PLASMA SCHOOL
Bad Honnef

Program of the school 2024

Saturday, October 5th:

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

Sunday, October 6th:

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

Monday, October 7th:

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

Tuesday, October 8th:

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, &* *Antonio Tejero, University of Cordoba, Spain*
	OR
	Experimental Workshop I: 'Basics of laser absorption spectrocopy' *Olivier Guiatella, 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: Scientific Integrity *Bernard Harmegnies, University of Mons, Belgium*

Wednesday, October 9th:

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 III: Development at high pressure and in liquids *Peter Bruggeman, University of Minnesota, USA*
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 10th:

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 I: Material processing *Stephanos Konstantinidis, University of Mons, Belgium*
12:30 - 13:30	Lunch

Program of the master class 2024 on plasmas, liquids, and nanomaterials

Thursday, October 10th:

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

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

Friday, October 11th:

8:45 - 9:00	Welcome and introduction *Rony Snyders & Stephanos Konstantinidis, University of Mons, Belgium*
9:00 - 10:30	Sputtering onto liquids for nanoparticles synthesis and beyond *Stephanos Konstantinidis, University of Mons, Belgium*
10:30 - 10:45	Coffee break
10:45 - 12:30	Parameters inlfuencing NP growth *Clio Azina, RWTH Aachen, Germany*
12:30 - 13:45	Lunch
13:30 - 15:00	Sputtering onto liquids in a reactive plasma *Angélique Bousquet, Université Clermont - Auvergne, France*
15:00 - 16:30	Master class poster session & coffee and biscuits
16:30- 17:30	Combinatorial deposition onto liquids substrates *Alfred Ludwig, Ruhr-University Bochum, Germany*
19:00	Dinner

Saturday, October 12th:

9:00 - 10:30	SoL for producing catalytic nanoparticles *Amaël Caillard, University of Orléans / CNRS, France*
10:30 - 10:45	Coffee break
10:45 - 12:15	Combining Gas Aggregation Source and liquid substrates *Andrey Choukourov, Charles University, Czech Republic*
12:15 - 12:20	Closing
12:30 - 13:30	Lunch