

The Chinese University of Hong Kong  
Department of Geography and Resource Management

will present a seminar

by

**Dr. Naishen LIANG**

Head of Global Carbon Cycle Research Section  
Center for Global Environmental Research (CGER)  
National Institute for Environmental Studies (NIES), Japan



**Long-term Response and Feedback of Asian Terrestrial Ecosystems Carbon Cycle to Global Warming**

**Abstract:**

Asian terrestrial ecosystems occupy vast areas from tropical forests and wetlands in Southeast Asia to boreal ecosystems in northeastern Asia, and as well as alpine ecosystems on the Tibet Plateau. These ecosystems play important roles in regional and global carbon sink and global warming mitigation. Accurately quantifying CO<sub>2</sub>/CH<sub>4</sub> balances is critical for setting targets for their emission reductions and to identify and promote effective mitigation strategies. Since the mid-1990s, we have been developing an automated chamber network that covers the boreal ecosystems in Siberian and Alaska, temperate forests and grassland in East Asia, wetlands and permafrost on the Tibetan Plateau, and subtropical and tropical forests and wetlands in Southeast Asia, for continuous measurements of CO<sub>2</sub>/CH<sub>4</sub> budget as well as net ecosystem production. Among the sites, ten forests are using for conducting soil warming experiments. This talk will present long-term CO<sub>2</sub>/CH<sub>4</sub> fluxes and their response and feedback to climate change.

**About the Speaker:**

Dr. Naishen LIANG obtained his MS and PhD degrees in ecophysiology in Beijing Forestry University in 1988 and in Niigata University in Japan in 1995, respectively. He is currently the Head of Global Carbon Cycle Research Section in the Center for Global Environmental Research (CGER) at the National Institute for Environmental Studies (NIES) in Japan. His research mainly focuses on terrestrial carbon cycling and its response and feedback to climate change. He has designed an automated chamber system that has been deployed in over 30 different sites spanning from the Siberian tundra in the north to the Malaysian rainforest in the south to investigate soil respiration processes in the East Asian terrestrial ecosystems. Over the past decade, he has received various funding support with a total of over US\$6 million, and published more than 30 SCI papers on topics related to ecosystem carbon cycling.

**Language: English**

**Date: 9 April 2019 (Tuesday)**

**Time: 2:30~4:00pm**

**Venue: Room 221**

**Chen Kou Bun Building  
Chung Chi College**

**~All are Welcome~**

For any inquiries, please contact Prof. Lai Yuk Fo, Derrick (Tel. 3943 6528 or Email: [dyflai@cuhk.edu.hk](mailto:dyflai@cuhk.edu.hk)).