



Department of
Mechanical Engineering
The University of Hong Kong



Materials Innovation for Better Living (onsite and online)
Seminar jointly organized by the Department of Mechanical Engineering and the
Department of Chemistry

Date: 6 February, 2023 (Monday)
Time: 11:00 a.m. (Hong Kong Time)
Venue: Room 7-34, Haking Wong Building, HKU

Speaker: Prof. Jiaying Huang
Chair Professor of Materials
Westlake University

Zoom Online Lecture:
<https://tinyurl.com/mv2bz5k2>

Meeting ID: 936 8818 5080
Password: 181358



Abstract:

I will try to share some thoughts about materials science and engineering, where the paradigm of thinking is “microstructure-properties relationship”. The “structure” is an incredibly broad and diverse concept that often empowers one to see the discontinuum within the apparent continuum of materials, to think across different length scales and even different time scales, and sometimes to see the connection between the virtual information-based world and the physical materials-based world. A few examples will be briefly addressed, including microstructural design of graphene-based materials at macroscopic and microscopic materials, leading to altered processability and properties, fluidized electrocatalysts that allows unstable catalysts to deliver stable performance, and repurposing information processing tools for materials processing. On the other hand, materials-training facilitates researchers to discover and new problems in the society. A few examples will be given, such as materials innovations for personal well-being, as well as some materials ideas to enhance our preparedness for future outbreaks of infectious respiratory diseases.

Biography:

Jiaying Huang obtained his B.S. degree in Chemical Physics from USTC in 2000 and PhD in Chemistry from UCLA in 2004, after which he carried out postdoctoral research with the support of a Miller Research Fellowship at UC Berkeley. From 2007 to 2021, he was an Assistant, Associate and then Full Professor of Materials Science and Engineering at Northwestern University. He joined Westlake University in August 2021 as a Chair Professor of Materials and has recently become an elected member of the Board of Trustees of Westlake University. Prof. Huang enjoys integrating education and research to enhance the learning experience for his students and himself. In research, his group uses chemical principles and tools to discover new materials, advance materials processing, and use material innovations for better living. Through teaching, they aim to develop intuition, unlock creativity and bring the best out of

students and themselves. He received the Guggenheim Fellowship in the US in 2014, the JSPS Fellowship from Japan in 2016, and the Humboldt Research Award from Germany in 2016. He is a Fellow of the American Association for the Advancement of Science (AAAS), a Member of the European Academy of Sciences and Arts, and the founding Editor-in-Chief of Accounts of Materials Research.

ALL INTERESTED ARE WELCOME

For further information, please contact Prof. Nicholas Fang at 3917 2639.