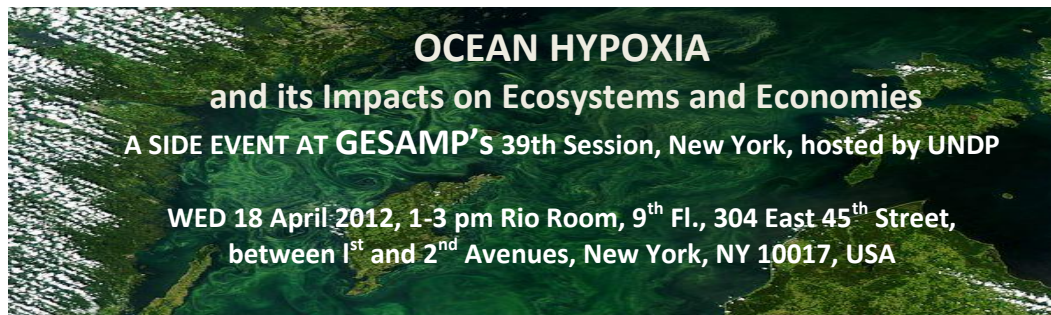


You are Invited



United Nations Development Programme

ENVIRONMENT AND ENERGY



During the last few decades, anthropogenic inputs of excess nutrients into the coastal environment, from agricultural activities and wastewater, have dramatically increased the occurrence of coastal eutrophication and hypoxia. Worldwide there are now more than 400 “dead zones” with the number doubling every ten years since the 1960s. The economic costs to fisheries, tourism and other coastal livelihoods are already in the many tens of billions of dollars annually and will only continue to increase in the ‘business as usual’ scenario.

This side event at [GESAMP's](#) 39th session in New York, hosted by [UNDP](#), will review the scientific understanding of hypoxia's causes and environmental and socioeconomic impacts, and will introduce approaches to reverse hypoxia and restore degraded marine ecosystems. After the presentations, the audience will be invited to engage in discussion with the panel.

Moderator: **Mr Manmohan Sarin, Vice Chairman of GESAMP**

Presentations by:

Dr. Rudolf Wu, Director and Chair Professor, School of Biological Sciences, The University of Hong Kong

“Hypoxia: Problems and Scientific Challenges”

Dr. Robert W. Howarth, David R. Atkinson Professor of Ecology and Environmental Biology, Cornell University

“Nutrient Pollution of Coastal Waters: Trends, Drivers, and Potential Solutions”

Dr. Peter Thomas, HEB Endowed Professor in Marine Science; University of Texas Marine Science Institute

“Disruption of fish reproduction in hypoxic coastal waters: potential impacts on coastal fisheries world-wide”

Dr. Nancy N. Rabalais, Executive Director and Professor, Louisiana Universities Marine Consortium

“Ocean Deoxygenation and Coastal Hypoxia in a Changing World”

Dr. Andrew Hudson, Head, Water and Ocean Governance Programme, United Nations Development Programme

“Reversing Ocean Hypoxia through Application and Scaling up of Innovative Policy, Economic and Financial Tools”



GESAMP

Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection

The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) is an advisory body, established in 1969, that advises the United Nations (UN) system on the scientific aspects of marine environmental protection. The Mission of GESAMP is: *“To provide authoritative, independent, interdisciplinary scientific advice to organizations and member Governments to support the protection and sustainable use of the marine environment.”*

Space limited - RSVP to: Jane Fulton jane.fulton@undp.org tel +1 212 906 5863

NB : Those without UN passes should assemble in building lobby at 12:50 pm and be escorted to Rio Room