Department of **Materials Science & Engineering** seminar series 2019

Presents

1D AND 2D COMBINED NANOSTRUCTURES FOR HIGH PERFORMING ENERGY STORAGE AND CONVERSION

by *Xin Li*

Date: 24 October 2019 (Thursday)
Time: 10am to 1pm
Venue: EA-06-06

Abstract

A proper and synergistic combination of 1D and 2D materials in a freestanding electrode is an effective approach to achieve distinguished electrochemical performance. Nevertheless, it remains a challenge to comprehensively figure out the close relationships among the composition, structure and the electrochemical characteristics of electrodes, which will be timely to minimize the trial and error in establishing the optimum energy storage/conversion systems. In this work, a thorough study is conducted in the successful fabrication of different nickel/cobalt-based nanocomposites with various 1D and 2D combined nanostructures, which have served as high-performing electrodes for both energy storage/conversion applications. Herein, the good supplements are provided for the composition-structure-performance relationship, which is expected to serve a set of useful guidelines for developing electrodes with 1D and 2D combined nanostructures for high-performing energy storage/conversion systems.

Speaker *Xin Li*

Biography

Xin Li received her B.S. degree in Zhejiang University. She is currently a Ph.D. candidate under supervision of Prof. John Wang at Department of Materials Science and Engineering, National University of Singapore. Her research interests mainly focus on the design and fabrication of nanomaterials for energy storage and conversion.

ALL ARE WELCOME!

Prof Ding Jun Host