

# IOC WESTPAC-FEC Workshop (6-8, Dec.)



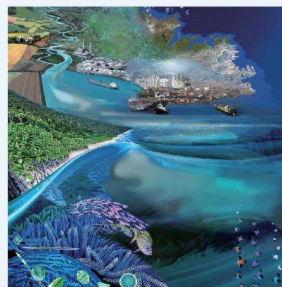
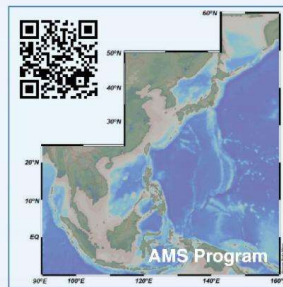
## IOC WESTPAC-FEC Workshop

Role of human-activities on the marine environment through the exchange materials between land and the ocean

🕒 6-8, December 2024

📍 Venue: University of Toyama, Japan (Hybrid)

🌐 Conference Website: <https://fec-iocwestpacworkshop.jimdofree.com/>



### Agenda

6 Dec. 14:00 WESTPAC AMS Program Business Meeting

7 Dec. WESTPAC and FEC Joint Public Forum

09:00 WESTPAC AMS Core Project “Nutrient Footprint” Scientific Session: Phase and Stage of Eutrophication, Oligotrophication, and Hypoxia

- from Coast to Marginal Sea
- from Land to Coastal Ocean

14:00 Nutrient Management of Coastal Oceans Under Global Climate Change

- Impact of Climate Change
- Oligotrophication in Developed Economies
- Eutrophication in Developing Economies
- Bridging over the Troubled Waters: Transnational Cooperation in East Asian Oceanography
- Importance of Nutrient Management
- Sustainable Future Based on the Linkage of the Earth-human System



WESTPAC and FEC Joint Public Forum

Registration link: <https://forms.office.com/Pages/ResponsePage.aspx?id=Px-qw12Ujs0IFczlBm9gJGOKJmpuES5Bm5EQMPvoib5UOTFFTVdESjEzTzhiRUcwQUNJUFo2Q1pQOS4u&origin=QRCode>

8 Dec. Cultural Study - Water Reincarnation in Toyama

- from Itai-Itai Disease to “the Home of Famous Spring Water”
- Kurobe Public Washing Area
- Uozu Higashiyama Cylindrical Water Divider

Register

WESTPAC and FEC Joint Public Forum (7 Dec.)

Global climate change significantly impacts coastal marine environments. During the economic

development phase, nutrient loads from land to the ocean tend to increase, leading to eutrophic conditions. This can result in phenomena like red tides and other biological issues. Conversely, in mature, developed societies, stringent control of nutrient discharge can lead to oligotrophic conditions, reducing biological productivity. These contrasting situations are heavily influenced by the stage of societal development, underscoring the need for balanced, adaptive strategies.

## Forum Focus

At a global level, addressing nutrient pollution is essential for safeguarding marine environments, which are interconnected and critical to sustaining biodiversity, fisheries, and coastal communities. Collaborative efforts across regions are key to developing scalable solutions that mitigate the widespread impacts of nutrient overloads, protect oceanic resources, and contribute to global climate resilience and sustainability goals.

This forum, a collaboration between IOC-WESTPAC and FEC, will explore appropriate coastal zone management measures through the exchange of information on the current status and nutrient management measures in each country. The focus will be on managing nutrient loads from land, which significantly impact coastal environments. By sharing recent advancements and strategies, the goal is to promote sustainable and healthy oceans amidst the challenges posed by global climate change.

The partnership between FEC and IOC-WESTPAC is crucial. FEC brings deep expertise in coastal sustainability, while IOC-WESTPAC's regional focus and scientific leadership offer a strong platform for applying this knowledge within the framework of the "Healthy, Productive, and Sustainable Asian Marginal Seas" project. Together, this collaboration ensures that research outputs are not only scientifically robust but also attuned to the socio-economic realities of the region, greatly enhancing the project's ability to generate actionable insights for sustainable management practices.

## Key Points

- Impact of Climate Change
- Oligotrophication in Developed Economies
- Eutrophication in Developing Economies
- Bridging over the Troubled Waters: Transnational Cooperation in East Asian Oceanography
- Importance of Nutrient Management
- Sustainable Future Based on the Linkage of the Earth-human System

## Agenda

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#### 7 Dec. WESTPAC and FEC Joint Public Forum

**09:00 WESTPAC AMS Core Project "Nutrient Footprint" Scientific Session: Phase and Stage of Eutrophication, Oligotrophication, and Hypoxia**

Time	Presentation Titles	Speakers
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#### Section 1 From the coast to the marginal sea

9:00-9:10	Introduction, East China Sea & Toyama Bay	Jing Zhang
9:10-9:25	Min-Zhe coastal area& East China Sea	Bin Wang
9:25-9:40	East China Sea	Xinyu Guo
9:40-9:55	Yellow Sea	Guebuem Kim
9:55-10:10	Sea of Okhotsk and Kamchatka area	Vyacheslav Lobanov
10:10-10:25	Groundwater in the north Bohai Sea	Bing Zhang

#### Section 2 From land to the coastal ocean

10:40-10:55	Seto Inland Sea	Akihiko Morimoto
10:55-11:10	Gulf of Thailand	Anukul Buranapratheprat
11:10-11:25	Gulf of Thailand	Suchana Apple Chavanich
11:25-11:40	Coastal Ocean in Indonesia	Faisal Hamzah
11:40-11:55	Coastal Ocean in Malaysia	Poh Seng Chee

**14:00 Nutrient Management of Coastal Oceans Under Global Climate Change**

#### Section 1 Chair: Xiaoyu Fang

14:00-14:05	Prof. Jing Zhang
14:05-14:30	Prof. Dr. Alice Newton, Prof. Dr. Ramesh Ramachandran
14:30-14:55	Prof Dr. Anik Bhaduri
14:55-15:20	Prof Dr. Gil Jacinto

#### Section 2 Chair: Jing Zhang

15:30-15:55	Prof. Dr. Sungeum Kim
15:55-16:20	Prof. Dr. Xiaopei Lin
16:20-16:45	Prof. Makoto Taniguchi
16:45-17:00	General discussion