

Prospective for Low-Carbon Future**Prof Yuhan SUN**

Shanghai Advanced Research Institute, Chinese Academy of Sciences

Shanghai, China

Date: 8th June 2019, Saturday
Time: 4:00 to 5:00 pm
Venue: EA-02-11

Abstract & Speaker

Carbon emissions, mainly from industrial and transportation sector, become the biggest limiting factor for China's energy supply. Thus, fossil energy will gradually transfer from "fuel" to "raw material" and its low carbonization is an inevitable stage during the transition to zero-carbon energy. To control carbon emission within upper limit, transportation sector must realize low carbonization, and battery energy storage technology and zero-carbon gasoline and diesel will become the focus of attention. Low-carbon power relies on the development of large-scale energy storage technology and smart grid. Amongst them, much attention will be paid to the next generation of nuclear energy. In these cases, the hybrid energy system was proposed and then practiced step-by-step at CAS-SARI. Based on these considerations, low-carbon conversion of fossil fuel is being carried out and discussed at CAS-SARI, including both carbon conversion technology R&D and related incubation platform in total value chain.

Prof Yuhan SUN is the director of CAS Key Lab for Low-carbon Conversion Science and Engineering at Shanghai Advance Research Institute. His research interests include C1 chemistry on natural gas to fuels and chemicals, catalysis and engineering for CO₂ utilization and related green chemistry, and strategic solution to clean energy strategy. He has published over 500 papers on peer-reviewed journals, including Nature, NatureChem, AngewChem, Energy & Environmental Science, Advanced Materials, Green Chemistry, Chemical Communication, ACS Catalysis, Journal of Catalysis, Journal of Materials Chemistry, Catalysis Today (with the citation over 15000), and more than 100 patents issued.

Yuhan Sun received his BS in Inorganic Chemistry from Zhengzhou University in 1983 and Ph.D in Heterogeneous Catalysis from the Institute of Coal Chemistry, Chinese Academy of Sciences in 1989. Afterwards, he worked as Associate Professor and Professor at the Institute of Coal Chemistry, Chinese Academy of Sciences, and Director of State Key Laboratory of Coal Conversion (1996-2002). He was a Visiting Professor at the California Institute of Technology (1999-2000) and Brunel University (1992-1995).

ALL ARE WELCOME!

Host: A/Prof Daniel Chua