

WORKSHOP 'PASSION FOR SOFT MATTER'

TUESDAY SEPTEMBER 28

09:00-09:15 OPENING

09:15-10:00 KEYNOTE PASSION FOR ELECTRONS [Chair: Prof. Martin Weinelt (Free University Berlin, Germany)]

Prof. T.W. Hänsch (MPI, Garching, Germany)
"Keynote Passion for Electrons"

NOVEL MATERIALS [Chair: Prof. José A. Pomposo, Centro de Física de Materiales UPV/EHU-CSIC and Ikerbasque, Spain]

10:05-10:35 Prof. Thomas P. Russell (University of Massachusetts Amherst, USA)
"Directed Self-Assembly of Block Copolymers over Macroscopic Length Scales"

10:35-11:05 Prof. Ralph H. Colby (The Pennsylvania State University, USA)
"Designing Ion-Containing Polymers for Facile Ion Transport"

11:05-11:25 Prof. Theyencheri Narayanan (ESRF, France)
"Probing the multi-level structure and dynamics of soft matter using X-ray scattering"

COFFEE BREAK

CONFINED WATER [Chair: Dr. Silvina Cervený, Centro de Física de Materiales UPV/EHU-CSIC, Spain]

11:50-12:20 Prof. Feri Mezei (ESS Collaboration, Lund, Sweden and Hungarian Academy of Sciences, RISSP, Budapest)
"Study of Nanoscale Protein Dynamics by High Power Neutron Spectroscopy"

12:20-12:50 Prof. Fabio Bruni (Università di Roma Tre, Italy)
"Water near proteins and under confinement: is that a good model for bulk water?"

12:50-13:10 Prof. Paola Gallo (University Roma Tre, Italy)
"Water and "The Others": Simulations of Supercooled Water in Confinement and Solutions"

13:10-13:30 Dr. Sandrine Lyonnard (CEA, France)
"The dynamical behaviour of water confined in perfluorinated ionomers and surfactants"

LUNCH BREAK

WINDOW TO BIOLOGY [Chair: Prof. Rod Quirk, University of Akron, USA]

15:00-15:30 Prof. Jan Skov Pedersen (University of Aarhus, Denmark)
"The Structure of Protein-Detergent Complexes from Small-Angle X-ray Scattering"

15:30-15:50 Dr. Ilja Voets (Adolphe Merkle Institute, University of Fribourg, Switzerland)
"Complex Polymer Assemblies"

15:50-16:10 Prof. Dmitry Matyushov (Arizona State University, USA)
"Electrostatics and viscoelasticity of protein-water interface"

WEDNESDAY SEPTEMBER 29

09:00-09:45 KEYNOTE PASSION FOR PHOTONS [Chair: Dr. Javier Aizpúrua, Centro de Física de Materiales UPV/EHU-CSIC and DIPC, Spain]

Prof. Naomi Halas (Rice University, Houston, USA)
"Keynote Passion for Photons"

EMERGING PROPERTIES [Chair: Prof. Jörg Baschnagel, Institut Charles Sadron, France]

09:50-10:20 Prof. Pablo G. Debenedetti (Princeton University, USA)

"Thermodynamic and Kinetic Models of the Emergence of Biochemical Homochirality."

10:20-10:50 Prof. Francesco Sciortino (Università di Roma La Sapienza, Italy)

"Self Assembly of Janus Particles and other Patchy Colloids"

COFFEE BREAK

11:30-12:15 KEYNOTE PASSION FOR SOFT MATTER [Chair: Prof. Juan Colmenero, Centro de Física de Materiales UPV/EHU-CSIC and DIPC, Spain]

Prof. Dieter Richter (Forschungszentrum Jülich, Germany)
"Soft Matter and Live Science: Research with Neutrons"

DYNAMIC ASYMMETRY, VISCOELASTIC PHASE TRANSITIONS [Chair: Prof. Carmen Mijangos, Instituto de Ciencia y Tecnología de Polímeros, CSIC, Spain]

12:20-12:50 Prof. Hajime Tanaka (University of Tokyo, Japan)

"Pattern evolution - From viscoelastic phase separation to mechanical fracture"

12:50-13:20 Dr. Satoshi Koizumi (Japan Atomic Energy Agency, Japan)

"Dynamic Asymmetry Effects on Soft-Matters: Small-angle Scattering Studies of Their Rich Varieties Ranging from Viscous-to-Gel Limits"

13:20-13:40 Dr. Laurence Noirez (Laboratoire Léon Brillouin, France)

"Hidden Macroscopic Shear Elasticity in Viscous Liquids"

LUNCH BREAK

15:00-16:30 POSTER SESSION

THURSDAY SEPTEMBER 30

09:00-09:45 KEYNOTE PASSION FOR INTERFACES [Chair: Prof. Antoine Salin, Université Bordeaux, France]

Prof. Fernando Flores (UAM, Madrid, Spain)

"Organic and inorganic semiconductor interfaces across physics, chemistry and time"

DYNAMICS AT DIFFERENT SCALES [Chair: Dr. Daniele Cangialosi, Centro de Física de Materiales UPV/EHU-CSIC, Spain]

09:50-10:20 Prof. Alexei P. Sokolov (University of Tennessee, USA)

"Decoupling phenomena in dynamics of Soft Matter: From small molecules to proteins"

10:20-10:50 Prof. Kenneth S. Schweizer (University of Illinois at Urbana-Champaign, USA)

"Slow Dynamics in Soft Glassy Materials"

10:50-11:10 Prof. Vladimir Novikov (University of Tennessee, USA)

"Influence of pressure on fast relaxation in glass-forming materials"

COFFEE BREAK

SELF-ASSEMBLED SYSTEMS [Chair: Dr. Gustavo Schwartz, Centro de Física de Materiales UPV/EHU-CSIC, Spain]

11:40-12:10 Prof. Angel Alegría (Centro de Física de Materiales UPV/EHU-CSIC, Spain)

"Structure - dynamics relationship in nano-structured diblock-copolymers by dielectric spectroscopy"

12:10-12:40 Prof. Christiane Alba Simionescu (CEA Saclay, France)

"How anomalous remain the liquid water properties when it is confined at the nanoscale?"

12:40-13:10 Dr. Reidar Lund (DIPC, San Sebastián, Spain)

"Non-equilibrium Kinetics in Block Copolymer Micelles"

13:10-13:30 Prof. Soren Toxvaerd (Roskilde University, Denmark)

"Crystallization of supercooled nanodroplets"

LUNCH BREAK

DYNAMICS OF POLYMERS IN DIFFERENT ENVIRONMENTS [Chair: Dr. Fernando Alvarez, Centro de Física de Materiales UPV/EHU-CSIC, Spain]

15:00-15:30 Dr. Angel Moreno (Centro de Física de Materiales UPV/EHU-CSIC, Spain)

"Computer simulations of polymer blends: from structural relaxation to chain dynamics"

15:30-15:50 Dr. Jörg Baschnagel (Institut Charles Sadron, France)

"Deviations from Chain Ideality in Polymer Melts"

15:50-16:10 Dr. Apostolos Kyritsis (National Technical University of Athens, Greece)

"Dynamic heterogeneity in binary poly(ethyl acrylate) /p-xylene mixtures"

16:10-16:30 Dr. Nigel Clarke (Durham University, UK)

"Dynamics in polymer nanocomposites"