2023 IEEE International Conference on Manipulation, Manufacturing and Measurement on the Nanoscale

31 July - 4 August 2023, Chengdu, China

3M-NANO is the annual International Conference on Manipulation, Manufacturing and Measurement on the Nanoscale. It will be held on 31 July - 4 August 2023 in Chengdu, China. **The ultimate ambition of this conference series is to bridge the gap between nanosciences and engineering sciences**, aiming at technology opportunities and new markets. The advanced technologies for manipulation, manufacturing and measurement at nanoscale promise novel revolutionary products and methods in numerous areas of application. Scientists working in research fields related to 3M-NANO topics are invited to submit papers. **All accepted full papers (presented at the conference and following IEEE format) will be submitted in IEEE Xplore database and Ei Compendex.** Selected papers will be recommended for publication in the IEEE Trans. on Automation Science & Engineering, Int. J of Nanomanufacturing, IFAC Mechatronics, Int. J of Optomechatronics, J of Micro-Bio Robotics, Journal of Bionic Engineering, Light (Science & Applications), Optics and Precision Engineering and other SCI/Ei journals.

Organizers: **Sichuan University, China**
International Research Centre for Nano Handling and Manufacturing of China
Changchun University of Science and Technology, China
Aarhus University, Denmark
University of Warwick, UK
University of Bedfordshire, UK
Ministry of Education Key Laboratory for Cross-Scale Micro and Nano Manufacturing, China
Zhongshan Institute of Changchun University of Science and Technology, China
International Joint Research Center for Nanophotonics and Biophotonics, China
International Society for Nano Manipulation, Manufacturing and Measurement
IEEE Nanotechnology Council

Topics: Specific topics include, but are not limited to

- Nanohandling robots and systems
- Nanofabrication and nanoassembly
- Nanometrology and nanocharacterization
- Nanopositioning and nanomanipulation
- Nanosensing and microscopy
- AFM and SEM for nanohandling
- Process automation at nanoscale
- Self-assembly at nanoscale
- Nanoscale robotics
- Nanolithography
- Nanoenergy
- Nanoscience for healthy foods
- Nanomaterials and applications
- Graphene and applications
- Nanoparticles, nanowires and nanotubes
- Nanoelectronics and nanomagnetics
- Nanophotonics and plasmonics
- Nanomechanics and nanomechatronics
- NEMS and their applications
- Nanofluidics
- DNA detection and sequencing
- Bio-nano devices and applications
- Bio-nanoimaging and nanomeasurement
- Nanotech and environmental protection

High-profile keynote talks (20-24) on selected topics in manipulation, manufacturing and measurement on the nanoscale will be offered by **distinguished international experts**.

Social events: 3M-NANO aims at encouraging long-term partnerships and collaborative activities between experts in nanosciences and in engineering sciences. **Get-together events will be organized by 3M-NANO as part of this effort.**

Venue: Chéngdū, formerly transliterated as Chengdu, is the capital of Sichuan province, of Southwest China, maintaining sub-provincial administrative status. Chengdu is also one of the most important economic centres, transportation and communication hubs in Western China. Chengdu is located at the western edge of the Sichuan Basin and sits on the Chengdu Plain; the dominating terrain is plains. Sichuan cuisine is a style of Chinese cuisine originating in the Sichuan Province of Southwestern China famed for bold flavors. UNESCO has declared the city of Chengdu to be a city of Gastronomy in 2011, mainly because of its Sichuan style of cooking.

Important Dates

Full paper submission: **1 May 2023**
Proposals for special session (5-6 papers): **1 May 2023**

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