



European Network for Innovative  
and Advanced Epitaxy



**Lenka Zajickova**

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COST Action CA20116

**PERA**  
European Network for Innovative  
and Advanced Epitaxy

4<sup>th</sup> OPERA COST Action Training School (hybrid event)  
**Applications and Characterization of Epitaxial Materials**

3<sup>rd</sup> to 6<sup>th</sup> June 2025

For on-site participants at:  
Faculty of Science (Kotlářská Campus)  
Masaryk University  
Brno, Czech Republic  
with technical session at  
CEITEC, Brno University of Technology

Deadline for registration: 30<sup>th</sup> April 2025

No attendance fee

Chair: Lenka Zajíčková  
E-mail: [lenkaz@physics.muni.cz](mailto:lenkaz@physics.muni.cz)  
<https://cost-opera.eu/>

A square QR code located in the bottom right corner of the poster, likely linking to the event registration page.

The logo of the European Union, featuring a circle of twelve gold stars on a blue background.

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OF TECHNOLOGY

Daily Schedule

Tuesday, June 3

| Time        | Activity                                                                                | Location  |
|-------------|-----------------------------------------------------------------------------------------|-----------|
| 11:00–12:30 | Registration                                                                            | SCI/06    |
| 12:30–13:00 | Opening of Training School (Yamina Andre / Lenka Zajčková)                              | SCI/06/F1 |
| 13:00–14:30 | Principles of Epitaxial Growth and Epitaxy from Molecular Beams (MBE) (Eduard Hulicius) | SCI/06/F1 |
| 14:30–15:15 | Coffee break                                                                            | SCI/09    |
| 15:15–16:30 | Scaling Up: SiC Epitaxy for Industrial Production (Tomáš Novák)                         | SCI/06/F1 |
| 16:30–17:45 | Pulsed Laser Deposition: Principles and Applications (Adam Dubroka)                     | SCI/06/F1 |

Wednesday, June 4

| Time        | Activity                                                                                                     | Location  |
|-------------|--------------------------------------------------------------------------------------------------------------|-----------|
| 08:30–10:00 | Metalorganic Vapour Phase Epitaxy of Nitrides and III-V Nanoheterostructures (Alice Hospodková)              | SCI/06/F1 |
| 10:00–11:30 | X-ray Structural Characterization of Epitaxial Materials (Ondřej Caha)                                       | SCI/06/F1 |
| 11:30–13:30 | Lunch break + individual transport to CEITEC                                                                 | –         |
| 13:30–14:30 | Excursion to CEITEC Nanotechnology Labs                                                                      | CEITEC/C  |
| 14:30–17:00 | Hands-on: Deposition and Characterization Methods (Viktor Danchuk, Adam Dubroka, Marek Eliáš, Daniel Franta) | CEITEC/C  |
| 17:00–19:30 | Coffee break + poster session                                                                                | CEITEC/S  |



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Thursday, June 5

| Time        | Activity                                                                                                                   | Location            |
|-------------|----------------------------------------------------------------------------------------------------------------------------|---------------------|
| 09:00–10:00 | Fabrication and Characterization of Magnetic Nanowires and Nanotubes (Michal Staňo)                                        | SCI/06/F1           |
| 10:00–12:30 | Hands-on: Atomic Force Microscopy Data Analyses (David Nečas)/<br>Hands-on: Semiconductor Device Technology (Petr Mikulík) | SCI/06/F1<br>SCI/09 |
| 12:30–14:00 | Lunch break                                                                                                                | –                   |
| 14:00–16:30 | Hands-on: Atomic Force Microscopy Data Analyses (David Nečas)/<br>Hands-on: Semiconductor Device Technology (Petr Mikulík) | SCI/06/F1<br>SCI/09 |
| 16:30–17:00 | Coffee break                                                                                                               | SCI/09              |
| 17:00–18:00 | CVD of Diamond and Its Quantum Computing Applications (Miloš Nesládek)                                                     | SCI/06/F1           |

Friday, June 6

| Time        | Activity                                                                                                                                 | Location  |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 08:30–09:45 | Non-destructive Characterization of Crystalline Defects using Diffraction Techniques in Scanning Electron Microscopes (Martin Čalkovský) | SCI/06/F1 |
| 09:45–11:15 | Advanced Scanning Probe Microscopy (Petr Klapetek)                                                                                       | SCI/06/F1 |
| 11:15–13:30 | Lunch break + transport to Czech Metrology Institute                                                                                     | –         |
| 13:30–14:30 | Excursion to Czech Metrology Institute Labs (CMI)                                                                                        | CMI       |
| 14:30–16:30 | Hands-on: Atomic Force Microscopy (Petr Klapetek)                                                                                        | CMI       |

COST Action CA2014  
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TS - Countries of origine

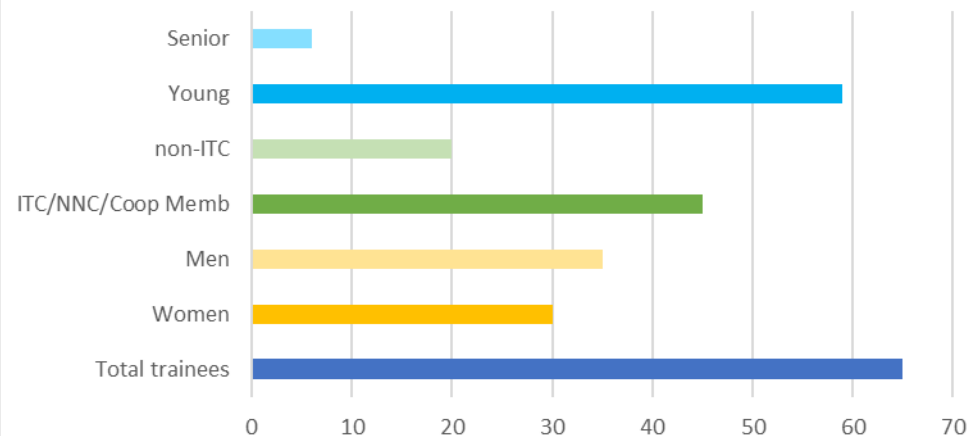


- Lithuania
- Italy
- Romania
- Germany
- Poland
- Serbia
- Greece
- Latvia
- Belgium
- Portugal
- Azerbaijan
- Ireland
- Spain
- Czech Republic
- Israel
- Slovakia
- Croatia
- India
- Turkey

TS - Trainees Gender Balance



TS - Statistics



TS - Participant reimbursement statistics

