scitek technologies for science

GATAN

Protochips Quantifiably Better™

IN-SITU ELECTRON MICROSCOPY SEMINAR & WORKSHOP

June 17th, 2019

Seminar Topic

Modern in-situ electron microscopy techniques

Presenter

ZiBin Chen, Application Scientist of Scitek

Abstract

In-situ electron microscopy is a state-of-art powerful technique in material research, chemistry, biology, and physics. Capable of being used as a normal electron microscope with an in-situ holder, environmental electron microscope, or a fast speed camera providing ultra-fast recording rates, and in-situ recording functions. In-situ techniques allow people to simulate different conditions (e.g. environmental, mechanical, chemical, thermal, and electrical conditions) in an electron microscope and observe the dynamic process in realtime with ultra-high resolution.

Within this seminar, various modern in-situ techniques, including in-situ (thermal, electrical, gas and liquid) holders and fast cameras with in-situ recording functionality will be introduced with relevant application cases.

A workshop will be held after the seminar, showing the novel MEMS-based electrothermal technology allowing imaging at elevated temperatures up to 1,200°C with heating, and cooling rates of 106 °C/s, whilst providing electrical stimulation.

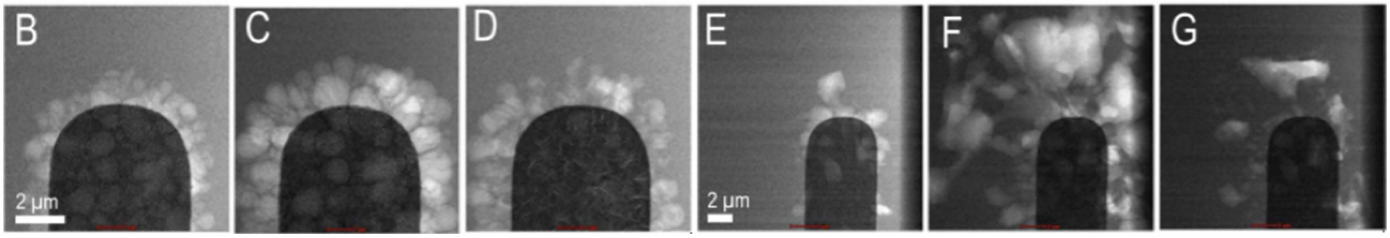
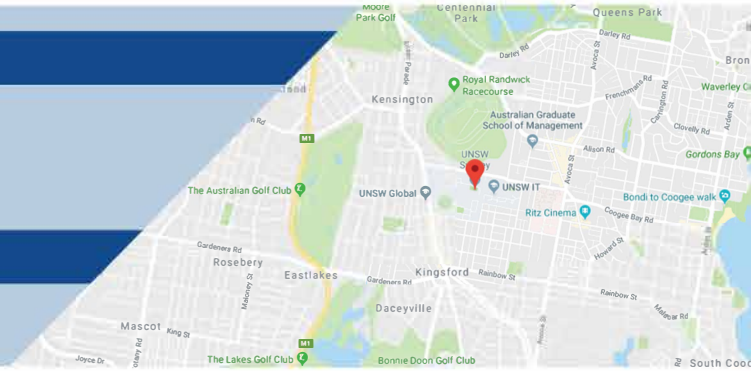


Figure 1.0 - Water as an additive to tune lithium ion battery efficiency

June 17th, Seminar

Time : 13:00 - 14:00

Location : Room G37, Chemical Science Building



June 17th, Workshop

Group 1 : 14:10 - 15:30

Group 2 : 15:40 - 17:00

Register & RSVP

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