



Department of
Mechanical Engineering
The University of Hong Kong



SEMINAR

Decode Low-dimensional crystal structure by using non-equilibrium observation

Date: 13 December, 2023 (Wednesday)
Time: 10:30 a.m.
Venue: Room 7-34/7-35, Haking Wong Building
HKU

Speaker: Professor Zhu-Jun Wang
ShanghaiTech University
China

Abstract:

Zhu-Jun Wang is an expert on both electron microscopy and heterogeneous catalysis. He has successfully constructed the surface sensitive near-ambient-pressure in-situ scanning electron microscopy (SEM) during his doctoral research. With this technique, the detailed atomic-scale information obtained by in-situ transmission electron microscopy (TEM)/ scanning tunneling microscopy (STM) can be embedded within the global picture obtained at lower magnifications by in-situ SEM and subsequently correlated with the spectroscopic data from near ambient pressure in-situ X-ray photoelectron spectroscopy (NAP-XPS). This multi-scale approach enables to investigate the dynamic nature of catalyst during the ongoing work, bridges the pressure-gap, and links atomistic details to collective processes. One typical work is the analysis of surface dynamics, from the micrometer- to the atomic-scale, at well-controlled experimental environments to obtain a fundamental understanding of the mechanism of graphene and two dimensional (2D) materials growth on metal catalyst.

ALL INTERESTED ARE WELCOME

For further information, please contact Prof. Y. Lu at 3910 2155.