

Neutron Scattering Applications and Techniques

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Neutron scattering techniques provide exceptional tools for studying the structure and dynamics of materials at the molecular level.

On the other hand, new user facilities and instrumentation can provide the "non-expert" researcher opportunities of using neutron techniques to answer to difficult research questions in physics, biology, chemistry, engineering and medicine that cannot be answered by any other technique. In order to maximize this potential it is crucial to provide the research community with fundamentals of the techniques as applied in different fields.

In this talk I will give a short introduction to the basic of inelastic neutron scattering and the importance of complementarity with other techniques, such as thermal analysis, X-rays, Raman scattering and molecular dynamics simulation. I will also provide recent examples of applications to illustrate the capabilities of combining different experimental technique.