

Program of the school 2025

Saturday, October 4th:

Arrival/registration from 17:00 - 21:00 (dinner included)

Sunday, October 5th:

8:45 - 9:00	Welcome and introduction (plot of the school, information) <i>Marc Böke and Marina Prenzel, Ruhr-Universität Bochum & Rony Snyders and Stephanos Konstantinidis, UMONS, Belgium</i>
9:00 - 10:30	Introduction I: Fundamentals of Plasma Physics <i>Achim von Keudell, Ruhr-Universität Bochum, Germany</i>
10:30 - 10:45	Coffee break
10:45 - 12:15	Introduction II: Fundamentals of Plasma Physics <i>Achim von Keudell, Ruhr-Universität Bochum, Germany</i>
12:30 - 13:30	Lunch
13:45 - 15:15	Plasma modelling I: General Overview <i>Annemie Bogaerts, University of Antwerp, Belgium</i>
15:15 - 15:30	Coffee break
15:30 - 17:00	Plasma sources I: Micro-wave plasmas <i>Ante Hecimovic, Max-Planck-Institut für Plasmaphysik, Germany</i>
17:00 - 17:30	Forum with teachers
18:30 - 20:00	Dinner
20:00	Evening lecture: History of plasma physics <i>Holger Kersten, CAU Kiel, Germany</i>

Monday, October 6th:

9:00 - 10:30	Plasma modelling II: Electron kinetics in atomic and molecular plasmas <i>Luís L. Alves, University of Lisbon, Portugal</i>
10:30 - 10:45	Coffee break
10:45 - 12:15	Plasma modelling III: Fluid modelling of discharge plasmas <i>Luís L. Alves, University of Lisbon, Portugal Antonio Tejero, University of Cordoba, Spain</i>
12:30 - 13:30	Lunch
13:45 - 15:15	Plasma diagnostics I: Basics of plasma spectroscopy <i>Sylvain Iseni, GREMI, CNRS/Univ. Orléans, France</i>
15:15 - 15:30	Coffee break
15:30 - 17:00	Plasma sources II: High pressure thermal plasmas and sources <i>Tony Murphy, CSIRO, Australia</i>
17:00 - 17:30	Forum with teachers
18:30	School Dinner

Tuesday, October 7th:

9:00 - 10:30 Plasma diagnostics II: Measuring electron density and ion flux
Jean-Paul Booth, École Polytechnique, France

10:30 - 10:45 Coffee break

10:45 - 12:15 Plasma diagnostics III: Advanced optical diagnostics
Richard Engeln, ASML, Eindhoven, The Netherlands

12:30 - 13:30 Lunch

14:00 - 17:00 Modelling Workshop:
‘Hands on a Boltzmann solver’
*Luis L. Alves, University of Lisbon, Portugal, &
Tejero del Caz, University of Cordoba, Spain*

OR

Experimental Workshop I:
‘Basics of laser absorption spectroscopy’
Olivier Guatella, LPP, École Polytechnique, France

OR

Experimental Workshop II:
‘Spectroscopic instruments and their application’
Sylvain Iseni, GREMI, CNRS/Univ. Orléans, France

OR

Hiking etc.
→ Possible destinations can be requested from the organization team

18:30 Dinner

20:00 Evening lecture: Glim Skin from idea to prototype to market
Friederike Kogelheide (SkinLove Ruhr GmbH)

Wednesday, October 8th:

9:00 - 10:30 Plasma sources III: High density magnetized plasma sources
Diederik Depla, Ghent University, Belgium

10:30 - 10:45 Coffee break

10:45 - 12:15 Plasma sources IV: Dielectric Barrier Discharges
Olivier Guaitella, LPP, École Polytechnique, France

12:30 - 13:30 Lunch

13:45 - 15:15 Plasma technologies I: Material processing
Stephanos Konstantinidis, University of Mons, Belgium

15:15 - 15:30 Coffee break

15:30 - 17:00 Plasma technologies II: Plasma chemistry for bio
Nevena Puac, Institute of Physics Belgrade, Serbia

17:00 - 17:30 Forum with teachers

18:30 Dinner

20:00 Poster session

Thursday, October 9th:

9:00 - 10:30 Plasma diagnostics IV: Plasma-Surface Interactions
Jan Benedikt, CAU Kiel, Germany

10:30 - 10:45 Coffee break

10:45 - 12:15 Plasma technologies III: Developments at high pressure and in liquids
Zdeněk Bonaventura, Masaryk University Brno, Czech Republic

12:30 - 13:30 Lunch

Program of the master class 2025 on smart organic coatings by plasmas

Thursday, October 9th:

Arrival/registration from 17:00 - 21:00 (dinner included)

Regular lectures have duration of ~1:15h + 15min for final extended discussion

Friday, October 10th:

8:45 - 9:00	Welcome and introduction <i>Rony Snyders, University of Mons, Belgium</i>
9:00 - 10:30	Fundamental of plasma polymerization <i>Dirk Hegemann, Empa St.Gallen, Switzerland</i>
10:30 - 10:45	Coffee break
10:45 - 12:30	Atmospheric pressure plasma in plasma polymerization <i>François Reniers, Université Libre de Bruxelles, Belgium</i>
12:30 - 13:45	Lunch
13:30 - 15:00	Diagnostic of plasma polymerization processes <i>Damien Thiry, University of Mons, Belgium</i>
15:00 - 16:30	Master class poster session & coffee and biscuits
16:30 - 17:30	Plasma polymers and bio-applications <i>Pietro Favia, University of Bari, Italy</i>
19:00	Dinner

Saturday, October 11th:

9:00 - 10:30	Nanostructuring organic coatings <i>Ondřej Kylián, Charles University, Czech Republic</i>
10:30 - 11:00	Coffee break
11:00 - 12:30	Engineering the Nanoscale: Smart Coatings & Morphogenesis in Plasma Polymerization <i>Vincent Roucoules, Institut de Science des Matériaux de Mulhouse, France</i>
12:30 - 13:30	Lunch