

Complete title

Recent Advances in Marine Environmental Research

Schedule

27 November 2021, 9:00 AM – 5:00 PM (GMT+8)

Online platform to be used

Zoom

Rationale and short description

This 1-day symposium will feature a series of talks on recent advances in marine environmental research. The symposium will consist of three interrelated themes: (1) innovative technologies in pollution monitoring and control, (2) environmental risk assessment of emerging chemicals of concern, and (3) ecological restoration. The symposium will be concluded with a panel discussion with experts.

Expected outcomes and outputs

Through this 1-day symposium, participants will learn about the latest advancements in marine environmental research, including the latest technology of pollution monitoring and control, occurrence and impacts of emerging chemicals of concern, problems of eminent stressors such as hypoxia and algal toxins, and novel approaches in ecological restoration. Participants will have a chance to express their views on the challenges in marine environmental research during the panel discussion. The symposium also paves the way for capacity building and research collaboration in Asia-Pacific region.

Target audience

Governmental representatives (including policy makers and environmental authorities), environmental consultants, environmental practitioners, representatives from industries, environmental scientists, academics and research students, and other interested individuals

Co-organizers

- State Key Laboratory of Marine Pollution (SKLMP), City University of Hong Kong (CityU)
- Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University (PolyUHK)
- Department of Science and Environmental Studies, The Education University of Hong Kong (EdUHK)

Program

Morning Session

Chair: Dr. Leo Chan, Associate Director, SKLMP, CityU

Co-Chair: Dr. Henry He, School of Energy and Environment, CityU

Afternoon Session

Chair: Professor Kenneth Leung, Director, SKLMP, CityU

Co-Chair: Dr. James Fang, Department of Applied Biology and Chemical Technology and Research Institute for Future Food, PolyUHK

Moderator for the Panel Discussion

Professor Rudolf Wu, Department of Science and Environmental Studies, EdUHK

| Time (GMT+8) | Presentation/Session | Speaker |
|---------------------|--|--|
| 09:00 AM - 09:10 AM | Welcoming and Introduction | Dr. Leo Chan , Associate Director, SKLMP, CityU |
| 09:10 AM - 09:40 AM | Metagenomic insights into antibiotic resistance genes in environments | Professor Tong Zhang , Department of Civil Engineering, University of Hong Kong (HKU) |
| 09:40 AM - 10:10 AM | Stress responses in corals: winners or losers under climate change? | Professor Jianwen Qiu , Department of Biology, Hong Kong Baptist University (HKBU) |
| 10:10 AM - 10:30 AM | Recent progress and future research on ciguatera causing marine benthic dinoflagellates in Asian Pacific regions | Dr. Leo Chan , SKLMP, CityU |
| 10:30 AM - 10:40 AM | Break | |
| 10:40 AM - 11:00 AM | Implications of antibiotic resistome in mariculture for coastal environmental quality and seafood safety | Dr. Ling Jin , Department of Civil and Environmental Engineering, PolyUHK |
| 11:00 AM - 11:20 AM | Universal biosensors for pollution monitoring | Dr. Chun Kit Kwok , Department of Chemistry, CityU |
| 11:20 AM - 11:40 AM | Non-invasive methods for assessment of coral health <i>in-situ</i> | Dr Walter Dellisanti , Department of Applied Biology and Chemical Technology, PolyUHK |
| 11:40 AM - 12:00 PM | The Influence of environmental temperature and salinity on the toxicity of zinc oxide nanoparticles | Dr. Racliffe Lai , SKLMP, CityU |
| 12:00 PM - 02:00 PM | Lunch break | |
| 02:00 PM - 02:30 PM | Hypoxia: Nothing could be worse! | Professor Rudolf Wu , Department of Science and Environmental Studies, EdUHK |
| 02:30 PM – 02:50 PM | Liquid crystal monomers (LCMs): A class of emerging contaminants related to e-waste | Dr. Henry He , School of Energy and Environment, CityU |
| 02:50 PM - 03:10 PM | Ocean acidification threatens Chinese oysters: Can some species adapt within this century? | Dr. Vengatesen Thiyagarajan , Swire Institute of Marine Science, HKU |
| 03:10 PM - 03:20 PM | Break | |

| Time (GMT+8) | Presentation/Session | Speaker |
|---------------------|---|---|
| 03:20 - 03:50 PM | Enhancing marine biodiversity on seawalls through ecological engineering | Professor Kenneth Leung , SKLMP, CityU |
| 03:50 PM - 04:10 PM | Degradation and restoration of coral communities: Experience in a marginal coral environment, Hong Kong | Dr. Apple Chui , School of Life Sciences, Chinese University of Hong Kong (CUHK) |
| 04:10 PM - 04:30 PM | Emerging chemicals of concern: Stress in microalgae | Dr. Xiaying Xin , SKLMP, CityU |
| 04:30 PM - 05:00 PM | Panel Discussion – Grand Challenges of Marine Environmental Research in East Asia | <u>Moderator:</u> Professor Rudolf Wu <u>Panel Members:</u> Professor Kenneth Leung Professor Jianwen Qiu Dr. Vengatesen Thiyagarajan Dr. Apple Chui Dr. Ling Jin Dr. Henry He |