

Program of the school 2023

Saturday, September 30th:

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

Sunday, October 1st:

8:45 - 9:00 Welcome and introduction (plot of the school, information)
Marc Böke and Marina Prenzel, Ruhr-Universität Bochum & Jan Benedikt and Holger Kersten, CAU Kiel, Germany

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: Modelling of plasmas
Annemie Bogaerts, University of Antwerp, Belgium

15:15 - 15:30 Coffee break

15:30 - 17:00 Plasma sources I: Non magnetized rf discharges
Michael Klick, Plasmetrex GmbH, 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 2nd:

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 Izeni, GREMI, CNRS/Univ. Orléans, France

15:15 - 15:30 Coffee break

15:30 - 17:00 Plasma sources II: High density magnetized plasma sources
Tsanko Tsankov, Ruhr-Universität Bochum, Germany

17:00 - 17:30 Forum with teachers

18:30 School Dinner

Tuesday, October 3rd:

9:00 - 10:30 Plasma sources III: High pressure thermal plasmas and sources
Tony Murphy, CSIRO, Australia

10:30 - 10:45 Coffee break

10:45 - 12:15 Plasma diagnostics II: Measuring electron density and ion flux
Jean-Paul Booth, CNRS, France

12:30 - 13:30 Lunch

14:00 - 17:00 Modelling Workshop:
'Hands on a Boltzmann solver'
Luis L. Alves & Antonio Tejero, University of Lisbon, Portugal

OR

Experimental Workshop I:
'Basics of laser absorption spectroscopy'
Olivier Guaitella, LPP, École Polytechnique, France

OR

Experimental Workshop II:
'Spectroscopic instruments and their application'
Sebastian Burhenn, Ruhr-Universität Bochum, Germany & Sylvain Iseni, GREMI, CNRS/Univ. Orléans, France

OR

Research data management workshop:
'FAIR principles in plasma science'
Marina Prenzel, Ruhr-Universität Bochum, Germany

OR

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

18:30 Dinner

Wednesday, October 4th:

9:00 - 10:30 Plasma technology I: Material processing
Stephanos Konstantinidis, University of Mons, 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 diagnostics III: Advanced optical diagnostics
Richard Engeln, ASML, Eindhoven, The Netherlands

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 5th:

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 II: Development at high pressure and in liquids
Peter Bruggeman, University of Minnesota, USA

12:30 - 13:30 Lunch

Program of the master class 2023 on advanced diagnostics of atmospheric pressure plasmas

Thursday, October 5th:

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

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

Friday, October 6th:

8:45 - 9:00 Welcome and introduction
Jan Benedikt and Holger Kersten, CAU Kiel, Germany

9:00 - 10:30 LIF/Laser spectroscopy
Peter Bruggeman, University of Minnesota, USA

10:30 - 10:45 Coffee break

10:45 - 12:30 Diagnostics of APP in contact with and in water
Tomáš Hoder, Masaryk University, Czech Republic

12:30 - 13:45 Lunch

13:45 - 15:15 Mass spectrometry of APP
Jan Benedikt, CAU Kiel, Germany

15:30 - 16:30 Master class poster session
& coffee and biscuits

17:00 - 18:15 Electric field measurements in APP
Svetlana Starikovskaia, LPP, École Polytechnique, France

19:00 Dinner

Saturday, October 7th:

9:00 - 10:30 Computationally assisted atmospheric pressure plasma diagnostics
Judith Golda, Ruhr-Universität Bochum, Germany

10:30 - 10:45 Coffee break

10:45 - 12:15 PROES of atmospheric pressure plasmas
Ihor Korolov, Ruhr-Universität Bochum, Germany

12:15 - 12:20 Closing

12:30 - 13:30 Lunch