

## PREFACE

The ocean has long been a source of life, livelihoods, and inspiration for humanity. In the face of escalating environmental challenges and the growing urgency for sustainable development, the role of the blue economy remains more vital than ever. It was within this context that we proudly held the International Conference on Blue Economy and Techno-Socio Environmental Innovation (INFLECTION) on 23–25 October 2024 at the Science Techno Park (STP), IPB University, Bogor, Indonesia in a hybrid format.

INFLECTION 2024 brought together a vibrant community of scholars, practitioners, policymakers, and students from Indonesia, the United Kingdom, Germany, Australia, Egypt, Singapore, New Zealand, Bangladesh, Cambodia, India, Malaysia, the Philippines, Taiwan, Tanzania, and Vietnam. With the theme "Sustainable Blue Economy," participants engaged in rich dialogue and knowledge exchange that emphasized our shared commitment to building resilient, inclusive, and sustainable ocean-based economies aligned with the Sustainable Development Goals (SDGs).

The conference successfully gathered 188 participants and resulted in 34 published papers, covering 2 topics—Integrated Coastal Management and Marine Biotechnology. These contributions reflect not only the diversity of research interests but also the importance of interdisciplinary collaboration in addressing the complex challenges facing our oceans today.

We are deeply grateful to our organizing and supporting partners: DAAD Indonesia, the DAAD Alumni Association for Marine Resources Studies (DAMARS), the International Research Institute for Maritime, Ocean and Fisheries (LRI i-MAR) – IPB University, the Center for Coastal and Marine Resources Studies – IPB University, and the Faculty of Pharmacy at Universitas Gadjah Mada. Their dedication and support were instrumental in the success of this event.

It is our hope that this publication serves not only as a record of the valuable insights shared during INFLECTION 2024, but also as a lasting source of inspiration for future research, innovation, and cooperation in advancing the blue economy and marine environmental sustainability.

Bogor, Indonesia  
**Chairperson of INFLECTION 2024**

**Dr. Kustiariyah Tarman**

## COMMITTEE OF THE INFLECTION 2024

Steering Committees	:	1. Prof Luky Adrianto 2. Prof Ario Damar 3. Prof Yonvitner 4. Bambang Yudho Rudiyanto, S.Pi, M.Si 5. Andy Afandy, S.Pi, MMA
Chairperson	:	Dr. Kustiariyah Tarman
Vice Chair	:	Nurdin Ahmadi, S,TP, MM
Secretary	:	Surya Genta Akmal, Ph,D
Treasurer	:	Retno P. Hastuti, ST, MM
Secretariat	:	1. Dina Yuniar, MSi 2. Ismi Isti'anah, M.Si 3. Mirah Afiza Nurazizah, S.Pi 4. Bintang Diva Juno, S.Pi
Event Division	:	1. Isdahartati, M.Si 2. Dinda Febta Meliyana, S.Pi
Scientific and Publication	:	1. Dr. Eng. Wahyu Ramadhan 2. Prof. Endang Lukitaningsih 3. Dr. Fery Kurniawan 4. Erika Wahyu Dewanti, M,Sc 5. Lusita Meliana, P.hD
Public Relations	:	Nana Anggraini Y, S.Sos
Media	:	1. Caddoumy Zahrel Ben, S.Pi 2. M. Arief Budiman, S.Pi 3. Ghea Nur Haliza, S.Pi
Excursion	:	1. Ima Kusumanti, MSc 2. Dr. Souvia Rahimah 3. Rifki Aldi Ramadhani, S.Pi
Accommodation	:	Vepryany Oktaviarty, S,TP
Logistic	:	1. Akhmad Nurhijayat, M.Si 2. Dwianka Rahman Maisalda, S.Pi 3. Y. Anes Sinaga 4. Agus Soleh, AMd

# THE AGENDA

## of International Conference on Blue Economy and Techno-Socio Environmental Innovation (INFLECTION 2024)

Day 1 (Hybrid) – October 23, 2024

TIME (GMT +7)	AGENDA
08.00 – 08.30	Registration
08.30 – 08.35	Opening by the MC
08.35 – 08.40	National Anthem “Indonesia Raya”
08.40 – 08.50	Welcome Speech by Prof. Yonvitner, Director of CCMRS, LRI i-MAR, IPB University
08.50 – 09.00	Welcome speech by Prof. Satibi, Dean of Faculty Pharmacy, UGM
09.00 – 09.10	Welcome speech by Dr. Guido Schnieders, Director of DAAD Jakarta Office
09.10 – 09.20	Opening Remarks by Prof. Arif Satria, Rector of IPB University
09.20 – 09.35	Signing MoU between IPB University and ASCOT, Philippines Prof. Arif Satria and Dr. Renato G Reyes
09.35 – 09.45	Photo session
09.45 – 10.15	Coffee Break
10.15 - 12.00	Parallel Session 1: Room 1: Marine Biodiversity, Mariculture & Conservation Room 2: Blue Foods & Marine Bioprospecting
12.00 – 13.00	Lunch Break
13.00 – 13.30	Keynote Speech 1: Prof. Mohamed A. Farag, Cairo University, Egypt “The Cinderella Story of Metabolomics: Does metabolomics get to go to drug discovery from symbiosis ballroom?”
13.30 – 14.00	Keynote Speech 2: Prof. Raimund Bleischwitz, ZMT Bremen, Germany "Collaborative Research Towards a Circular and Blue Economy"
14.00 – 15.15	Panel Session 1: Invited Speakers (Moderator: Prof. Ario Damar) 1. Dr. Andreas Hutahaean, IORA, Indonesia, “Nature Based Solution: A Solution for Regenerative Blue Economy” 2. Dr. Lik Tong Tan, Nanyang Technological University, Singapore, “Marine Cyanobacteria: a Treasure Trove of Bioactive Specialized Metabolites for Drug discovery and Development”
15.15 – 15.30	Coffee Break
15.30 – 17.30	Parallel Session Room 1: Blue Economy and Marine Nature-based Solution Room 2: Blue Foods and Marine Bioprospecting

# THE AGENDA

## of International Conference on Blue Economy and Techno-Socio Environmental Innovation (INFLECTION)

Day 2 (Hybrid) – October 24, 2024

TIME (GMT +7)	AGENDA
08.15 – 08.30	Registration
08.45 – 09.00	Keynote Opening by Director of LRI I-MAR, IPB University/ Chair of ISSG SEAFOAM ClimateWorks
09.00 – 09.30	Keynote Speech 3: Leonardo Adypurnama Alias Teguh Sambodo, SP, MS, Ph.D, Expert Staff of the Minister of National Development Planning (BAPPENAS) for Development of Leading Sectors and Infrastructure “Policy Transformation on Blue Economy in Indonesia - Prospects and Challenges”
09.30 – 10.00	Keynote Speech 4: Ir. Suharyanto, MSc, Director of Marine Spatial Planning, Ministry of Marine Affairs and Fisheries “Integrating Blue Economy Policy Transformation into Marine Spatial Planning”
10.00 – 10.15	Coffee Break
10.15 – 12.00	Parallel Session 3: Room 1: Genetics & Marine Biotechnology Room 2: Climate Change & Marine Socio-Ecological Systems
12.00 – 13.00	Lunch Break
13.00 – 14.45	Parallel Session 4: Room 1: Marine Logistic & AI for Marine Resources Room 2: Coastal Tourism
14.45 – 15.00	Coffee Break
15.00 – 16.30	Panel Session 2: Invited Speakers (Moderator: Dr. Sebastian Ferse) 1. Dr. Lisa Becking, Wageningen University and Research, Netherlands, “What Makes Blue Economy Resilient? Some Lesson Learnt from Sustainable Coral Marine Tourism” 2. Dr. Motilal Mathesh, Deakin University, Australia, “Biofactory and Marine Bioproducts” 3. Prof. Erna Prawita S, Universitas Gadjah Mada, Indonesia, “Marine Sponges as Promising Source for Drug Development”
16.30 – 17.15	Closing Ceremony Closing remarks by Prof. Luky Adrianto, Director of LRI I-MAR, IPB University Awarding best presenters, field trip announcement, etc.