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Neutron Scattering in Hong Kong – Present and Future

By

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Date: 27 April 2017 (Thursday)
Time: 11:00
Venue: E12-G004

Abstract

Neutron scattering is a powerful method to characterize the structure and dynamics of materials. The China Spallation Neutron Source (CSNS), a ~3 billion RMB facility under construction in Dongguan (~70 km north of Hong Kong) and due to commission in 2018, offers tremendous opportunities for the scientific community in Hong Kong and Macau area. Since about 2013, there have been steady efforts to promote the use of neutron scattering in Hong Kong. As a result, a budding user community is forming, particularly with young faculties recently joining local universities. In this talk, I will highlight the applications of neutron scattering, with a focus on energy-related materials. References will be made to studies by local faculties, on thermoelectric materials, Li-ion batteries, high entropy alloys, and metallic glasses. Scientific opportunities at CSNS, and the strategies capitalize, will be discussed.

Biography

Professor Xun-Li WANG received his BS from Peking University and PhD from Iowa State University, both in Physics. He had been working at Oak Ridge National Laboratory in the US since 1992, rising through the ranks to Distinguished Staff Member. In 2012, Prof Wang joined the City University of Hong Kong as a Chair Professor and Head of the Department of Physics and Materials Science.

Prof Wang's research focuses on in-situ scattering studies that elucidate the guiding principles underlying the development of new materials or engineering systems capable of reaching the ultimate performance. He used neutron scattering as a primary tool, to understand deformation and phase transformation behavior in complex materials.

Prof Wang received numerous of awards including the A. F. Davis Medal by the American Welding Society (1999), the Outstanding Oversea Young Scientist Award by the National Natural Science Foundation of China (2006) and was named a Chang Jiang Chair Professor by the Chinese Ministry of Education (2009). He is an elected Fellow of the American Physical Society (2010).

All are Welcome!