Joint Workshop on Nano-Characterisation

Utrecht (De Witte Vosch, Oudegracht 46), 28 October 2019

4TU. High-Tech Materials
together with the Materials Innovation Institute (M2i)

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To be able to develop novel, high-tech materials for sustainable applications, a thorough understanding of materials on the nanoscale is crucial. This workshop aims to bring together scientists and industrial partners with interest and expertise on nano-characterisation throughout the different types of materials, techniques and processes for an exchange of ideas and observations.

Speakers

- Prof. dr. Holger Schönherr, Physical Chemistry, Universität Siegen
- Dr. Nicolas Gauquelin, Physics, University of Antwerp
- Dr. Michael Herbig, Materials Science of Mechanical Contacts, MPIE
- Prof. dr. Kobus Kuipers, Quantum Nanoscience, TU Delft
- Prof. dr. Joris Dik, Materials Science and Engineering, TU Delft
- Dr. Sissi de Beer, Materials Science and Technology of Polymers, UTwente
- Hanne van der Kooij MSc., Physical Chemistry and Soft Matter, WUR
- Dr. Roderick Tas, Self-Organizing Soft Matter, TU/e
- Dr. ir. Jacob Hoogenboom, Imaging Physics, TU Delft

Posters

- Dr. Amir Mirza Gheytaghi, Microelectronics, TU Delft
  Poster title: Nano-characterization of coated CNT pillar
- Jianing Li MSc., Physics of Nanostructures, TU/e
  Poster title: Imprint lithography defined magnetic nanoplatelets for cancer treatment and biomedicine
- Dr. Oleg Kurnosikov, Physics of Nanostructures, TU/e
  Poster title: Exploring a subsurface in metals with STM
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<th>Time</th>
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<tr>
<td>10.00</td>
<td>Welcome and coffee</td>
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| 10.25 - 10.30 | Introduction  
**Prof.dr.ir. Jilt Sietsma** (scientific director 4TU.HTM)  
Materials Science and Engineering, 3mE, Delft University of Technology |
| 10.30 - 11.00 | **Prof.dr. Holger Schönherr** (Universität Siegen)  
Probing hidden interfaces and nanoenvironments in polymeric nanostructures and nanobubbles by combined optical-force microscopy methods |
| 11.00 - 11.30 | **Dr. Sissi de Beer** (UTwente)  
Nanoscale Subsurface Morphologies in Block Copolymer Thin Films Revealed by Combined Near-Field Infrared Microscopy and Mechanical Mapping |
| 11.30 - 12.00 | **Dr. Roderick Tas** (TU/e)  
Nanoscopy at the interface: from materials to ice |
| 12.00 - 12.15 | Short poster presentations by  
- Amir MirzaGheytaghi (TU Delft) Nano-characterization of coated CNT pillar  
- Jianing Li (TU/e) Imprint lithography defined magnetic nanoplatelets for cancer treatment and biomedicine  
- Oleg Kurnosikov (TU/e) Exploring a subsurface in metals with STM |
| 12.15 - 13.00 | Lunch and posters                                                      |
| 13.00 - 13.30 | **Dr. Michael Herbig** (Max-Planck-Institut für Eisenforschung)  
Joint Nanoscale Structural and Chemical Characterization by Correlative Atom Probe Tomography and Transmission Electron Microscopy |
| 13.30 - 14.00 | **Dr. Nicolas Gauquelin** (University of Antwerp)  
Nanocharacterisation of materials with modern TEM techniques |
| 14.00 - 14.30 | **Hanne van der Kooij MSc** (WUR)  
Imaging the nanoscale dynamics and mechanics of complex soft materials |
| 14.30 - 15.00 | Break and posters                                                      |
| 15.00 - 15.30 | **Prof.dr. Kobus Kuipers** (TU Delft)  
NanoOptics – breaking the diffraction limit to visualize the flow of light in nanophotonic devices |
| 15.30 - 16.00 | **Prof.dr. Joris Dik** (TU Delft)  
Topic: Smart*Light |
| 16.00 - 16.30 | **Dr.ir. Jacob Hoogenboom** (TU Delft)  
Zooming in on tissue from millimeters to nanometers with multi-modal microscopes |
| 16.30 - 17.30 | Closure & Drinks                                                       |

All information online: https://www.4tu.nl/htm/en/events/workshop-on-nano-characterisation/