



香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

南方海洋科學與工程廣東省實驗室（廣州）香港分部
HONG KONG BRANCH OF SOUTHERN MARINE SCIENCE AND
ENGINEERING GUANGDONG LABORATORY (GUANGZHOU)

Hong Kong Branch Seminar Series

Marine Ecosystem Health and Safety



Dr. Clive Trueman
University of Southampton

**Title: Stable isotopes as natural
tracers in fish and fisheries ecology**

Abstract: The distribution of stable isotopes of carbon nitrogen and oxygen in biogenic materials has a long history as tracers of ecological, climatological and biogeochemical processes. However, many variables and processes can influence the distribution and fractionation of stable isotopes within the ecosphere. Effective use of geochemical tracers in biological and ecological systems requires a blend of geochemical, biochemical and ecological understanding which can be difficult to achieve.

In this talk I will outline recent work quantifying and explaining spatio-temporal distributions of stable isotope tracers in marine ecosystems at regional and global scales. I will show how this knowledge can be used to study marine animal migration, to build new tools for spatial traceability in complex marine food supply networks, and to improve our understanding of thermal and metabolic drivers influencing the distribution and persistence of fish species under climate change projections.

**6 October 2020 (Tuesday) | 16:15-17:15 pm
(GMT +8)**

<https://hkust.zoom.us/j/91461800864>

General Inquiry: hkb@ust.hk

