

ClimEco8



Sustaining the ocean we need for the future we want

**19-23 June 2023,
ZRS-Mediterranean Institute for Environmental Studies, Koper, Slovenia**

The United Nations declared 2021-2030 as the UN Decade of Ocean Science for Sustainable Development. The objective is to motivate international efforts to improve ocean health by providing the science necessary for sustainable development of the oceans to underpin 'The ocean we need for the future we want'. Achieving this, however, requires more than 'just new knowledge'. It will require new approaches to understand and tackle complex socio-ecological problems in their entirety. Also, an increased focus on building ocean literacy and public support for ocean futures. Scientists and decision-makers will need to identify how to facilitate the use of available science and encourage the uptake of behaviours and the implementation of policies—at individual, local and global scales. This is a challenging task, that will require scientists to be able to work across disciplines, across knowledge systems, and with a diversity of stakeholders.

To this end, IMBeR will convene its 8th International ClimEco Summer School (ClimEco8), in Slovenia, to help develop the next generation of marine researchers who will be at the forefront of addressing ocean challenges. Under the guidance of a group of internationally recognised experts from the marine natural and social sciences, participants will develop a strong theoretical and applied understanding of different disciplines, and how they can be integrated to help generate solutions to the grand challenges facing the world's oceans. To complement this, participants will also gain practical skills in science communication and how to operate effectively at the science-policy-society interface, so that they can influence decision-making processes in relation to the world's oceans – to help secure the ocean we need, for the future we want.

Lecturers

- Christopher Cvitanovic (Convener) – University of New South Wales, Australia
- Jessica Blythe – Brock University, Canada
- Laurent Bopp – LSCE, France
- Beth Fulton – CSIRO, Australia
- Jerneja Penca – ZRS Koper, Slovenia
- Rashid Sumaila – University of British Columbia, Canada
- Ingrid van Putten – CSIRO and University of Tasmania, Australia

Practical Sessions and workshops

In addition to the lectures outlined above, the summer school will include a series of workshops focused on building the practical skills that can help early career researchers build a thriving career. Topics will include:

- How to write a winning research grant
- How to write scientific papers (and to know where to target them)
- How to develop a policy pitch and policy brief
- How to work across disciplines (and collaborate well)
- How to build successful careers both inside, and outside of, academia

Topics to be covered

The summer school will deal with a range of topics under five broad themes. This list provides an overview of key themes and example topic areas.

Climate change and the world's oceans

- Delineating the issues of climate change and impacts to marine ecosystems
- Biogeochemical impacts of climate change on the world's oceans
- Social and economic impacts of climate change in marine ecosystems
- Prioritising adaptation options, including social acceptability
- Adaptation in practice: case studies from around the world

Managing marine resources

- Governing marine systems; key concepts and strategies
- Justice, equity and inclusion in marine governance and management
- Unexpected management outcomes (and how to avoid them)
- The role of science in marine governance
- Principles for co-producing knowledge for marine governance
- Foresighting as a tool to inform futures governance

Introduction to modelling

- Overview of ecological modelling types (inc. coupling models)
- Economic and bio-economic modelling
- Network modelling
- Qualitative modelling
- Climate modelling, projections and uncertainty
- Key considerations when engaging decision-makers with models

Social and economic research methods

- Introduction to social science, and quantitative methods
- Qualitative social science research methods
- Behavioural economics and social psychology
- Ethics in the social sciences

Just and equitable ocean futures

- Blue justice and environmental (in)justice in the ocean
- The potential to advance equitable marine conservation
- Transformations towards ocean equity/just transitions
- Towards an equitable blue economy
- Data justice
- Gender equality in the marine sciences