



FLEET

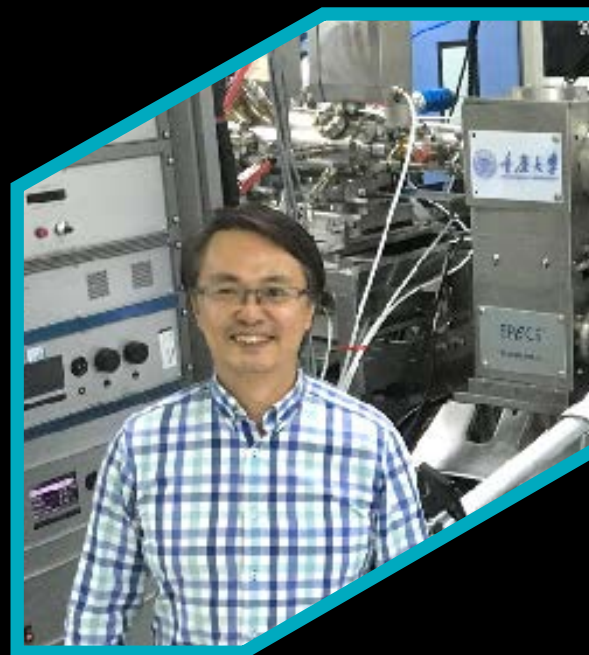
ARC CENTRE OF EXCELLENCE IN
FUTURE LOW-ENERGY
ELECTRONICS TECHNOLOGIES

FLEET RESEARCH SEMINAR

Surface electron microscopy and its applications on two-dimensional materials

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Chongqing University



Abstract: The study and control of two dimensional materials are of great interest both from a fundamental point of view and for important applications in the technology of information. This talk will discuss our recent research by using low energy electron microscopy (LEEM) for two-dimensional materials.

Fundamental questions of intensity, resolution and contrast will be discussed through examples such as in-plane ferroelectric In_2Se_3 , silicon-based 2D monolayer Cu_2Si and self-assembling process of graphene with intercalated alkali metal. The unique contrast mechanism and dynamic process of in-situ LEEM provide direct evidences of dynamic change in between atomic layers of 2D materials.

We also describe the design and commission of a novel aberration-corrected low energy electron microscope and photoemission electron microscopy (ac-LEEM/PEEM) at Chongqing University.

About the Speaker: Prof Wen-Xin Tang is working in the Material Science and Engineering at Chongqing University (CQU), China. He also acts as Deputy Director of Electron Microscopy Center at CQU.

Wen-Xin's research explores low dimensional materials and surface science by developing novel low energy electron microscopy and spectroscopy.

Currently, he is developing unique ultra-fast spin polarized LEEM which can be used to explore structural, chemical, spin and charge dynamics in time domain for two-dimensional materials.

DATE: Friday 05 October 2018
TIME: 11:00AM–12:00 NOON
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