



# **Program Summer School Solvation Science 2022**

# Tuesday, June 7<sup>th</sup> – @Lecture Hall – HIC

08:15 - 09:00	Registration
09:00 - 09:15	Welcome: Dr. Martin Rabe
	ECR Board, Max-Planck-Institut für Eisenforschung, GER

#### Catalysis at Charged Interfaces, Chair: Moreno Ascani

09:15 – 09:55 **Dr. Simone Pezzotti**, Ruhr-University Bochum, GER "Adsorption of ions and hydrophobic solutes at an electrified Au-water interface: insights from THz spectroscopy and simulations

> **Dr. Nicolas Hörmann**, Fritz Haber Institute – Max-Planck Gesellschaft, GER *"Recent insights from atomistic models of electrochemical solid liquid interfaces"*

09:55 – 10:45 Coffee Break

- 10:45 11:45 Prof. Dr. Marc Koper, Leiden University, NL
   "Double layer and electrolyte effects in electrocatalysis on Pt and Au electrodes"
   11:45 12:45 Prof. Dr. Olga Kasian, Halmholtz Zantrum Barlin, GEP.
- 11:45 12:45Prof. Dr. Olga Kasian, Helmholtz Zentrum Berlin, GER<br/>"Structure-function properties of electrocatalysts for energy conversion and<br/>storage at atomic scale"

12:45 – 14:15 Lunch Break

#### Biomolecule Solvation, Chair: Daniel Pabsch

- 14:15 15:15Prof. Dr. Sereina Riniker, ETH Zurich, CH<br/>"Advances in Molecular Dynamics for the Study of Biomolecular Processes"<br/>(Remote talk)
- 15:15 16:15Jun.-Prof. Dr. Franziska Thomas, University of Heidelberg, GER<br/>"Structural and functional engineering of WW domains"
- 16:15 16:45 Coffee Break
- 16:45 17:45
   Prof. Dr. Enrica Bordignon, University of Geneva, CH
   "Coupling between protein dynamics and hydration waters in the activation of a toxin and in liquid-liquid phase separation"
   (Remote talk)

18:00 – 21:00 Welcome dinner @ Beckmannshof

# Wednesday, June 8<sup>th</sup> – @Lecture Hall – HIC

09:00 - 09:15	Welcome: Dr. Ana Vila Verde
	ECR Board, University of Duisburg-Essen, GER

#### Interface Solvation and Solvation under Confinement, Chair: Moreno Ascani

- 09:15 10:15 **Prof. Dr. Douwe Jan Bonthuis,** TU Graz, AU "Ion solvation in bulk and at interfaces: from macroscopic thermodynamics to molecular models and back"
- 10:15 11:15**Prof. Dr. Satoshi Nihonyanagi,** RIKEN, JP"Structure and dynamics of water at interfaces"

11:15 – 11:30 Coffee Break

11:30 – 12:30**Prof. Dr. Jonathan Nitschke,** University of Cambridge, UK<br/>"Chemical purifications using coordination cages"

12:30 – 14:00 Lunch Break

#### Molecular/Biology Systems under Extreme Conditions, Chair: Abhishek Kalarikkal

14:00 - 15:00	Prof. Dr. Roland Winter, TU Dortmund, GER
	"Biomolecules under Stress – Life at Extreme Conditions"
15:00 - 16:00	Prof. Dr. Lorna Dougan, University of Leeds, UK

Canceled "Exploring the structure of water in extreme environments"

16:00 – 16:30 Coffee Break

16:30 - 17:30	Prof. Oscar Millet, CIC bioGUNE, ES
	"On the mechanism of haloadaptation: Proteins with a pinch of salt"
17:30 - 18:00	Award Ceremony "Solvation Science Student Challenge"

18:00 – 20:00 Get-together at @ZEMOS

### Thursday, June 9th

#### Workshop Part

09:00 - 12:30	"Stress management" – How to achieve more tranquility (ZEMOS 2.45)
in parallel	<b>"Team work &amp; leadership in academia"</b> – Team player-key player-head coach (ZEMOS 0.17/0.19)
	<b>"Networking in the academic context"</b> – Building & cultivating contacts by traditional and digital means (NCDF 03/399)
	"Stage fright" – Reclaiming sovereignty and confidence (NC 02/126)
	<b>"Intercultural competence"</b> – Avoiding misunderstandings – making the most of diversity (online)

#### Career Part, Moderator: Sandra Romero Molina

### **@Lecture Hall – HIC**

14:00 - 14:10	Welcome
14:10 - 14:35	Dr. Thorsten Schaefer – Manager Patents & Licences at PROvendis GmbH
14:35 – 15:00	<b>Dr. Ralph Marquardt</b> – Senior Vice President and General Manager Comfort & Insulation at Evonik Operations GmbH
15:00 - 15:25	<b>Dr. Andreas H. Göller</b> – Principal Scientist at Bayer AG Research & Development, Pharmaceuticals
15:25 – 15:50	<b>Dr. Sadra Ol Gheta</b> – Research Scientist at Bayer AG Research & Development, Pharmaceuticals
15:50 - 16:20	Coffee Break
16:20 - 18:00	Panel discussion with <b>Dr. Thorsten Schaefer, Dr. Ralph Marquardt, Dr.</b> <b>Andreas H. Göller, Dr. Sadra Ol Gheta and Jennifer Heymann</b> (Head of Business Innovation and Strategy at Evonik Operations GmbH)

18:00 – 21:00 Get-together BBQ at @ZEMOS

## Friday, June 10th

RESOLV's participating institutes
<u>Advanced Laboratory Modules ></u>

