RESEARCH SEMINAR

DEPARTMENT OF GEOGRAPHY AND RESOURCE MANAGEMENT THE CHINESE UNIVERSITY OF HONG KONG

Biogeochemical cycling in coastal wetland soils under environmental change

7 Sep 2023 (Thur) 4:30 – 6:00 pm (UTC+8) ZOOM ID: 895 147 7468 ZOOM Passcode: 858616

Wetlands are important ecosystems, hosting critical habitats and diverse species. The soils which support these ecosystems are highly dynamic environments, acting as sinks for carbon, and playing a critical role in the cycling of greenhouse gases, nutrients, and biogeochemical processes at the intersection of both terrestrial and aquatic ecosystems.

Coastal wetland soils experience rapid changes in water levels as a result of land management activities, variations in sea level, infrastructure development and climate change and variability. These variations in water levels can then cause rapid changes in soil and water quality, such as increasing acidity and decreasing pH, rapid deoxygenation of waterways and potential release of metals into porewaters and adjacent waterways. This seminar will explore how the biogeochemistry of coastal wetland soils are affected by land management activities and environmental change, and the potential effects of rising sea levels.



Vanessa Wong Associate Professor

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Associate Professor Vanessa Wong is a soil scientist in the School of Earth, Atmosphere and Environment at Monash University. She is an interdisciplinary soil scientist with the core focus of her research in soil chemistry. She works in both agricultural environments, assessing the effects of land degradation such as salinity, sodicity and acidity, and potential remediation options, and in natural environments, seeking to understand how humans and environmental change affects biogeochemical cycling in wetlands and conservation areas. Vanessa is the Editor-in-Chief of Land Degradation and Development, the immediate Past President of Soil Science Australia, and Vice-Chair of the International Union of Soil Science's Acid Sulfate Soil Working Group.





