



October 2009

Dear Soft Matter Colleagues,

Autumn is beginning on this side of the globe, but for many of you in our widely dispersed research network a different season may be starting all together! But nonetheless, we soldier on to meet all the new exciting opportunities and developments in our community. Lots of new conferences coming up, hope you enjoy the October 2009 Newsletter. We have had lots of new people join the mailing list crediting 'fellow researchers' as how they found out about Softmatterworld.org. Keep up the great work and pass on the word!

Also don't forget that in the meantime, send all questions and requests to editor.softmatterworld@gmail.com. Enjoy the September 2009 Newsletter.

- **This Month's Featured Research Group:**

- **The Soft Condensed Matter Group at the Sharif University of Technology**

- This month we are going all the way across the globe to the Sharif University of Technology in Tehran, Iran. The group interest covers wide range of topics from Soft Matter structures to Physics of Biological macromolecules. Currently the group is researching theoretical and/or computational studies on protein folding, DNA elasticity, liquid crystal, microtubular structures, anisotropic coarse-grained interaction models (RE-squared potential) and DNA translocation through Nanopores. This website has some great videos and a very nicely organized Research section. So be sure to look at this website and support our research groups from all around the globe. Visit the [Latest Research](#) section, or go directly to the website here.

- **This Month's Highlighted Research:**

- **Mechanical Properties of Individual Microgel Particles Through the Deswelling Transition**

- Two researchers study the deswelling behavior and response of microgels. Microgels are important materials for both basic science and engineering and have wide applications from the study of phase transitions to the delivery of drugs. These micron and sub-micron particles, made of hydrogel materials, respond to various solvent conditions. One of the authors is on our Global Network, so be sure to check this article out and support the Softmatterworld.org community!

RSC Publishing releases Softmatter's[®] Top Five Most Cited Biological Articles

In celebration of *Soft Matter's* fifth birthday, each month RSC publishing will be offering free access to a range of *Soft Matter* articles. Last month it was membrane biophysics, and this month's selection for the 'Top 5' series showcases the most cited biological articles which have been published in the journal since *Soft Matter* launched in 2005. This is a fantastic opportunity to see some of the most breakthrough work in the field of soft matter without charge. Visit the [Latest Research](#) section to read more.

- **Conference News:**

The **Multiple Length Scales in Polymers and Complex Fluids** meeting on **October 18th-21st 2009**, co-sponsored by CINT, NSF, DOE and the Lujan Center for Neutron Research will be held at the serene Bishop's Lodge in New Mexico. The meeting will focus on current and future trends in Polymers and Complex Fluids. There is an excellent line-up of speakers many of which belong to the Softmatterworld.org Global Network. Visit the [Latest News](#) section to read more.

CECAM, Centre Européen de Calcul Atomique et Moléculaire, is presenting a talk on **Classical Density Functional Theory Methods in Soft and Hard Matter**. It will be held on **October 21st-23rd, 2009** in Lausanne, Switzerland. The talk will focus on how in recent years Density Functional Theory (DFT) methods have been extended into new directions. Notably, reliable density functionals have been constructed for particles with more complex shapes and internal degrees of freedom and classical DFT has been extended to include dynamics of the density field, thereby opening a new avenue to study phase transformation kinetics in molecular systems via dynamical DFT (DDFT). Visit the [Latest News](#) section to read more.

- **Soft Matter Network:**

The **Global Research Network** is now in 3D! Check out the new map and if you or a colleague have a research group and would like to be added to the map, just fill out the form in **Global Research Network** section and you will be added.

I hope you enjoy browsing softmatterworld.org and come back soon - please let us know if you have any suggestions for improving the site.

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