DEMOKRITOS

INN Institute Nanoscience Nanotechnology

# Workshop

Iceland Liechtenstein Norway grants

EEA

nano scopy

## Advancements in Transmission Electron Microscopy and Spectroscopy: Exploring analytical and quantitative techniques

### Short Program

Friday 12 July 2024

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|---|---|
| **10:00-10:45** | Electron microscopy methods with emphasis on nanomaterials, **Philomela Komninou** |
| **11:15-12:00** | Introduction to structure analysis based on electron diffraction, **Anette Eleonora Gunnæs** |
| **12:00-12:45** | Introduction to spectroscopy in an electron microscope - local chemistry and beyond, **Demie Kepaptsoglou** |

Saturday 13 July 2024

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| **10:00-10:30** | Unraveling the complex nanomorphology of conjugated polymers/organic materials by multimodal analytical transmission electron microscopy and cryo-electron microscopy, **Christos Chochos** |
| **10:30-11:00** | Unlocking biological mysteries with cryo-electron microscopy, **Fotis Kyrilis** |
| **11:00-11:30** | Advanced studies (liquid/gas/oxidation/strain & phase maps) using in situ TEM 4D-SPED and 3D EDT tomography, **Stavros Nikolopoulos** |
| **11:30-11:50** | Coffee Break |
| **11:50-12:20** | Probing nanoscale light-matter interactions using fast electrons, **Andrew B. Yankovich** |
| **12:20-12:50** | In situ and operando (S)TEM studies of 2D battery materials, **Kalliopi Bazioti** |
| **12:50-13:00** | Introduction to SuperSTEM, UK national facility for advanced electron microscopy, **Demie Kepaptsoglou** |
| **13:00-13:45** | Short Demonstration of the operation of a Nion UltraSTEM100 cs-corrected STEM: Imaging and EELS, **Demie Kepaptsoglou** |
| **13:45-14:15** | Light Lunch |