



Call for papers: Topical issue on “Neutron Biological Physics”

Our knowledge of biological macromolecules and their interactions is based on the application of physical methods, ranging from classical thermodynamics to recently developed techniques for the detection and manipulation of single molecules. The role of *neutron diffraction and spectroscopy techniques* on improving this knowledge has been outstanding and the potential for future developments is remarkable, and cover the range from small biomolecules to entire cells.

The European Physical Journal E - Soft Matter and Biological Physics - is publishing a special issue on neutron biological physics to collect research reports on some of these exciting investigations.

Areas of interest include (but are not limited to): i) current developments in the exploration of the physico-chemical limits for life, especially in relation to the role of water and salt; ii) molecular adaptation; iii) protein dynamics; iv) structure and stabilization in organisms that live under extreme conditions of salinity, temperature, pressure; v) exobiology; vi) new developments of diffraction/scattering methods for biological systems.

These areas will be covered also in the symposium "Structural Dynamics and Dynamical Structures" to be held in Grenoble in October 2012 as a tribute to the work of Joe Zaccai who has pioneered the use of neutron diffraction and spectroscopy for the study of the structure and dynamics of biological systems. But note that the Topical issue "Neutron Biological Physics" is not to be considered as the proceedings of this symposium and all contributions are very welcome. All submitted manuscripts will be peer-reviewed according to the usual publication process of EPJE.

We invite you to submit papers for this special issue. Papers should be submitted by Sep 30th, 2012 to be considered for the special issue, to the Editorial Office of the European Physical Journal E via <https://articlestatus.edpsciences.org/is/epje/> (Editorial Office of The European Physical Journal E, Solange Guehot, e-mail: epje@edpsciences.org) and marked clearly for the topical issue on the Neutron Biological Physics to the attention of Giovanna Fragneto (Editor), or Frank Gabel or Bruno Demé (Guest Editors).

We look forward to receiving your submission

Best regards,
The editors

For further details and information contact the editorial office at epje@edpsciences.org