



March 2010, Issue 15

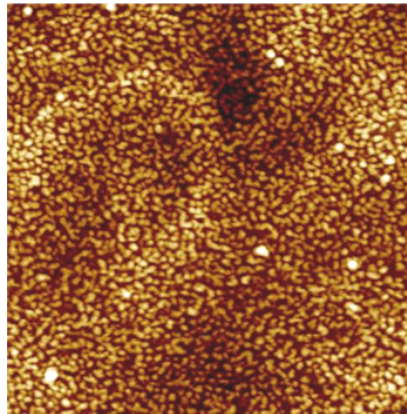
Dear Soft Matter Colleagues,

Welcome to the March newsletter. This Month we have an extra supplemental jobs bulletin included with your newsletter, please circulate it to your colleagues or post it in your department if you are able. If you have a job opening you would like to have featured in this quarterly bulletin just send in the job advertisement to us and we will post it free of charge.

Research Group of the Month: Soft Matter Laboratory at INIFTA-CONICET

This month we have picked a new and unique group from Buenos Aires, Argentina. This is the first group to be featured from the global network that is located in South America. Headed by **Dr. Omar Azzaroni**, this laboratory is devoted to the study of soft matter-based systems located at the Instituto de Investigaciones de Investigaciones Fisicoquímicas y Aplicadas (INIFTA) in the Department of Chemistry of the Universidad Nacional de la Plata (UNLP). They are also a Max Planck Partner Group working in close collaboration with different groups at the Max-Planck-Institute für Polymerforschung in Mainz (Germany). At present, the ongoing projects in the lab are sponsored and funded by CONICET, ANPCyT and the Max Planck Society.

The Soft Matter Laboratory is involved in the scientific activities of the research consortium:



“Centro Interdisciplinario de Nanociencia y Nanotecnología” (CINN). The CINN is an ANPCyT sponsored partnership among INIFTA (UNLP), Centro Atómico Bariloche (CNEA) and INQUIMAE (UBA) dedicated to fundamental and applied research on nanoscience and nanotechnology.

This framework provides a unique platform to perform internationally competitive research with state-of-the-art experimental equipment.

Currently the group’s research interests include:

- Polymer Brushes
- “Smart” Surfaces and Soft Nanoactuators
- Macromolecular Assemblies in Nanoconfined Geometries
- Biorecognition-Directed Assembly on Surfaces
- Electron Transfer in Supramolecular Bioconjugates

Be sure to read more about this great new group in the [Latest Research Section](http://www.softmatterworld.org/research/); www.softmatterworld.org/research/



First Issue Available: Polymer Chemistry

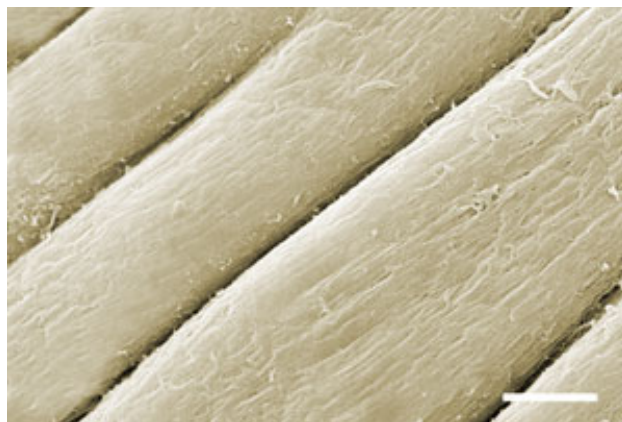


The inaugural issue of the new journal from RSC publishing, Polymer Chemistry, is now freely available online. Showcasing only the highest quality polymer chemistry research, issue 1 includes articles from some of the top authors in the field. The current issue of Polymer Chemistry is freely accessible on the website until the end of 2011. Which means you can read all the great content in issue 1 free of charge!

Advance In Artificial Tendons

Jun-Ichi Sasaki, Takuya Matsumoto, et al. **Soft Matter**, 2010, DOI: 10.1039/b922418a

Japanese scientists have engineered three dimensional (3D) replacement tendon tissue using fibrin gel. Takuya Matsumoto and colleagues from Osaka University have created a gel containing 3D patterns of cells similar to tendon tissue, which they say could be an excellent tool to reproduce tendons in vitro. Matsumoto cultured cells from bone marrow into biocompatible fibrin gel and stretched it, aligning the growing cells. As the cells grew, they stretched to form lines of fibrin bundles similar to tendon tissue. Varying the amount of strain applied allowed Matsumoto to control how the cells grew and reproduced.



Bundle-like structure was formed in strained fibrin gel and showed specific alignment parallel to strain direction (bar: 20 μm). Arrows in figure indicate strain direction.

Modelling texture perception by soft epithelial surfaces

George A. van Aken, , **Soft Matter**, 2010, 826 DOI: 10.1039/b916708k

This paper introduces a mechanistic approach to relate the sensations of touch by epithelial surfaces of for example skin, eye or mouth to the material properties of the substrate. The approach is to model the hydrodynamic and frictional forces exerted by the substrate onto the surfaces, which are deformable and compliant to these forces.

Inter-Continental advanced materials for photonics (I-CAMP)

The annual Inter-Continental Advanced Materials and Photonics (I-CAMP) Summer School will bring together both prominent & junior scientists and will allow them to combine advanced education with learning about different cultures worldwide. The School will enable researchers working at the forefronts of materials science & photonics to discuss the emerging uses of light for control and fundamental study of matter and advances in the use of materials to control light. The I-CAMP will provide advanced interdisciplinary expert training usually not available within the traditional system of graduate education and postdoctoral apprenticeship. The application deadline is May 15, 2010 so visit the [Latest News](#) section to read more.



CIMOPV

The CIMOPV Workshop will focus on emergent scientific developments in this field and will be held on the campus of the University of Queensland in Brisbane, Australia on July 1-3, 2010, in conjunction with the I-CAMP 2010 summer school. The speakers will emphasize the open/emerging questions, unsolved problems, and potential pathways for novel solutions. Registration for I-CAMP and CIMOPV is open until May 15, 2010, so visit the [Latest News](#) Section to read more.



Non-Equilibrium Soft Matter Symposium, Japan

The international Symposium on Non-Equilibrium Soft Matter is to be held 17-20 of August, in Nara, Japan. Organized by NEQ-SOFT, the symposium is focused on the behavior of soft matter coupled to the non-equilibrium nature. Although the topics discussed will be wide-spread ranging from microscopic molecular dynamics of polymers to macroscopic flow behavior of structured fluids, their common features are formation of the mesoscopic and hierarchical structures originating from a large number of internal degrees of freedom of the constituents. Registration is open so visit the [Latest News](#) Section to read more.

We hope you enjoy browsing softmatterworld.org and come back soon

Linda S. Hirst and Adam Ossowski
SoftMatterWorld.org