香港大學 機械工程系
Department of Mechanical Engineering
THE UNIVERSITY OF HONG KONG

**SEMINAR**

# Title: Central Fabrication Laboratory- Technical sharing session – Multi-Dimensional Material Characterization

**Date:** 25 November, 2026 (Wednesday)
**Time:** 10:30am – 12:30pm
**Venue:** Room 7-35
Haking Wong Building, HKU

**Speaker:** Dr. Bo Yu
CIQTEK Co., Ltd.

**Language:** Mandarin

**Limited seats available on a first-come first-served basis**

**Abstract:**
The Central Fabrication Laboratory (CFL) is a cutting-edge cleanroom facility located at the University of Hong Kong. Its primary mission is to provide advanced fabrication facilities and expertise to enhance teaching and research activities in micro/nano fabrication. As a leading research laboratory, CFL offers open access not only to University of Hong Kong members but also to local and international institutions, researchers, and companies, with collaborations from the private sector always encouraged. The technical sharing sessions offered by CFL are designed to keep participants updated on the latest micro/nano fabrication techniques and provide valuable networking opportunities with experts from around the world.

The scanning electron microscope (SEM), once confined to morphological observation as a microstructural characterization tool, has increasingly become a platform for micro-scale characterization. With the growing range of in-situ attachments available, diverse in-situ dynamic observations can now be achieved by coupling different accessories to the microscope. Firstly, a discussion of in-situ platforms, including different in-situ attachments such as in-situ tensile testing, in-situ tensile testing combined with elevated-temperature EBSD, and in-situ nanoindentation. Next, an introduction to the application of Ciqtek's SNVM (Scanning NV Microscope) to magnetic materials. Finally, a brief introduction of some other electron microscope series will be given, together with the imaging results these microscopes deliver in material characterization.

**Biography:**



Dr. Bo Yu is Solution Manager at CIQTEK Co., Ltd. He has nearly ten years of hands-on electron microscopy experience, accumulated throughout his master's and doctoral research, where microscopy served as the core tool for linking material synthesis, nanostructure and performance. His research centres on the design and characterization of nanomaterials for energy storage and catalysis, with a focus on understanding how structure at the nanoscale governs functional behaviour. He received his PhD in Materials Science and Engineering from the Daegu Gyeongbuk Institute of Science and Technology (DGIST), Republic of Korea.

**ALL INTERESTED ARE WELCOME**

**For further information, please contact Mr. YIP P.S. (3910 2637, psanyip@hku.hk) or Prof. Chan P.K.L. (3917 2634, pklc@hku.hk).**