optics and photonics, plasmonics
- ▶ Phononics/acoustics, thermoelectricity
- ▶ Nanomagnetism, data Storage & memory
- ▶ Flexible & large area electronics, organic electronics
- ▶ Superconducting micro- and nano-devices (**SMND special sessions**)

Topic 4 - Micro/Nano Engineering for the Life Sciences

- ▶ Bio-inspired technologies. bio-mimetic surfaces
- ▶ Packaging, biocompatibility, degradable-/disposable packaging
- ▶ Micro and nano fluidic systems and their fabrication
- ▶ Processing of nanoparticles: manipulation, detection, sensing, sorting
- ▶ Membranes and nanopore technology
- ▶ Design, fabrication, recycling of micro-nano devices for life sciences
- ▶ Interfacing biomaterials and bio-entities with devices and systems
- ▶ New process technologies for life sciences: plasma treatment, beams, etc...
- ▶ Applications in health, environmental monitoring, food safety, agrofood, nutrition and agriculture, E-waste reduction, recycling of disposable devices

Our current sponsors are shown below. How about you?

