

Department of Materials Science & Engineering seminar series 2019

Presents

Compositional and Structural Engineering of Two-dimensional Chalcogenides for Advanced Transistors and Catalysts

by Tang Baoshan

Date: 30 May 2019 (Thursday)

Time: 2:00 pm to 5:00pm

Venue: EA-02-15

Abstract

Two-dimensional (2D) chalcogenides have attracted tremendous attention since they exhibit novel physical and chemical properties with potential applications in field effect transistors (FET) and electrocatalysts. However, controlled fabrication of 2D chalcogenides needs to be established before these emerging materials can be realized for practical applications. Meanwhile, to optimize the use of 2D chalcogenides as transistors and catalysts, fundamental understanding on the role that composition and structure played in determining the properties of 2D chalcogenides needs to be fully investigated.

In this work, we comprehensively studied 2D chalcogenides, extending from growth to the advanced applications, revealing the importance of compositional and structural engineering on the properties of 2D chalcogenides.

Speaker Tang Baoshan

Biography

Tang Baoshan graduated from Tongji University, China and got master degrees of materials science and engineering in 2015. He is now a PhD student of Prof. Gong Hao and his co-supervisor is Dr. Yang Weifeng from Institute of materials research and engineering (IMRE). His present research interests are on design, synthesis and defect engineering of two-dimensional TMDCs for electronics and catalysts.

A/Prof Xue Jun Min