



# IR Optical Nanoscopy Workshop

Krakow, March 11, 2026 – Solaris Synchrotron

## Program

### Wednesday | March 11<sup>th</sup>, 2026

08:30 – 08:50 **Registration**

08:50 – 09:00 **Marcin Sikora, Tomasz Wróbel, Maciej Roman** – Solaris Synchrotron, Krakow, Poland  
*Opening Remarks*

09:00 – 09:10 **Bogusław Burak** – COMEF, Poland  
*Technology introduction*

#### Session 1 **Nano-IR Imaging and Spectroscopy Applications**

09:10 – 09:40 **Adrian Cernescu** – Attocube systems GmbH, Munich, Germany  
*Nano-IR imaging and spectroscopy tutorial; practical aspects and application examples*

09:40 – 10:00 **Szczepan Zapotoczny** – Jagiellonian University, Krakow, Poland  
*Chemical mapping of nanostructured polymer systems*

10:00 – 10:20 **Adam Kiersnowski** – Wrocław University of Science & Technology, Wrocław, Poland  
*At the Core of Polymer Polymorphs. Revealing the Polymer Crystal Packing with Scanning Probe Microscopy*

10:20 – 10:40 **Agata Niemczyk** – West Pomeranian University of Technology, Szczecin, Poland  
*Determining the Composite Nature of Thin Polymeric Coatings*

10:40 – 11:10 **Coffee Break**

#### Session 2 **Nano-IR Imaging and Spectroscopy Applications**

11:10 – 11:30 **Ewelina Lipiec** – Jagiellonian University, Krakow, Poland  
*s-SNOM imaging of selected biomolecules: challenges and outlook*

11:30 – 11:50 **Łukasz Piątkowski** – Poznań University of Technology, Poznań, Poland  
*SPOTLab - from magnetic field sensors to cellular membranes*

11:50 – 12:10 **Katarzyna Kołodzińska** – Wrocław University of Science & Technology, Wrocław, Poland  
*From morphology control to functionalization: a nano-FTIR study of electrospun protein-based materials*

12:10 – 12:30 **Piotr Kuich** – Wroclaw University of Science and Technology, Wroclaw, Poland  
*Vesicular-type nanocarrier co-loaded with persistent luminescence nanoparticles and photosensitizers - synthesis, characteristics and potential application*

12:30 – 12:50 **Patrik Micek** – Ensemble3, Warsaw, Poland  
*Complex far-field & near-field optical characterization of eutectic crystals*

12:50 – 13:40 **Lunch Break (on site, provided by organizers)**

### Session 3 **nano-IR Live Demo – remote session from Solaris IR - beamline**

13:40 – 15:10 **Adrian Cernescu, Yasin Durmaz** - Attocube systems GmbH, Munich Germany  
*Nano-IR live demonstration on polymer, biological and inorganic samples*

15:10 – 15:30 **Adrian Cernescu** - Attocube systems GmbH, Munich Germany  
*Nano-IR image and spectral data processing*

15:30 – 16:00 **Transfer to Solaris Synchrotron**

### Session 4 **Poster Session at Solaris Synchrotron**

16:00 – 18:00 **Synchrotron tour and poster session with snacks & drinks**

**10<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> March: nano-IR measurements of participant samples**

#### **Workshop venue:**

Wydział Chemii UJ

ul. Gronostajowa 2, 30-387 Kraków

