



**Seminar Topic:  
New Strategies to Prepare Novel Exotic Materials**

**Associate Professor Zhang Qichun**

### **Abstract**

In this talk, I will present several novel strategies to prepare new exotic materials. I hope the discussion will be helpful for postgraduate students and research staff to advance their own research. The strategies are – (1) exploring chemical reactions among organic micro/nanoparticles in aqueous solution, (2) employing the surfactant-thermal method to control the bulk crystal growth of chalcogenides and MOFs, (3) organic materials for Li-ion batteries, (4) inorganic-organic hybrid nanopores for the detection and imaging of ROS/RNS species, (5) using ‘clean’ reactions to synthesize larger acenes, and (6) ‘doping’ oligoacenes with heteroatoms.

### **Biography**

Dr Zhang Qichun is an Associate Professor at the School of Materials Science and Engineering (MSE) and School of Physical and Mathematical Sciences (SPMS) at Nanyang Technological University, Singapore. He received his B.S. in Analytical Chemistry at Nanjing University in 1992, M.S. in Physical Organic Chemistry at Beijing Institute of Chemistry, Chinese Academy of Sciences in 1998, M.S. in Organic Chemistry at the University of California, Los Angeles in 2003. He then went on to complete his PhD in Chemistry at the University of California, Riverside in 2007. After his postdoctoral stint at Northwestern University from 2007 – 2008, he joined NTU as an Assistant Professor, and was subsequently promoted to Associate Professor with tenure in 2014.

His research interests include synthesis of exotic materials and their applications (for example, novel organic conjugated materials for optoelectronic devices and novel electrode materials for use in microbial fuel cells). Currently, he is an Associate Editor of the Journal of Solid State Chemistry. He is also a member of the Advisory Boards of the Journal of Materials Chemistry C, Chemistry – An Asian Journal, Materials Chemistry Frontiers, and Inorganic Chemistry Frontiers. In addition, he was also the guest editor of Inorganic Chemistry Frontiers (2016 – 2017), Journal of Materials Chemistry C (2017 – 2018), and Inorganic Chemistry Frontiers (2017 – 2018). He is a Fellow of the Royal Society of Chemistry and has published >272 papers, garnering a H-index of 57.

**Wednesday, 28 March 2018 || Time: 2:00 pm – 3:00 pm**  
**Venue: MSE Meeting Room (N4.1-01-28)**  
**Hosted by: Professor Chen Xiaodong**