



January | 2012

Graduate Positions

PhD Position in Materials Science at the University of Santiago de Compostela

A PhD position is available in the Soft Matter & Molecular Biophysics group (<http://alanine.usc.es>) to work in the design of interfacial films. This is a 4 year contract associated with the MICINN Grant MAT2011-25501. The project would be developed under the physics faculty of the University of Santiago de Compostela, in Northwestern Spain, 100 km North of Portugal, under the supervision of Ángel Piñeiro and Juan M. Ruso. This project involves a number of experimental and computational techniques aimed to design and characterize interfacial films based on cyclodextrins. The contract will start in spring of 2012.

To read more download a PDF version of the job posting.

PhD Positions in Soft Condensed Matter Physics at UC Merced.

As the first new American research university of the 21st century, the University of California in Merced features a unique academic structure that removes barriers to interdisciplinary research common in traditional departments and fosters strong ties of our physical sciences research to life sciences, materials, and electrical engineering. Graduate Students will have the opportunity to pursue a PhD on a wide range of cutting-edge research topics, including soft and hard condensed matter physics, physical chemistry, solar energy, nanoscience and biophysics.

We invite applications from students with a strong background in chemistry, physics, or closely related disciplines. Prospective graduate students are encour-

aged to contact individual faculty members to discuss their research interests.

The application deadline is January 15. Highly competitive applicants will be considered for the Chancellor's Fellowship, which provides a \$4000 grant on top of the TA or GSR salary for up to four years.

<http://physics-chemistry.ucmerced.edu/education/prospective-students/apply>

PhD positions in Physics: Department of Physics, Wesleyan University

Posted by PhDs.org

Wesleyan University is currently seeking applicants for autumn of 2012 for our physics Ph.D. program. The department provides educational opportunities for students who are seeking a close working relationship with faculty and fellow students.

Current areas of research include:

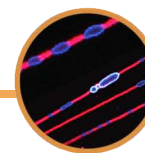
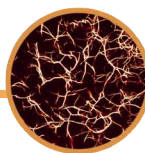
- Experimental Condensed Matter and Biophysics
 - * Fluid Dynamics and Soft Condensed Matter Lab
- Experimental Atomic and Molecular Physics
- Theoretical and Computational Physics
 - * Quantum Computing and Computational Physics
 - * Soft Matter and Biological Physics
 - * Wave Transport in Complex Systems

<http://jobs.phds.org/job/32632/wesleyan-university/phd-positions-in-physics>

PhD in Soft Matter Physics at Wageningen UR (University & Research centre)

Posted by NatureJobs

Within the Laboratory of Physical Chemistry and Colloid Science, a major emerging research theme is the



Graduate Positions continued...

study of mechanical failure in soft and thermal materials. This research is aimed at unraveling the interplay between microstructure, thermally activated processes and external stresses in the stability and failure of materials. This project will expand our work in this area by studying the failure mechanisms underlying adhesion by exploring the basic microscopic physics behind adhesive properties of micro patterned contacts often exploited in nature. This project will become available March 1st, 2012 and is in principle available for four years, subject to University regulations.

<http://www.nature.com/naturejobs/science/jobs/237255-PhD-in-Soft-Matter-Physics>

PhD Studentship in Dynamics of colloidal particles and proteins - theory and simulation : Jülich, Germany

Posted by NatureJobs

Dynamics of colloidal particles and proteins – theory and simulation The Soft Matter group at the Institute of Complex Systems (ICS-3), Research Centre Jülich, is offering a 3 year position for a motivated PhD student. The PhD work will be integrated into the soft matter and biophysics activities of ICS-3. The Research Centre in Jülich provides a highly interdisciplinary environment and excellent infrastructure, including Europe's most powerful supercomputing center. The accepted candidate will have the opportunity for complementary training within the International Helmholtz Research School "BioSoft" (IHRS BioSoft, www.ihrs-biosoft.de). The school offers PhD positions and a course program at interfaces between physics, chemistry, and biology, as well as transferable skills courses.

<http://www.nature.com/naturejobs/science/jobs/235202-Dynamics-of-colloidal-particles-and-proteins-theory-and-simulation>

PhD Studentship in the Development of C-type lectin ligands using NMR spectroscopy : Berlin, Germany

Posted by NatureJobs

The "Structural Glycobiology" group is looking for a motivated and ambitious PhD candidate, holding a Diploma/MSc in Biochemistry or related subjects. The

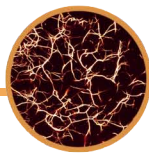
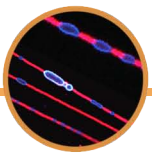
group is a part of the Department of Biomolecular Systems at the Max-Planck-Institute of Colloids and Interfaces in Berlin-Dahlem. Many members of the C-type lectin family are expressed on defined sets of mammalian tissues and are involved in various aspects of cell biology and physiology. These proteins resemble interesting targets for the development of specific molecular probes to study their function. This project combines our interest in the field of biophysical characterization of ligand/target interactions and small molecule ligand design as well as applied studies into glycobiology. The candidate will use nuclear magnetic resonance (NMR) and other biophysical techniques to study the receptor recognition process and to conduct screening towards the development of high affinity ligands for C-type lectins. The ligands will then be used to perform functional in vitro studies to answer important questions in the field of glycobiology and immunology.

<http://www.nature.com/naturejobs/science/jobs/237938-Development-of-C-type-lectin-ligands-using-NMR-spectroscopy>

Graduate Opportunities at RSC Publishing

RSC graduate opportunities provide a fantastic way to develop a career in science without working in the lab. We are looking for high caliber graduates who are passionate about advancing the Chemical Sciences. We are able to offer opportunities for joining different teams in the RSC. As well as on the job training, candidates will join our graduate development program. Our graduate development program incorporates core training around areas such as understanding the RSC and their expectations, professionalism, managing performance and business skills. They also offer a number of electives that have been designed to support individual development such as networking, project management and assertiveness.

<http://www.rsc.org/AboutUs/rscwork/Graduates/index.asp>



Postdoctoral Positions

Postdoctoral Research in Liquid Crystals at Case Western University

We have an opening for a postdoctoral research scholar in liquid crystals. Our primary goal is to investigate fundamental properties such as chirality, wetting, interactions at the interface, and effects due to nanoparticle dispersions -- these include carbon nanotubes, gold nanoparticles, and ferroelectric nanoparticles. Experience with nanoscopic techniques and liquid crystal interfacial phenomena is not required, but is desirable.

Candidates should send their resume (including publication list) electronically and arrange for two letters of recommendation to be sent electronically to rosenblatt@case.edu, using the subject line "postdoctoral application".

For further details, please contact Charles Rosenblatt in the Department of Physics at +1-216-368-4125, rosenblatt@case.edu, <http://liq-xtal.case.edu>.

2 Postdoctoral Scholar positions in soft condensed matter/biophysics theory at University of California Merced

Prof. Ajay Gopinathan's group at UC Merced is seeking two motivated theorists with a soft condensed matter/biophysics background to fill two separate postdoctoral positions. These positions involve theoretical and computational research on biological transport at the molecular, cellular and multicellular scales. Specific projects include motor-driven intracellular transport, gated transport through membrane pores and transport in multicellular communities. The successful candidates will also have the opportunity to work with and be jointly affiliated with the Huang lab in Bioengineering at Stanford University.

The candidate should have a Ph.D. in Physics or a related field (or obtain one by Summer 2011), a good publication record, expertise in soft-matter/statistical mechanics/polymer physics/biophysics theory and be well-versed in numerical simulations. The University

of California at Merced is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty, staff, and students.

The University is supportive of dual career couples. For more information visit the website or contact Ajay Gopinathan at agopinathan@ucmerced.edu. More information about the research groups involved may be found at Prof. Gopinathan's website and at the Laboratory of Cellular Organization at Stanford.

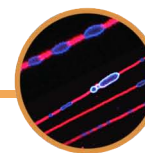
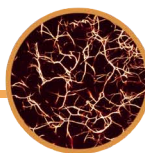
<http://jobs.ucmerced.edu/n/academic/position.jsf?positionId=2948>

Postdoctoral Research Position: Ab-Initio Dynamics of Condensed Matter : Mainz, Germany

Posted by NatureJobs

In the Ab-Initio Dynamics of Condensed Matter Group we aim to develop novel computational methods to study complex many-body systems such as liquids, biomolecules in solution and solids from first-principles. Along those lines we do have a postdoctoral research positions to offer, which consists of both method development and application. Potential candidates must have a PhD degree in Chemistry, Physics, or related discipline and a strong interest in computer simulations as well as programming. Basic experiences with Linux, numerical methods of theoretical physics/chemistry, electronic structure methods and/or molecular dynamics are required. Consideration of candidates will begin immediately until the position is filled. Questions and applications should be submitted via email. Applications should include a cover letter and contact information of at least two academic references. Email kuehne@uni-mainz.de.

<http://www.nature.com/naturejobs/science/jobs/200361-Postdoctoral-Research-Position-Ab-Initio-Dynamics-of-Condensed-Matter>



Postdoctoral Positions continued...

Postdoctoral Research in Theoretical Physics : Jülich, Germany

Posted by NatureJobs

The Soft Matter Group at ICS-3 focuses on dynamics in concentrated dispersions of soft and permeable colloidal particles – theory and simulation. We are offering a position for a highly motivated postdoctoral fellow. The research work will be integrated into the soft matter activities of ICS-3. The Research Centre in Jülich provides a highly interdisciplinary environment and excellent infrastructure, including Europe's most powerful supercomputing center. The research project deals with theoretical modeling, and the exploration of diffusion and rheological transport properties, of charged and neutral soft-particle systems. The numerical analysis of these properties will build on state-of-the-art theoretical and computer simulation methods which have been partially developed and advanced in our group. Important aspects include the modeling of solvent flow inside and outside the particles, and possible electro-kinetic effects by the surrounding microions in the case of charged particles.

<http://www.nature.com/naturejobs/science/jobs/235333-Theoretical-Physics>

PostDoc position in the department of Department of Materials and Interfaces : Rehovot, Israel

Posted by NatureJobs

The materials and interfaces group conducts theoretical research in biological physics and soft matter physics, cell mechanics and dynamics, membranes and colloids. We collaborate with experimental groups. Currently, we are offering a PostDoc position in the Department of Materials and Interfaces at Weizmann Institute of Science in the group of Samuel Safran for 2 years.

<http://www.nature.com/naturejobs/science/jobs/204732-PostDoc-position-in-the-department-of-Department-of-Materials-and-Interfaces>

PostDoc position in the department of Department of Materials and Interfaces : Rehovot, Israel

Posted by NatureJobs

PostDoc position is available in the Department of Materials and Interfaces at Weizmann institute of Science in the group of Klein Jacob for 3 or 4 years. Up to 3 post-doctoral fellowships available for up to 4 years each as part of a major new grant on interfaces, soft matter, biolubrication and tissue engineering. Read More at Nature.com.

<http://www.nature.com/naturejobs/science/jobs/204739-PostDoc-position-in-the-department-of-Department-of-Materials-and-Interfaces>

Physicist Postdoctoral Fellow (Coherent X-ray Science)

Posted by PhDs.org

The Advanced Light Source Division (ALS) at Lawrence Berkeley National Laboratory (Berkeley Lab) is seeking a postdoctoral fellow to conduct x-ray diffractive imaging and x-ray holography of complex oxide and magnetic materials. The new postdoctoral fellow will join a small world-class team conducting coherent x-ray science experiments on a wide variety of condensed matter systems. In addition, the postdoc will have the opportunity to do different magnetic scattering experiments at the ALS and possibly other sources. Read more at jobs.org.

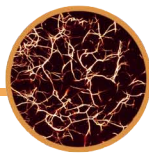
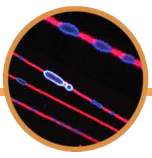
<http://www.nature.com/naturejobs/science/jobs/204739-PostDoc-position-in-the-department-of-Department-of-Materials-and-Interfaces>

Postdoctoral Research Associate: Expert in microfluidics

Posted by PhDs.org

The Materials Research Science and Engineering Center at Brandeis University in Waltham, MA, seeks to hire a Postdoctoral Research Associate expert in microfluidics starting as early as April, 2012. The position entails collaborating on various research projects within the MRSEC, such as synchronization in networks of non-linear chemical oscillators and biological active matter. Read more at jobs.org.

<http://jobs.phds.org/job/32110/brandeis-university/post-doctoral-research-associate-expert-in-microfluidics>



Postdoctoral Positions continued...

Biological Science Post-Doc at Sandia National Laboratory

Posted by *sandia.gov*

Sandia National Laboratories is the nation's premier science and engineering lab for national security and technology innovation. The Center for Integrated NanoTechnologies (CINT) Science Department is searching for a postdoctoral appointee to perform leading-edge research focusing on designing and synthesizing block copolymers for the development of novel materials. The work will support projects that

explore the integration of functional molecules into robust matrices to create complex hierarchical structures. The projects involve chemists, biologists, physicists, and covers both experiment and modeling. Particular emphasis will be placed on the preparation of amphiphilic block copolymers by living polymerization reactions.

To read more download a PDF version of the posting from the Soft Matter World Noticeboard.

<http://www.softmatterworld.org/noticeboard/Sandia%20Soft%20Matter%20Postdoc.pdf>

Faculty Positions

Tenure Track Assistant Professor at Cornell University- Experimental Physics

Posted by *APS Careers*

The Laboratory of Atomic and Solid State Physics (LASSP) at Cornell University expects to make a faculty appointment in experimental physics, to begin July 1, 2012. We encourage applications in cold atom physics, biophysics, hard and soft condensed matter physics, x-ray physics, and related areas that utilize condensed matter tools and techniques. The search will focus at the assistant professor level, although more senior candidates may be considered. The successful candidate will be expected to conduct an outstanding independent research program and be an effective teacher in the undergraduate and graduate instructional program of the Physics Department.

<http://careers.aps.org/jobs#/detail/4578668>

of the University of Colorado BioFrontiers Institute. BioFrontiers is an interdisciplinary research initiative primarily involving Physics and Biology. We are looking for a research associate with long term research interests in Bio-Physics related to liquid crystal technology. This research will involve research on the borderline between Biophysics and Soft Condensed Matter with the goal of connecting these two broad areas of science. The successful candidate will have a PhD in physics or biophysics and will have extensive experimental skills. The work will involve using the methods of physical science to study biological systems. It will also involve working with materials which deform easily under the influence of external fields such as electric fields, shear or gravity (like liquid crystals, polymers, nanoparticles, or any composites of these materials). The work will be primarily experimental in nature.

<http://careers.aps.org/jobs#/detail/4624572>

BioPhysics Research Associate at University of Colorado-Liquid Crystal Technology

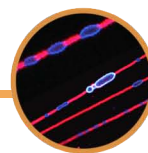
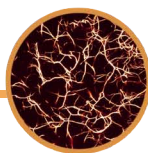
Posted by *APS Careers*

The University of Colorado - Colorado Springs (UCCS) is seeking a Research Associate for the UCCS Center

Tenure-Track Assistant Professor Computational Biophysics University of Massachusetts

Posted by *APS Careers*

The Physics Department at UMass Boston invites applications and nominations for a Tenure-Track Assistant Professor appointment in computational biophysics beginning September 1, 2012. Theorists in soft



Faculty Positions continued...

condensed-matter physics with demonstrated interest in biological applications and interdisciplinary collaborations are also invited to apply. This position is part of a multi-year rebuilding effort and we seek energetic candidates with independent research programs who will actively contribute to departmental development, attract external funding, and be committed to innovative teaching. UMass Boston has a number of new cross-disciplinary initiatives in areas of the biomedical sciences and the department would expect any new hire to take advantage of these and others in area institutions. Current departmental research includes nonlinear optics and physics, cancer biophysics, quantum control and nanomechanics, complex systems and computational physics, quantum chaos and many-body physics, semiconductor optoelectronics and new materials. A growing cluster-computing environment is also available.

<http://careers.aps.org/jobs/4610951/tenure-track-assistant-professor-computational-biophysics>

Six Lecturerships at King's College, London

Posted by APS Careers

Applications are invited for six Lecturerships in Physics, which are part of a significant investment by King's College London to strengthen and expand the Department of Physics. King's College London is one of the top 30 universities in the world (2011/12 QS international) and the fourth oldest in England. The Department of Physics is in the College's Strand Campus in the heart of London. You will have a strong research record and a proposed research program that strengthens existing research within King's College London. You will be expected to engage in internationally-leading research and contribute to undergraduate and postgraduate teaching and other academic activities.

- 3 LECTURESHIPS IN MATERIALS & MOLECULAR MODELLING
- LECTURESHIP IN EXPERIMENTAL NANOSCIENCE
- LECTURESHIP IN BIOPHOTONICS

The appointments will be made, dependent on relevant qualifications and experience, within the Grade 7 scale, currently £40,313 to £47,656, per annum, in-

clusive of £2,323 London Allowance, per annum. Further information about teaching and research in the department may be found at <http://www.kcl.ac.uk/physics>.

Further details and application packs are available at www.kcl.ac.uk/jobs, or alternatively by emailing Human Resources at strand-recruitment@kcl.ac.uk. All correspondence should clearly state the job title and reference number. Equality of opportunity is College policy.

<http://careers.aps.org/jobs/4599192/six-lecturerships>

Faculty Position in Soft Condensed Matter : New York University

Posted by NatureJobs

The Physics Department and the Center for Soft Matter Research at New York University solicit applications for a faculty position in the area of soft condensed matter physics, with preferred emphasis on broadly defined biological physics, to begin September 1, 2012, pending administrative and budgetary approval. This position is part of an ongoing multi-year program at NYU to develop an international center for research at the interface between physics, chemistry, biology and engineering. Applications on all levels will be considered.

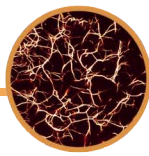
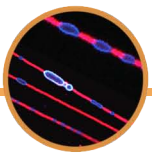
Applications received by January 31, 2012, will receive first consideration. Earlier submission is strongly encouraged. NYU is an Equal Opportunity/Affirmative Action Employer.

<http://www.nature.com/naturejobs/science/jobs/223716-Faculty-Position-in-Soft-Condensed-Matter>

Principal Beamline Scientist, The Versatile Soft X-ray (VERSOX) Beamline

Posted by NatureJobs

An experienced scientist is required to develop the specification and lead the design, building, commissioning and operation of the beamline to tight cost, capabilities and timescale targets. Your role will further see you encouraging users from new areas of science and plan future developments of the beamline to ensure it continues to meet scientific requirements. You require a strong track record in synchrotron research and an in depth knowledge of beamline design, with



Faculty Positions continued...

an ability to solve problems quickly, engage others and develop your team.

<http://www.nature.com/naturejobs/science/jobs/233990-Principal-Beamline-Scientist-The-Versatile-Soft-X-ray-VER-SOX-Beamline>

Research Scientist at The Institut Laue-Langevin (ILL), France

Posted by NatureJobs

Working within the Time-Of-Flight and High-Resolution (TOF/HR) Group, you will be co-responsible for the Neutron Spin Echo Spectrometer IN11 (<http://www.ill.fr/YellowBook/IN11>). IN11 uses the highest energy-resolution neutron-scattering technique available, especially well suited for quasi-elastic scattering studies in soft condensed matter, materials and magnetism. In addition to carrying out a personal research program and establishing scientific collaborations, you will assist ILL's visiting scientists with their experiments on IN11 and other ILL instruments. Furthermore, you will participate in the operation of IN11 and the development of the new spectrometer WASP.

<http://www.nature.com/naturejobs/science/jobs/235875->

Junior-Professor (W1) in Atomistic Modelling of Reactive Interfaces between Solids and Liquids

Posted by BrightRecruits

The Ruhr-Universität Bochum (RUB) – Faculty of Chemistry and Biochemistry together with the Interdisciplinary Centre for Advanced Materials Simulation (ICAMS) – is seeking to appoint a Junior-Professor (W1) in “Atomistic modeling of reactive interfaces between solids and liquids” to start in Spring/Summer 2012. The position is for a fixed term of up to 6 years (3 years initially) and includes generous resources for several scientific staff positions, consumables, travel, and computing. Read more at Bright Recruits.

<http://brightrecruits.com/job/3335/junior-professor-w1-in-atomistic-modelling-of-reactive-interfaces-between-solids-and-liquids>

Bio-Polymer/Fiber Bio-Composites Research Scientist

Posted by PhDs.org

World Centric is a leading manufacturer of compostable food service packaging, based in Palo Alto, CA. There are two focus areas - biopolymer formulation from waste/plant based sources and natural/agriculture biopolymer composites. Candidates can apply for either of these areas or both. Employer is looking to fill the position immediately.

<http://jobs.phds.org/job/32506/world-centric/bio-polymer-fiber-bio-composites-research-scientist>