



香港城市大學
City University of Hong Kong

Interactive integration of world-leading synchrotrons and neutron scattering facilities into CityU classrooms

Project Number: 6000451

Principal Investigator: Prof Xun Li WANG

Grant Type: TDG

Abstract:

Synchrotron X-ray sources and Spallation Neutron Sources are large-scale research-facilities offering unprecedented opportunities for undergraduate students, PhD students, postdocs and senior research staff and academicians in science and engineering to carry out a huge variety of very different types of diffraction and scattering experiments on gaseous, liquid, solid or soft materials of practically unlimited form and nature. The aim of the Teaching Grant proposal is to integrate the vast potentials of these large-scale research-facilities into regular university curricula by exploring, communicating and disseminating interactively into the classroom. The international large-scale research-facilities are openly available worldwide for any innovative research idea proposed with no limitations by age, nationality, race or sex and promote the incorporation of the acquired knowledge into the general welfare of humanity. Because of this principal openness of the international large-scale research-facilities we propose to directly and interactively contact classroom students by the internet to the beamline at a Synchrotron and/or a Spallation-Neutron-Source while one of the PhD students or/and City University staff members is carrying out an experiment at the facility. Synchrotrons or Spallation Neutron Sources are usually not included in a regular curriculum, therefore the proposed Teaching Grant will close the open gap between site specific university laboratories and the internationally available unprecedented research opportunities. To the knowledge of the principle and co-investigator the present Teaching Grant proposal is worldwide unprecedented, therefore it would also provide City University the privilege to be pioneering with this initiative.