

Programme

Monday 3 September

11:30	Registration
12:00	Lunch (for those who have booked)
12:50	Welcome and Introductions Pavel Jungwirth, <i>Academy of Sciences of the Czech Republic, Czech Republic</i>
13:00 Paper 1	Introductory Lecture: Ion specific Hofmeister effects Thomas Record <i>University of Wisconsin - Madison, USA</i>
Session 1	Solvation of Ions in the Aqueous Bulk and at Interfaces Session Chair: Dr Bernd Winter, <i>Helmholtz Centre Berlin, Germany</i>
14:00 Paper 2	Adsorption kinetics of nonionic surfactants in micellar solutions: effects of added charge Ci Yan, Anna Angus-Smyth and Colin D. Bain* <i>Durham University, UK</i>
14:05 Paper 3	Adsorption of solutes at liquid-vapor interfaces: insights from lattice gas models Patrick Shaffer, Suriyanarayanan Vaikuntanathan and Phillip L Geissler* <i>University of California, Berkeley, USA</i>
15:00	Afternoon Tea
15:30 Paper 4	Surface and interfacial tensions of Hofmeister electrolytes Yan Levin* and Alexandre P dos Santos <i>Universidade Federal de Rio Grande do Sul, Brazil</i>
15:35 Paper 5	An <i>ab initio</i> approach to understanding the specific ion effect Marcel D Baer and Christopher J Mundy* <i>Pacific Northwest National Laboratory, USA</i>
16:30	Close of Sessions
16:30 – 18:00	Poster Session and Wine Reception
	Free evening

Tuesday 4 September

Session 2	Ion-ion Interactions in Water Session Chair: Professor Ruth Lynden-Bell, <i>University of Cambridge, UK</i>
09:00 Paper 6	How specific are ion specificities? A pilot NMR study Susanne Dengler, Angelika Klaus, Gordon J.T Tiddy and Werner Kunz* <i>University of Regensburg, Germany; University of Manchester Institute of Science and Technology, UK</i>
09:05 Paper 7	Simulation study of ion pairing in concentrated aqueous salt solutions with a polarizable force field Yun Luo, Wei Jiang, Haibo Yu, Alexander D MacKerell, Jr and Benoit Roux* <i>University of Chicago, Argonne National Laboratory & University of Maryland, USA</i>
09:10 Paper 8	Understanding ion-ion interactions in bulk and aqueous interfaces using molecular simulations Liem X Dang*, Xiuquan Sun, Bojana Ginovska-Pangovka, Harsha V.R Annapureddy and Tai Ba Truong <i>Pacific Northwest National Laboratory, USA</i>
10:30	Morning coffee
11:00 Paper 9	A new structural technique for examining ion-neutral association in aqueous solution Phil E Mason*, George W. Neilson, David L. Price, Marie-Louise Saboungi and John W. Brady <i>Academy of Sciences of the Czech Republic, Czech Republic; Cornell University, USA; University of Bristol, UK; Centre de Recherche sur la Matière Divisée & Conditions Extrêmes et Matériaux: Haute Température et Irradiation, France</i>
11:05 Paper 10	Femtosecond study of the effects of ions and hydrophobes on the dynamics of water Sietse T. van der Post, Klaas-Jan Tielrooij, Johannes Hunger, Ellen H. G. Backus and Huib J. Bakker* <i>FOM Institute AMOLF, The Netherlands</i>
11:10 Paper 11	Ion cooperativity and the effect of salts on polypeptide structure – a molecular dynamics study of BBA5 in salt solutions Wen Jun Xie and Yi Qin Gao*, <i>Beijing National Laboratory for Molecular Sciences, China</i>
12:30	Lunch

Session 3	Interactions Between Ions and Biomolecules (Proteins, Nucleic Acids, Membranes, etc) in Water Session Chair: Dr Jonathan Goodman, <i>University of Cambridge, UK</i>
14:00 Paper 12	Diversity in the mechanisms of cosolute action on biomolecular processes Shahar Sukenik, Liel Sapir, Regina Gilman-Politi and Daniel Harries* <i>The Hebrew University, Israel</i>
14:05 Paper 13	Ion interactions with non-polar and amphiphilic solutes in water D. T. Bowron* and J. L. Finney <i>Rutherford Appleton Laboratory & University College London, UK</i>
14:10 Paper 14	Interactions between halide anions and a molecular hydrophobic interface Dor Ben-Amotz*, Blake M. Rankin, Michael D. Hands, David S. Wilcox, K. Rebecca Fega and Lyudmila V. Slipchenko <i>Purdue University, USA</i>
15:30	Afternoon Tea
16:00 Paper 15	Solution electrostatics beyond pH: a coarse grained approach to ion specific interactions between macromolecules Anil Kurut and Mikael Lund* <i>Lund University, Sweden</i>
16:05 Paper 16	Ionic interactions in biological and physical systems: A variational treatment Bob Eisenberg* <i>Rush University, USA</i>
16:10 Paper 17	Ionic specific effects on the structure, mechanics and interfacial softness of a polyelectrolyte brush Francisco Rodríguez-Ropero, Nico F A van der Vegt* <i>Technische Universität Darmstadt, Germany</i>
17:30	Close of sessions
Time tbc	Pre-Dinner Drink
Time tbc	Conference Dinner

Wednesday 5 September

Session 4	Specific Hofmeister Effects of Ions and Osmolytes on Protein Association, Precipitation, Folding/Unfolding and Activity Session Chair: Professor Paul Madden, <i>University of Oxford, UK</i>
09:00 Paper 18	Measuring the interaction between ions, biopolymers and interfaces – one polymer at a time Sandra Kienle, Tobias Pirzer, Stefanie Krysiak, Michael Geisler and Thorsten Hugel* <i>Technische Universität München, Center of Excellence Automated Infusion Systems & Center for Integrated Protein Science Munich, Germany</i>
09:05 Paper 19	Interactions of monovalent salts with cationic lipid bilayers Sarka Pokorna, Piotr Jurkiewicz*, Lukasz Cwiklik, Mario Vazdar and Martin Hof, <i>Academy of Sciences of the Czech Republic, Czech Republic; Rudjer Bošković Institute, Czech Republic</i>
09:10 Paper 20	Ion specific effects of alkali cations on the catalytic activity of HIV-1 protease Jana Pokorna, Jan Heyda and Jan Konvalinka* <i>Gilead and IOCB Research Center Prague & Charles University in Prague, Czech Republic; Helmholtz-Zentrum Berlin für Materialien und Energie, Germany</i>
10:30	Morning Coffee
11:00 Paper 21	Dramatically stabilizing multiprotein complex structure in the absence of bulk water using tuned Hofmeister salts Linjie Han, Suk-Joon Hyung and Brandon T. Ruotolo* <i>University of Michigan, USA</i>
11:35	General Discussion <i>Led by Pavel Jungwirth and Paul Cremer</i>
12:05 Paper 22	Concluding Remarks Lecture: Philip Ball <i>Stanford University, USA</i>
12:35	Acknowledgements
12:40	Close of Meeting