# The Second International Workshop on Eco-shoreline Designs for Sustainable Coastal Development

Date: 28-31 May 2018

## **Programme - Day 1 (28 May 2018)**

Venue: Lecture Theatre P4 in Chong Yuet Ming Physics Building, HKU

0830-0900 Registration

0900-0940 **Opening Ceremony** of the Workshop

Master of Ceremonies: Professor Kenneth M. Y. Leung, Professor and Deputy Director, School of Biological Sciences, and Scientist, the Swire Institute of Marine Science (SWIMS), HKU, Hong Kong SAR, China

Welcoming Remarks by Professor Matthew Evans, Dean, Faculty of Science, HKU, Hong Kong SAR, China

Welcoming Remarks by Professor Peter Steinberg, Director, the World Harbour Project, and Director, Sydney Institute of Marine Science, Australia

**Opening Remarks by Mr Kam-Sing Wong**, GBS, JP, Secretary for the Environment, Environment Bureau, the Government of the Hong Kong Special Administrative Region (HKSAR), Hong Kong SAR, China

**Opening Address by Ir Keith K. F. Tang**, Deputy Head of Civil Engineering Office (Port & Land), Civil Engineering and Development Department, the Government of the HKSAR, Hong Kong SAR, China

**Group Photo-Taking** 

#### Session 1, Chairperson: Professor Kenneth Leung

School of Biological Sciences and SWIMS, HKU, Hong Kong SAR, China

0940-1010 **Keynote Lecture 1 by Professor Stephen J. Hawkins**, Professor of Natural Sciences, Ocean and Earth Science, National Oceanography Centre Southampton, University of Southampton, UK; Marine Biological Association of the United Kingdom, Plymouth, UK

<u>Keynote title</u>: Beyond just another brick in the wall: Diversity, connectivity and ecosystem functioning in multifunctional artificial structures

1010-1040 **Keynote Lecture 2 by Dr Shimrit Perkol-Finkel**, CEO and Chief Scientist, ECOncrete Tech LTD, Israel

<u>Keynote title</u>: The big blue vision – How to scale up eco-engineering solutions in coastal development and coastal protection schemes?

1040-1110 Coffee Break

#### Session 2, Chairperson: Professor Peter Steinberg

World Harbour Project and Sydney Institute of Marine Science, Australia

1110-1130 **Invited Talk 1 by Professor Yun-wei Dong**, State Key Laboratory of Marine Environmental Science, College of Ocean and Earth Sciences, Xiamen University, Xiamen, China

<u>Talk title</u>: The multiple-scale ecological consequences of armoured shorelines in China

1130-1150 **Invited Talk 2 by Dr Ting Fong May Chui**, Department of Civil Engineering, HKU, Hong Kong SAR, China

<u>Talk title</u>: *Modelling the temporal dynamics of benthic biomass with hydrological factors: Impact assessment of land reclamation* 

1150-1210 Invited Talk 3 by Dr Tom Heath, Georges River Council, Australia

Talk title: Georges River foreshore eco-engineering: A case study

1210-1230 **Invited Talk 4 by Dr Melanie J. Bishop**, Macquarie University and Sydney Institute of Marine Science, Australia

<u>Talk title</u>: A global analysis of factors influencing human perceptions of harbour health, and support of eco-engineering interventions

1230-1400 Lunch Break

#### Session 3, Chairperson: Professor Joe S. Y. Lee

Simon F. S. Li Marine Science Laboratory and School of Life Sciences, The Chinese University of Hong Kong, Hong Kong SAR, China

1400-1420 **Invited Talk 5 by Professor Ichiro Takeuchi**, Graduate School of Agricultural Sciences and Center of Advanced Technology for the Environment, Ehime University, Matsuyama, Ehime, Japan

<u>Talk title</u>: Transcriptome analysis to assess coral bleaching induced by Irgarol 1051

1420-1440 **Invited Talk 6 by Ms Kei Wing Wong**, Department of Geology, Geography and Environmental School, Calvin College, USA

<u>Talk title</u>: A critical study of coral bleaching and ecosystem management in the Great Barrier Reef

1440-1500 **Invited Talk 7 by Dr David Baker**, School of Biological Sciences and Scientist of SWIMS, HKU, Hong Kong SAR, China

<u>Talk title</u>: Coral reef restoration - Is it viable for Hong Kong?

1500-1530 Coffee Break

#### Session 4, Chairperson: Professor Stephen Hawkins

Ocean and Earth Science, National Oceanography Centre Southampton, University of Southampton, UK; Marine Biological Association of the United Kingdom, Plymouth, UK

1530-1600 **Keynote Lecture 3 by Mr Sean O'Malley**, Managing Principal, Planner and Landscape Architect, swa, California, USA

Keynote title: Beyond the edge; extending the shoreline

1600-1630 **Keynote Lecture 4 by Professor Joe S. Y. Lee**, Director, Simon F. S. Li Marine Science Laboratory, the Chinese University of Hong Kong, Shatin, New Territories, Hong Kong SAR, China

<u>Keynote title</u>: 'Hard' versus 'soft' on fast disappearing natural shorelines – What are we missing?

1630-1700	<b>Keynote Lecture 5 by Professor Peter Steinberg</b> , Director, the World Harbour Project; Director, Sydney Institute of Marine Science, Australia
	Keynote title: Kelp and macrophyte rehabilitation in Australia
1700-1730	Roundtable Discussion with the Five Keynote Speakers
1730-1830	Reception for Invited Speakers and Guests
	Venue: Senior Common Room, 15/F, K. K. Leung Building, HKU
1900-2130	Dinner for Invited Speakers and Guests
	Venue: Jan at Le Pinacle, Shop 7 & 1/F, Block 3, Connaught Garden, 155 Connaught Road West, Hong Kong SAR, China

## <u>Programme - Day 2 (29 May 2018)</u>

Venue: Lecture Theatre P4 in Chong Yuet Ming Physics Building, HKU

#### Session 5, Chairperson: Dr Shimrit Perkol-Finkel

ECOncrete Tech LTD, Israel

0900-0930	<b>Keynote Lecture 6 by Dr Ross Coleman</b> , Professor and Director of Graduate Research, The University of Sydney, Australia
	Keynote title: Artificial structures and shorelines: What's good about this?
0930-1000	<b>Keynote Lecture 7 by Dr Laura Airoldi</b> , Associate Professor, Department of Biological, Geological and Environmental Sciences, University of Bologna, Italy
	<u>Keynote title</u> : The challenges of maintaining functional intertidal ecosystems for coastal protection under escalating local and global stressors in urbanised coastal regions
1000-1030	<b>Keynote Lecture 8 by Dr Jason Toft</b> , Senior Research Scientist, School of Aquatic and Fishery Sciences, University of Washington, Seattle, USA
	<u>Keynote title</u> : The Seattle story: Effectiveness of eco-shorelines in Puget Sound
1030-1100	Coffee Break

#### Session 6, Chairperson: Dr Ross Coleman

The University of Sydney, Australia

1100-1120 **Invited Talk 8 by Dr Louise Firth**, School of Biological and Marine Sciences, Plymouth University, Plymouth, UK

<u>Talk title</u>: *Eco-engineering of the grey: Making space for nature in artificial shorelines* 

1120-1140 **Invited Talk 9 by Dr Lynette Loke**, Department of Biological Sciences, National University of Singapore, Singapore

<u>Talk title</u>: How much enhancement is enough? Effect of habitat area and fragmentation on tropical seawall biodiversity at a landscape scale

1140-1200	<b>Invited Talk 10 by Dr Edward Lau</b> , School of Biological Sciences and SWIMS, HKU, Hong Kong SAR, China
	<u>Talk title</u> : Can green engineering enhance marine biodiversity on artificial seawalls?
1200-1220	<b>Invited Talk 11 by Dr Beth Strain</b> , Sydney Institute of Marine Science, Sydney, Australia
	<u>Talk title</u> : The efficacy of eco-engineered interventions for enhancing the native biodiversity of seawalls in harbours across the globe
1220-1400	Lunch Break

## Session 7, Chairperson: Dr Laura Airoldi

Department of Biological, Geological and Environmental Sciences, University of Bologna, Italy

1400-1420	<b>Invited Talk 12 by Dr Eliza C. Heery</b> , Department of Biological Sciences, National University of Singapore, Singapore
	<u>Talk title</u> : Designing artificial structures with an eye on detrital production and flux
1420-1440	<b>Invited Talk 13 by Dr Rebecca Morris</b> , National Centre for Coasts and Climate, School of BioSciences, The University of Melbourne, Australia
	<u>Talk title</u> : From grey to green: Efficacy of eco-engineering solutions for nature-based coastal defence
1440-1500	<b>Invited Talk 14 by Mr Michael Kokora</b> , Faculty of Architecture, HKU; OBJECT TERRITORIES, Hong Kong SAR, China
	<u>Talk title</u> : Experiments in hydrodynamics
1500-1530	Coffee Break

### Session 8, Chairperson: Professor Stephen Hawkins

Ocean and Earth Science, National Oceanography Centre Southampton, University of Southampton, UK; Marine Biological Association of the United Kingdom, Plymouth, UK

1530-1600	<b>Keynote Lecture 9 by Mr Richard Wenning</b> , Principal, Global Service Line Leader, Ecological Services, Ramboll Environment & Health, Ramboll US, Portland Maine, USA
	<u>Keynote title</u> : Review of eco-shoreline planning, design and construction projects in the Nordics
1600-1630	<b>Keynote Lecture 10 by Dr Jon Miller</b> , Research Associate Professor, Stevens Institute of Technology, Hoboken, NJ, USA
	Keynote title: Eco-shoreline "success": A matter of perspective
1630-1700	Roundtable Discussion with the Five Keynote Speakers
1700-1715	Introduction to the Writing Workshop by Professor Kenneth Leung, School of Biological Sciences and SWIMS, HKU, Hong Kong SAR, China
1715-1730	Closing Ceremony for the 2-day Symposium and Acknowledgements by Professor Kenneth Leung, School of Biological Sciences and SWIMS, HKU, Hong Kong SAR, China

1730-1830 Happy Hours for Invited Speakers and Guests

Venue: Senior Common Room, 15/F, K. K. Leung Building, HKU

# Programme - Day 3 (30 May 2018; by invitation only)

## Writing Workshop: How to Evaluate the Success of Eco-shoreline Projects?

Venue: 6N11 & 6N03, Kadoorie Biological Sciences Building, HKU

0900-1030	Setting the directions, syndicates' objectives, and deliverables (6N11)
	Led by Professor Stephen Hawkins and Professor Joe S. Y. Lee
1030-1100	Coffee break
1100-1200	Breakout - Part I: Scoping and division of labour (6N11 or 6N03)
1200-1330	Lunch (Senior Common Room)
1330-1530	Breakout - Part II: Sub-group discussion and writing (6N11 or 6N03)
1530-1600	Coffee break
1600-1630	Breakout - Part III: Reporting from sub-groups (6N11 or 6N03)
1630-1700	Summary of the progress and strategy by the leaders; Receiving feedbacks from members and setting plans for tomorrow (6N11)
1700-1900	Extended discussion at Senior Common Room (15/F, K. K. Leung Building, HKU)

# Programme - Day 4 (31 May 2018; by invitation only)

## Writing Workshop: How to Evaluate the Success of Eco-shoreline Projects?

Venue: 6N11 & 6N03, Kadoorie Biological Sciences Building, HKU

0900-1030	Introduction to the eco-shoreline trials in Hong Kong and receiving feedbacks from members $(6\mathrm{N}11)$
	By Professor Kenneth Leung and Dr Edward Lau, School of Biological Sciences and SWIMS, HKU, and representatives of Civil Engineering and Development Department, the Government of HKSAR, Hong Kong SAR, China
1030-1100	Coffee break
1100-1200	Breakout - Part IV: Matter arising and leader's briefing; Sub-group discussion and writing (6N11 or 6N03)
1200-1330	Lunch (Senior Common Room)
1330-1500	Breakout - Part V: Sub-group discussion and writing (6N11 or 6N03)
1500-1530	Coffee break
1530-1630	Breakout - Part VI: Progress reporting and planning (6N11 or 6N03)
1630-1730	Summary of progress and plan by the leaders; receiving feedbacks from members, and setting the timeline for deliverables (6N11)
1730-1900	Extended discussion at the Senior Common Room (15/F, K. K. Leung Building, HKU)