

One-day workshop: Metrology for Energy nanomaterials

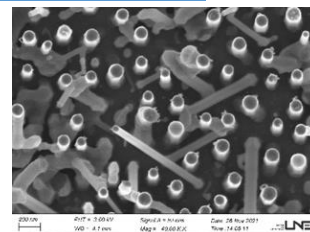
Date: November 17, 2022

Place: LNE Paris (room 68) 1, rue Gaston Boissier - 75724 PARIS

Organisers: N. Fleurence (LNE), B. Gautier (INL), F. Piquemal (LNE)

Objectives

This workshop proposes to present to the scientific community involved in the development of Energy nanomaterials an overview (not exhaustive) of the main techniques of quantitative characterization at micro and nano scales. It is also an opportunity to introduce them to the issues of standardization, traceability of measurements and modelling at these scales. In addition, this workshop will also be an opportunity to discuss the scientific barriers and technical challenges specific to measurements at nanoscale that remain to be overcome with the aim at obtaining quantitative measurements and converging measurements and modelling.



Draft Agenda

| Time | Topic | Speakers |
|---------------|---|---------------------------------|
| 9h00 – 9h10 | Opening | Organisers |
| 9h10 – 9h45 | Standardisation | N. Fabricius (ISC) |
| 9h45 – 10h20 | Modelling | B. Gautier (INL) |
| 10h20 – 10h55 | Metrology : Measurement and uncertainties | S. Demeyer (LNE) |
| 10h55 – 11h10 | Coffee break | |
| 11h10 – 11h45 | Nano characterization in length domain: AFM, SEM | A. Delvallée (LNE) |
| 11h45 – 12h20 | Nano characterization in electricity (I): KPFM, and Conductive AFM techniques | K. Kaja (LNE) |
| 12h20 – 13h45 | Lunch | |
| 13h45 – 14h20 | Nano characterization in electricity (II): SMM techniques | J. Hoffmann (METAS) |
| 14h20 – 14h55 | Nano characterization in magnetism | H. W. Schumacher (PTB) |
| 14h55 – 15h30 | Nano characterization in thermal domain (SThM) | S. Gomès (CETHIL) |
| 15h30 – 15h45 | Coffee break | |
| 15h45 – 16h20 | Elemental and structural characterization | M.-C. Lepy / Y. Menesgen (LNHB) |
| 16h20 – 17h00 | Round table | All |
| 17h00 – 17h10 | Closure | Organisers |

Registration and attendee details: <https://www.lne.fr/en/events/workshop-metrology-energy-nanomaterials>

The workshop is free of charge but all participants have to register online. Please note that the total number of participants is limited, so the 'first come, first serve' principle will be applied.

Contact: workshopnanoenergy@lne.fr