

ACKNOWLEDGEMENTS

FERNANDO BRESME is Reader in Chemical Physics at Imperial College and Adjunct Professor of Computational Chemistry at the Norwegian University of Science and Technology. He was awarded the McBain medal in Colloid and Interface Science (2008) and elected Fellow of the Royal Society of Chemistry (2010). In 2011 he has been awarded a highly prestigious EPSRC Leadership Fellowship, which he is holding at Imperial College, where he leads the Computational Chemical Physics group. Current research in the group focuses on the development of computational and theoretical tools to investigate the interfacial properties of complex fluids and materials relevant in energy management, chemical and industrial applications.

CARLOS DRUMMOND received his PhD from the University of California, Santa Barbara (1999) and has been a CNRS research fellow since 2003, after spending 4 years as a researcher at INTEVEP (Research and Technological Support Center of Petroleos de Venezuela). His research interests include surface forces and nanotribology, responsive functional surfaces, structuration of polymer surfaces and graphene-based coatings and materials.

JORDI FARAUDO received his PhD in Physics from Universitat Autònoma de Barcelona (UAB), Spain, in 1999. In 2007 he joined the Institut de Ciència de Materials de Barcelona (ICMAB-CSIC) as a tenured scientist. His research interests are in the field of theory and simulation of soft matter, with particular emphasis on self-assembly and on problems involving colloidal forces beyond the classical DLVO theory.

TERESA LÓPEZ-LEÓN received her PhD in Physics from University of Granada, Spain, in 2006. In 2013 she joined the French National Center for Scientific Research (CNRS). She has worked as a postdoctoral researcher at Harvard University, at the Georgia Institute of Technology (U.S.), and the Laboratoire Charles Coulomb at the University of Montpellier (France). During her scientific career, she has worked on different fields of soft matter, from colloidal science to the physics of confined liquid crystals.

- *Master de Ciencia y Tecnología de Coloides e Interfases.*
- Department of Applied Physics, University of Granada.
- **Research projects:**
- *Ministerio de Economía y Competitividad, projects MAT2012-36270-C04-02 and MAT2010-15101.*
- *Junta de Andalucía, projects CTS-6270, P11-FQM-7074, P09-FQM-4698 and PE10-FQM-5977.*
- *Unión Europea-Séptimo Programa Marco, project PERG07-GA-2010-268315-ColloDi.*
- *Campus de Excelencia Internacional-Universidad de Granada: CEI-BioTiC-CEI2013-MP-3.*

REGISTRATION FREE

CERTIFICATION OF ATTENDANCE AND POSTER CONTRIBUTION

Inscription and poster submission at dbastos@ugr.es

Deadline: October 18th

ORGANIZING COMMITTEE:

Delfi Bastos González (dbastos@ugr.es)
Arturo Moncho Jordá (moncho@ugr.es)

THIRD WORKSHOP ON ADVANCES IN COLLOIDAL MATERIALS

WACM³

Granada

Sala de Conferencias

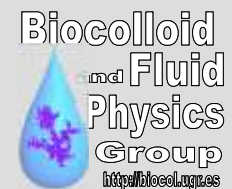
Facultad de Ciencias

October 25th, 2013



ugr Universidad
de Granada

DEPARTAMENTO DE FÍSICA APLICADA



Colloidal Science involves the study and work with matter on an ultra-small scale. One nanometre is one-millionth of a millimetre and a single human hair is around 80,000 nanometres in width. This field encompasses a range of techniques rather than a single discipline, and stretch across the whole spectrum of science, touching medicine, physics, engineering and chemistry.

An intense interest in colloidal substances was present throughout the sciences in the early 20th century, Einstein and others studied their characteristics and applications closely. At the time, this emerging field of science was a leading area of inquiry for theorists, researchers, and manufacturers.

The aim of the **Third Workshop on Advances in Colloidal Materials** is to publish advanced research that is currently developing in Interface and Colloid Science, from both experimental and theoretical points of view, in order to stimulate new research ideas and collaborative projects. We have joined seven top researches at different areas that will present an overview of their most challenge investigation. Poster session will offer the opportunity to exchange fruitful discussions with other researchers.

SCHEDULE

09:00-09:15 Opening Session

09:15-10:00 Olivier Dauchot, CNRS, Gulliver laboratory, Paris.

Active matter: understanding collective motion

10:00-10:45 Christos Likos, University of Vienna

Hierarchical self-assembly of associating soft patchy particles

10:45-11:15 Coffee Break

11:15-12:00 Alain Pénicaud, CNRS-University of Bordeaux

From pencils to computer screens: processing graphite and nanocarbons

12:00-12:45 Fernando Bresme, Imperial College of London

Interfacial structure and wetting transitions in soft interfaces

12:45-14:00 Posters Session

14:00-16:00 Lunch

16:00-16:45 Carlos Drummond, CNRS-University of Bordeaux

Water-based Lubricants

16:45-17:30 Jordi Faraudó, ICMAB-CSIC, Barcelona

Simulating the self-assembly of nanoobjects

17:30-18:15 Teresa López-León, CNRS, Gulliver laboratory, Paris

Spherical shells of liquid crystal

OLIVIER DAUCHOT is heading the recently founded research team EC2M (Collective effects in Soft Matter) within the CNRS Gulliver laboratory, at ESPCI, in Paris. His general interest is to develop model experiments for studying general features of many-particle systems, driven out of equilibrium. Developing collaborations with theoretical teams is one of his hallmark. He presently concentrates on active matter, self-assembling, and glass forming systems. Previously, Olivier was leading the Group Instabilities and Turbulence in CEA-Saclay. At that time he brought significant contributions to the study of jamming in granular media, to that of chaotic mixing, as well as to the understanding of transition to turbulence.

CHRISTOS LIKOS is Professor of the Faculty of Physics, at the University of Vienna (Austria), heading his own group focused on the research area of Theoretical and Computational Physics of Soft Condensed Matter. His investigation covers a large variety of systems of fundamental interest, possessing at the same time enormous technological and biological relevance, e.g.: polymers, colloids, DNA-molecules, proteins, membranes, etc.

ALAIN PÉNICAUD obtained his PhD from the University of Rennes in 1988. After spending two years at the University of Southern California, he has worked, first in Mexico (UNAM, then CINVESTAV) then in Bordeaux, using redox chemistry to crystallize soluble fullerenes or to dissolve novel carbon nanoforms.