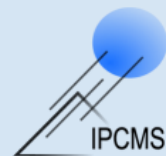




**TEM** | EUROPEAN PLATFORM  
OF IPCMS STRASBOURG



# SCIENTIFIC WORKSHOP

## “Electron Microscopy at high Spatial and Temporal Resolution”

### Program

Inauguration of Transmission Electron Microscopy  
OPERANDO (Grand ARM 2)

Cronenbourg Campus, 23 rue du Loess, Strasbourg

Monday 13, 2025

11:00-12:30, Auditorium IPCMS – Building 69

*Outreach lectures* : From Next-Generation Materials to Advanced  
Analytical Tools: An Essential Partnership

**Pr. Clément Sanchez**, LCMCP CNRS-Sorbonne Université-Collège de France Paris,  
USIAS Strasbourg

« *Integrative Materials Science: A domain where chemistry, biology, physics and  
engineering meet* »

**Pr. Gianluigi Botton**, Diamond Light Source (UK) and McMaster University (CA)

« *Probing the atomic and electronic structure of functional materials with electron  
microscopy and spectroscopy* »

14:30-16:30, Amphitheater Perey - Building 01

*Official Inauguration* (CNRS, University of Strasbourg, Foundation Jean-  
Marie Lehn, Local authorities, Alsace region etc.)

Tuesday 14, 2025

9:00-17:30, Amphitheater Grünewald - Building 25

*Scientific workshop* : Electron Microscopy at High Spatial and Temporal  
Resolution: Current Status and Future Perspectives in Material  
Characterization



# SCIENTIFIC WORKSHOP

## “Electron Microscopy at high Spatial and Temporal Resolution”

**Pr. Nigel Browning**, Albert Crewe Centre for Scanning Transmission Electron Microscopy, Liverpool (UK)

« *Sparse Sampling and Inpainting for High resolution, In-situ and Ultrafast (S)TEM* »

**Pr. Naoya Shibata**, Institute of Engineering Innovation, School of Engineering, The University of Tokyo and Nanostructures Research Laboratory, Japan Fine Ceramic Center (Japan)

« *Development of magnetic-field-free atomic resolution electron microscope* »

**Pr. Marc-Georg Willinger**, Department of Chemistry, School of Natural Sciences Technical University of Munich (Germany)

« *Dynamics at phase boundaries and their relation to catalytic function: Insights from operando electron microscopy* »

**Pr. Joke Hadermann**, Electron microscopy for materials science (EMAT), University of Antwerp (Belgium)

« *Crystal structure evolution tracking using in situ 3D ED and 4D-STEM tomography* »

**Pr. Odile Stephan**, Laboratoire de Physique des Solides (LPS), Université Paris-Saclay - CNRS, Orsay

« *Recent advances in monochromated STEM EELS and related spectroscopy techniques* »

**Dr. Sophie Meuret**, Centre d'élaboration de matériaux et d'études structurales (CEMES), CNRS, Toulouse

« *Dynamics of semiconductors heterostructures with an Ultrafast Transmission Electrons Microscope* »

**Dr. Patricia Abellan**, Institut des Matériaux de Nantes Jean Rouxel (IMN), CNRS, Nantes

« *The radiolysis of water ice interfaces and aromatic compounds in the electron microscope* »

**Dr. Arnaud Demortier**, Laboratoire de Réactivité et de Chimie des Solides (LRCS), CNRS, Amiens

« *Pushing the Limits of 4D-STEM in Battery Research: ACOM Mapping and Electron Ptychography* »

**Dr. Patrick Schultz**, Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC), CNRS – Université de Strasbourg

« *3D imaging of hydrated samples, lessons from biology* »