

## Global and local measures to reduce the risks of impact of climate change on coral reefs

### Present list of attendants

- **Allemand, Denis (Centre Scientifique de Monaco, Monaco)**

Denis Allemand is Scientific Director of the Scientific Center of Monaco (CSM) and Professor of University. His main field of research concerns the physiology of marine organisms, mainly corals, and their use as model organisms to understand the major problems of biology (biomineralization, symbiosis, evolution, adaptation and acclimatization...). He is also studying the effect of ocean acidification on marine organisms. He is co-author of about 150 scientific papers. He is a member of various scientific councils (Prince Albert II Foundation, École Pratique des Hautes Études, IFREMER) and Board of Directors (Observatoire Océanologique de Villefranche-sur-Mer, INDEMER). He is the scientific co-director of Tara Pacific expedition. For further information, please visit: [www.centrescientifique.mc](http://www.centrescientifique.mc)
- **Anthony, Ken (Australie)**

Ken Anthony is a marine scientist driven by conservation challenges. Ken uses models to tackle the question: what can we do to save the world's coral reefs? He is a Principal Research Scientist with the Australian Institute of Marine Science, leads the modelling teams under the Reef Restoration and Adaptation Program, and serves on the National Academy of Sciences, Engineering and Medicine's Committee on Interventions to Increase the Resilience of Coral Reefs.
- **Gattuso, Jean-Pierre (France, GIEC)**

Jean-Pierre Gattuso is CNRS Research Professor at the Laboratoire d'Océanographie de Villefranche (Sorbonne University) and Associate Scientist at the Institute for Sustainable Development and International Relations (IDDRI-SciencesPo, Paris). His current research relates to the effects of ocean acidification and warming on marine ecosystems and the services that they provide to society. He coordinates The Ocean Solutions Initiative which investigates ocean-based solutions to mitigate and adapt to climate change. Jean-Pierre Gattuso contributed to several IPCC products (AR5, Special Report on 1.5°C of Warming, and the Ocean and Cryosphere Special Report) and is President of the Monegasque Association on Ocean acidification.
- **Hilmi, Nathalie (Centre Scientifique de Monaco, Monaco, GIEC)**

Dr Nathalie Hilmi is an expert in Macroeconomics and International Finance. In 2010, she joined the Centre Scientifique de Monaco as section head of environmental economics and collaborated with IAEA's Environment Laboratories to initiate correlation studies between environmental sciences and economics to better evaluate the socioeconomic extent of impacts and costs of action versus inaction with regard to carbon emissions. She passed her post-doctoral degree (HDR) in 2011 about "a multidisciplinary approach of sustainable

development". She is lead author for IPCC special report SROCC and for the coming AR6.

- **Hoegh-Guldberg, Ove (Australie, GIEC)**  
Ove Hoegh-Guldberg is Professor of Marine Science and Director of the Global Change Institute (GCI) at the University of Queensland. His research group focuses coral reefs and ocean ecosystems, particularly the impacts of global warming and ocean acidification. Ove was coordinating lead author (CLA) for Chapter 30, ('The Ocean') for the fifth assessment report of the IPCC and is currently the Coordinating Lead Author for the Special IPCC Report on the implications of 1.5°C as a climate target.
- **Hughes, Terry (Australie)**  
Distinguished Professor, Terry Hughes is the Director of the Australian Research Council's Centre of Excellence for Coral Reef Studies, headquartered at James Cook University in Queensland. A recurrent theme in his studies is the application of new scientific knowledge towards improving management of marine environments. In June this year, Prince Albert II of Monaco presented Professor Hughes with the 2018 Climate Change Award.
- **Kayanne, Hajime (Japon)**  
Hajime Kayanne is Professor of Earth and Planetary Science and serve as a director of marine education at the University of Tokyo. He studies responses of coral reefs to the global change (CO<sub>2</sub> increase, global warming and ocean acidification) during the most recent past, present and projecting to the future based on field observation in the domestic Ryukyu Islands and Pacific islands. He also has developed new systems to monitor carbonate chemistry in the ocean.
- **Kleypas, Joanie (USA)**  
Joanie Kleypas is a marine scientist at the National Center for Atmospheric Research (USA), who investigates how rising atmospheric carbon dioxide affects marine ecosystems, including both climate change and ocean acidification. She is currently using high-resolution oceanographic modeling to help identify refugia based on the expected impacts of climate change on adult coral populations as well as their recovery via larval dispersal. She also founded a coral reef restoration project in Costa Rica.
- **Magnan, Alexandre (France, GIEC)**  
Alexandre Magnan, Senior Research fellow at IDDRI, is developing research on coastal vulnerability and adaptation to climate and environmental change. He is working on tropical small islands especially in the Indian Ocean (e.g., Réunion Island, Maldives) and in the Pacific (Kiribati, French Polynesia). He is particularly interested in "trajectories of vulnerability » and the risk of maladaptation. He also co-leads an initiative on ocean-based solutions to address climate change and its impacts.
- **Mcleod, Elizabeth (USA)**  
Dr. Lizzie Mcleod is the Nature Conservancy's Global Lead for Reefs. She oversees the Nature Conservancy's global reef strategy and has spent over 15 years working to reduce

the impacts of climate change on tropical marine ecosystems. Previously, she served as a Marine Climate Scientist and the Science Lead for the Reef Resilience Network – a Network that has trained nearly 1,500 reef managers in more than 75 countries. She has worked on reef projects across Micronesia, Indonesia, and Melanesia, modeling the impacts of climate change, conducting reef resilience assessments, developing research priorities and management recommendations for coral reefs, assessing ocean acidification, and leading community vulnerability to climate change. She also led an effort to ensure gender equity is integrated into climate projects.

- Rinkevich, Buki (Israël, GIEC)

Buki Rinkevich is a marine biologist and ecologist at the National Institute of Oceanography (Israel), who investigates marine invertebrates immunology and developmental biology, cell cultures from marine invertebrates, genotoxicity and coral reef biology. In the last two decades much of the work is concentrated on coral reef restoration, with projects developed in coral reefs worldwide, from the Caribbean, east Africa, the Red Sea, southeast Asia to the Indian Ocean islands. Current research is focusing on the development of ecological engineering tools for reef restoration and the construction of the reef of tomorrow.

- Steneck, Bob (USA)

Robert Steneck is Professor of Marine Biology, Oceanography and Marine Policy in the University of Maine's School of Marine Sciences. He is a marine ecologist whose laboratories include coral reefs in the Caribbean and Indopacific oceans and kelp forests of the North Atlantic and North Pacific Oceans. He has published over 200 scientific papers on topics including coral reefs, calcareous algae, lobsters, sea urchins, fish, historical ecology, marine ecosystem dynamics, global climate change, ocean acidification and the science of managing marine resources. His scientific publications have been cited over 33,000 times. He is a Fellow of the American Association for the Advancement of Science, A Pew Fellow in Marine Conservation and was distinguished for his research by the Second International Lobster Congress.

- Woolstra, Chris (Saudi Arabia)

Christian Woolstra is Associate Professor of Marine Science and the Associate Director of the Red Sea Research Center at KAUST. His research area is environmental genomics with a focus on acclimation and adaptation of corals and the role of microbes. Christian is a scientific coordinator of the Tara Pacific Expedition that explores the diversity and response of coral reefs in the Indo-Pacific to Climate Change. Christian is currently using a standardized and portable coral bleaching stress system to identify resistant coral colonies and study their molecular underpinnings.

### Invited Guest experts

- Wachenfeld, David (Australie)

**Direction de la Communication**

10, Quai Antoine 1er - BP 458

Tel: (+377) 98 98 22 22

Fax: (+377) 98 98 22 15

presse@gouv.mc

[www.gouv.mc](http://www.gouv.mc)