



Experts School

05.05.2025

10:00	Opening of the Event
10:15	InnoLAB in brief
10:30	Ice-breaker activities
11:00	Break
11:15	Plenary Talk 1: Process intensification <i>Prof. Tapio Salmi, Abo Akademi University, Laboratory of Industrial Chemistry and Reaction Engineering.</i>
12:15	Case Study 1: Methanol production <i>Dipl.-Ing. Albrecht Irrgang and Dr. Stefan Frölich, Dresden University of Applied Sciences</i>
13:00	Lunch break
14:00	Expert Talk 1: Toward Sustainable Polyurethane Foams: Trends and Challenges under the Green Deal Framework <i>Dr. Letizia Verdolotti, IPCB-CNR</i>
14:45	Case Study 2: Sugar alcohols synthesis from sugar monomers <i>Prof. Tapio Salmi, Abo Akademi</i>
15:30	Break
15:45	Case Study 3: Process intensification to overcome the thermodynamic limitations of chemical reactions <i>Prof. Martino Di Serio, University of Naples Federico II</i>
17:00	Closing



Experts School

06.05.2025

9:15	Opening
9:30	Case Study 4: Fischer-Tropsch synthesis <i>Prof. Stefan Haase, Dresden University of Applied Sciences</i>
10:00	Case Study 5: Removal of emerging pollutants from wastewater <i>Prof. Vincenzo Russo, University of Naples Federico II</i>
10:45	Break
11:00	Plenary Talk 2: Sustainability and Life Cycle Assessment <i>Prof. Raffaele Cucciniello, University of Salerno, Department of Chemistry and Biology "Adolfo Zambelli".</i>
12:00	Expert Talk 2: Novel technologies for wastewater treatment <i>Prof. Raffaele Cucciniello, University of Salerno, Department of Chemistry and Biology "Adolfo Zambelli".</i>
12:30	Case Study 6: Biogas production from waste biomass <i>M. Tech. Pragya Singh, IIT Ropar/Dresden University of Technology</i>
13:15	Lunch break

Free afternoon/ City visit



Experts School

07.05.2025

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| 9:15 | Opening |
| 9:30 | Case Study 7: Carbon capture from gaseous effluents
<i>Dr.-Ing. Sara Marchini, Dresden University of Technology</i> |
| 9:50 | Expert Talk 4: Carbon capture in off-shore conditions
<i>M.Sc. Martina Zabatta, Department of Chemical, Materials and Production Engineering, University of Naples Federico II</i> |
| 10:15 | Expert Talk 5: Overview on Carbon Capture, with focus on Bluenzyme™
<i>Dr. Laura Pirro, CCUS Solution Manager, Saipem</i> |
| 10:45 | Break |
| 11:00 | Expert Talk 6: Advanced measurement techniques for chemical reactors
<i>Prof. Markus Schubert, Dresden University of Technology</i> |
| 11:45 | Case Study 8: Vegetable oil epoxidation: from the industrial process to novel developments
<i>Prof. Rosa Turco, University of Naples Federico II and Dr. Pasi Tolvanen, Abo Akademi</i> |
| 12:30 | Expert Talk 7: Environmental catalysis: development of novel catalysts for mobile and stationary applications
<i>Dr. Luciana Lisi, STEMS-CNR</i> |
| 13:15 | Lunch |
| 14:15 | Expert Talk 8: Sustainability for chemical processes
<i>Dr. Yuri Sneider, MARIMONT</i> |
| 15:00 | Expert Talk 9: Advanced reactor modelling
<i>Prof. Johan Warna, Abo Akademi</i> |



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Experts School

- 15:45 Workshop: Reactor modelling with Matlab
 Prof. Riccardo Tesser, University of Naples Federico II
- 16:45 Closing

Dinner Event



Experts School

08.05.2025

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| 9:30 | Opening |
| 9:45 | Plenary Talk 3: Digitalization in Chemical Process Engineering
<i>Prof. Francesco Di Natale, University of Naples Federico II,
Department of Chemical, Materials and Production Engineering.</i> |
| 10:45 | Expert Talk 10: Machine learning applied to a gas scrubbing process
<i>Dr. Ing. Luigi Piero Di Bonito, Department of Chemical, Materials and
Production Engineering, University of Naples Federico II</i> |
| 11:30 | Break |
| 11:45 | Expert Talk 11: Fischer-Tropsch synthesis and Power-to-Liquid
processes
<i>M.Sc. Maximilian Medicus, Fraunhofer IKTS</i> |
| 12:15 | Expert Talk 12: Biopolymers and Waste Biomass Valorization: Case
Studies on Circular Economy Approach
<i>Dr. Gabriella Santagata, IPCB-CNR</i> |
| 13:00 | Lunch |
| 14:15 | Expert Talk 13: Microdevices for process intensification
<i>Prof. Jürgen Brandner, Karlsruhe Institute of Technology (KIT)</i> |
| 15:00 | Expert Talk 14: Utilization of the 4 th State of Matter: Plasma as a
Game Changer for e-Fuels
<i>Dr. Martin Kellert, Refuel.green consulting & technologies</i> |
| 15:45 | Break |
| 16:00 | Workshop: case study development in groups |
| 17:45 | Closing |



Experts School

09.05.2025

9:30	Opening
9:45	Expert Talk 15: Analytics for water control <i>Dr. Francesco Troisi, Natura Srl</i>
10:30	Break
11:30	Workshop: case study development in groups
13:15	Lunch
14:15	Group presentations and next steps
16:00	Evaluating students' engagement in bio-energy project-based learning: a project from IIT Ropar, India. <i>M. Tech. Pragya Singh, IIT Ropar/Dresden University of Technology</i>
16:30	Closing of the Event