



The University of Hong Kong
School of Biological Sciences

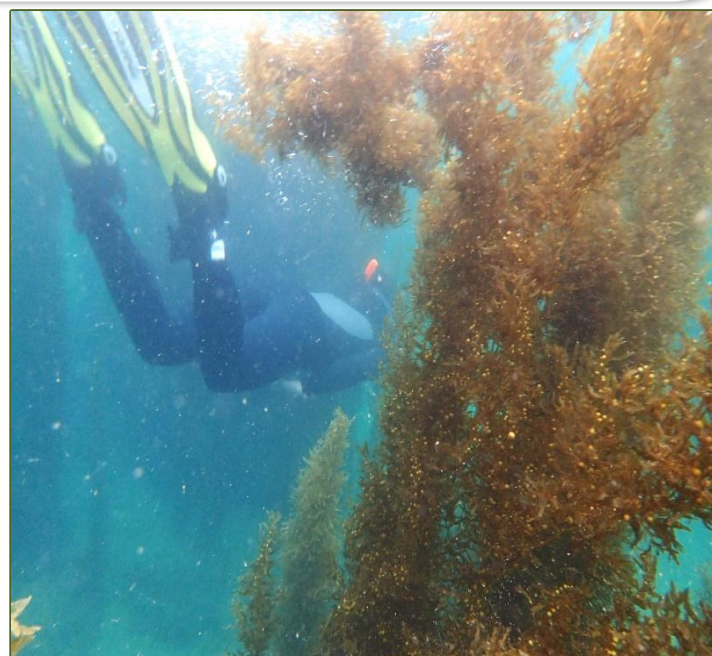
Qualifying
Seminar

Sargassum forests in southern China: historical distribution, environmental drivers for loss and potential for restoration

Date: 25th March 2025

Time: 11.00 am HKT

Venue: 6N-11 and Zoom



About the speaker:

S. A. M. Shariar Islam is a PhD candidate in the Marine Futures Laboratory supervised by Prof. Bayden D. Russell.



Abstract:

Sargassum species are frequently the dominant brown algae that is widely distributed on rocky reefs across tropical and subtropical environments in terms of biomass and formation of natural algal forests. In Hong Kong, *Sargassum* forests seasonally form high-biomass forests in winter but then senesce in summer. Locally, they play a significant role in maintaining the diversity of marine biological communities by providing habitat and food for fish and invertebrates. Due to their rapid seasonal growth and high biomass, they play an important role as a carbon stock and removing CO₂ from the atmosphere. But in recent decades, their distribution has been decreasing due to anthropogenic activities, climate change, and increasing sea water temperature. Therefore, effective methods for the restoration of seasonal *Sargassum* forests are urgently required. Thus, the purpose of this research is to identify the distribution of *Sargassum* species, assessment of genetic diversity, quantify the carbon capture potential, evaluate the potential of restoration activities for enhancing the role of *Sargassum* in blue carbon stocks and then whether nutrients offset the effect of high temperature.