The University of Hong Kong
School of Biological Sciences

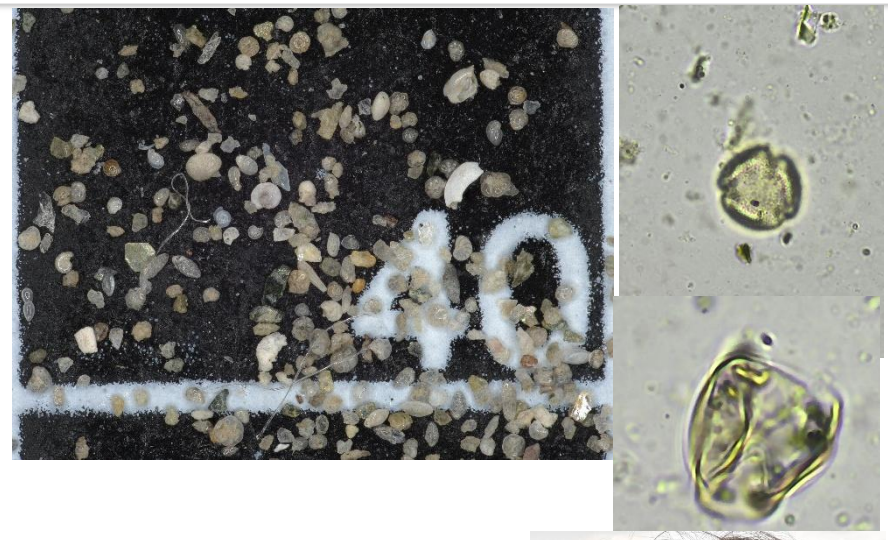
Qualifying Seminar

Anthropocene in Hong Kong: Ecological change in the palaeontological record

Date: 23 March 2026

Time: 16:00

Venue: 6N-11



About the speaker:

Yuen Tung CHIU is a PhD candidate supervised by Prof. Moriaki YASUHARA and Prof. Timothy BONEBRAKE. Her research focuses on anthropocene and palaeoecology of Hong Kong

Abstract:

Hong Kong, one of the most urbanised and densely populated coastal cities, retains significant ecological value, making it an important site for preserving evidence of anthropogenic ecological change. This study applies a multi-proxy approach combining micropalaeontology (ostracods and foraminifera), palynology (pollen and spores), and isotopic analysis to investigate the local boundary of the Anthropocene in Hong Kong. Sediment cores collected from multiple sites are compared to construct a clearer model of human-driven ecological change. Preliminary results reveal distinct ecological signals. The Tolo Harbour core shows low charcoal content but high palynomorph diversity, suggesting dynamic vegetation changes with limited fire activity. In contrast, the 15-meter core from Lantau Island exhibits a high abundance of foraminifera, indicating significant benthic ecological records. Overall, micropalaeontological methods demonstrate a strong linkage with ecological patterns, confirming their effectiveness in this study. Additional coring and expanded datasets will further refine the understanding of ecological change and help delineate the local boundary of the Anthropocene in Hong Kong.