

Program Summer School Solvation Science 2021

Tuesday, May 25th

Gather.town/Zoom

08:30 – 09:00 Self check-in at Gather.town

09:00 – 09:15 **Welcome: Martin Rabe**
ECR Board, Ruhr-Universität Bochum, GER

Ultrafast Spectroscopic Methods to Investigate Solvation Dynamics, Chair: Janine Kamps

09:15 – 10:15 **Sascha Schäfer**, Universität Oldenburg, GER
“Imaging ultrafast dynamics by time-resolved transmission electron microscopy”

10:15 – 10:45 **Coffee Break**

10:45 – 11:45 **Ellen Backus**, University of Vienna, AU
“Interfacial vibrational dynamics of soft matter probed with time-resolved sum frequency generation spectroscopy”

11:45 – 12:45 **Malte Oppermann**, École Polytechnique Fédérale de Lausanne, CH
“A new twist for ultrafast optical spectroscopy: Using molecular chirality to track structural dynamics in solution”

12:45 – 14:15 **Lunch, Icebreaker event Moderator: Célia Millon**

Solvation of Electron-rich and Electron-deficient Systems, Chair: Julian Kleinhaus

14:15 – 15:15 **Viktoria Däschlein-Gessner**, Ruhr-Universität Bochum, GER
“Metallated Ylides: From Electron-rich to Electron-deficient Main Group Compounds”

15:15 – 16:15 **Robert Mulvey**, University of Strathclyde, Glasgow, UK
“Alkali Metal Mediation in Synthesis and Catalysis”

16:15 – 16:45 **Coffee Break**

16:45 – 17:45 **Jeehiun Lee**, Rutgers University, NJ, USA
“Understanding Solvation through Gas Phase Studies”

Wednesday, May 26th

Gather.town/Zoom

Solvation of Electron-rich and Electron-deficient Systems, Chair: Laura Krause

- 09:00 – 09:15 **Welcome: Ana Vila Verde**
ECR Board, University of Duisburg-Essen, GER
- 09:15 – 10:00 **Dietmar Stalke**, Universität Göttingen, GER
“Is the solid state structure of any help to determine the structure in solution?”
- 10:00 – 11:00 **Gerhard Erker**, Universität Münster, GER
“Frustrated Lewis Pair Chemistry: Searching for New Reactions”
- 11:00 – 11:30 **Coffee Break**
- 11:30 – 12:30 **Holger Braunschweig**, Universität Würzburg, GER
“Borametallo mimetics – Activation of Small Molecules by Low-Valent Boron Species”
- 12:30 – 14:00 **Lunch Break, Yoga course (13:15-13:45, Trainer: Irina Freihold)**

Ultrafast Spectroscopic Methods to Investigate Solvation Dynamics, Chair: Richard Beckmann

- 14:00 – 15:00 **Jochen Küpper**, DESY Hamburg, GER
“Unraveling ultrafast dynamics of microsolvated molecules”
- 15:00 – 16:00 **Foivos Perakis**, University of Stockholm, Sweden
“Structural dynamics of supercooled water and aqueous solutions using coherent x-ray scattering”
- 16:00 – 16:30 **Coffee Break**
- 16:30 – 17:30 **Tanja Cuk**, University of Colorado Boulder, NREL, USA
“Resolving a catalytic mechanism at an electrode surface with high time resolution: Experimental identification of theoretical descriptors”

Thursday, May 27th

Gather.town/Zoom

Career Day

Group and panel discussions with guests from chemical industry and company founders.

- 09:00 – 09:15 **Welcome and Moderation: Michael Römelt**
ECR Group Leader, Ruhr-Universität Bochum, GER
- 09:15 – 10:30 20-minute presentations by guest professionals
- 10:30 – 11:00 **Coffee Break**
- 11:00 – 12:20 20-minute presentations by guest professionals
- 12:20 – 13:30 **Lunch**
- 13:30 – 15:00 Breakout discussion with the professionals
- 15:00 – 17:00 Panel discussion

Friday, May 28th

Gather.town/Zoom

Video-series SolvationMethods@Lab

- 09:00 – 09:15 **Welcome: Christopher Stein**
ECR Board, University of Duisburg-Essen, GER
- 09:00 – 12:00 Video-series and self-study
- 12:00 – 13:30 **Lunch**
- 13:30 – 14:30 Sequential Poster presentations, **Moderator: Raffaella Papagna**
- 14:30 – 15:00 **Coffee break**
- 15:00 – 17:00 Parallel Poster & Method discussions

Closing remarks: *Organization Committee and Martin Rabe*