Special Issue

Application of Neutron and X-Ray Scattering in Biophysics and Biomaterials Science

Message from the Guest Editor

X-ray and neutron scattering techniques have proven to be very powerful tools in the study of biological structures. Currently, certain X-ray techniques are available in many laboratories, but even more of them, and those with the best performance, can be found at large synchrotron radiation facilities. At the same time, dedicated nuclear reactors and spallation sources provide neutron beams that can be exploited in a plethora of research fields, including bioscience. Techniques include small-angle scattering, crystal and powder diffraction, reflectometry, inelastic scattering, imaging, and X-ray absorption fine structure (XAFS), and, more recently, techniques based on X-ray free-electron lasers (XFELs). These have led to the acquisition of a huge amount of knowledge on both the structure and the functionality of many biological macromolecules such as membranes, lipids, and proteins. Inspired by these topics and your recognized expertise in the field of X-ray/neutron scattering applications in bioscience, we would like to invite you to contribute an original research or review article to this Special Issue.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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