



DEPARTMENT OF CIVIL ENGINEERING

SEMINAR

**When clay minerals meet natural plant:
Eco-friendly fabrication of mineral functional material**

Professor Aiqin WANG
Chinese Academy of Sciences, China

Date: July 26, 2023 (Wednesday)

Time: 3:00 p.m. – 4:00 p.m.

Venue: Room 612B, 6/F Haking Wong Building, The University of Hong Kong

Note: The seminar will be given in Mandarin

Abstract

Plants are one of the main forms of life on earth, while minerals are natural products of the earth's geological processes. What kind of spark can the encounter of these two products from nature produce for the chemical world? In recent years, our group has focused on the theme of "clay minerals meets natural plant" and carried out a series of studies on the green fabrication of functional materials by using plant extracts as "natural reagents" in collaboration with attapulgite. The diversity and uniqueness of natural plants and clay minerals provide the basis for the flexible design of functional materials, and the synergistic fabrication of mineral functional materials from plants and clay minerals provides application support for the realization of high-value utilization of natural plant resources and mineral resources.

About the Speaker

Dr. Aiqin Wang is Professor of Materials Chemistry and Doctorial Supervisor in Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, China. He is Directors of the Key Laboratory of Clay Mineral Applied Research of Gansu Province in China. Dr. Wang served as editor of six international journals such as Applied Clay Science, Chemical Engineering Research & Design, Frontiers in Chemistry. Dr. Wang was selected as Elsevier's list of highly cited Chinese scholars in chemical engineering for nine consecutive years from 2014 to 2022, and selected as a global highly cited scientist in 2022. His research focuses on the research and development of mineral functional materials and environment-friendly material and has published more than 500 SCI papers, His long-term efforts have been devoted to realizing reconstruction, modification and nanocomposite of clay mineral by using chemical principles, giving full play to the nano-effect of mineral materials, solving key scientific, technical and engineering technical problems in the high-value application of natural clay mineral resources, and expanding their application in environmental, engineering, health and energy areas. His research achievements have won more than 10 awards, such as the Second Prize for National Technological Invention of the People's Republic of China in 2018 and the "Ho Leung Ho Lee Innovation Award" in 2020.

- ALL ARE WELCOME -