



# INTERNATIONAL SCIENCE, TECHNOLOGY and POLICY SYMPOSIUM

(Side event of the World Ocean Conference)

12 - 14 May 2009  
Manado, North Sulawesi  
Indonesia



## **SYMPOSIUM SECRETARIAT**

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**MESSAGE FROM THE MINISTRY OF MARINE AFFAIRS AND FISHERIES  
FOR THE INTERNATIONAL OCEAN SCIENCE, TECHNOLOGY AND POLICY  
SYMPOSIUM 2009"**

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The Government of Indonesia will host the World Ocean Conference 2009 (WOC'09) in Manado, the capital city of North Sulawesi Province, during May 11 - 15, 2009. In conjunction with that global event, the Ministry of Marine Affairs and Fisheries (MMAF) and The Provincial Government of North Sulawesi will co-organize an International Ocean Science, Technology, and Policy Symposium as a side event of the WOC'09. The symposium will be held during May 12 - 14, 2009 at the same site of the WOC'09 venue.

The symposium will cover various aspects related to oceans including physical, biological, technological, and social economic. Altogether, there will be 31 different topics to be discussed at parallel sessions during three days activity. It is organized in such a way that participants and speakers may involve in more than one sessions, and freely mobile, in order to gain maximum benefits of their presence.

The objective of the symposium is to share information among scientists, managers, practitioners, entrepreneurs, and policy-makers on their recent and current experiences. It is a global arena for participants to introduce their new inventions, great ideas, research findings, derived methods and technologies of production, as well as resource policy advices, in order that everybody may improve his/her capacity in their respective field and specialization. Being a side event of the WOC'09, the symposium may also provide information directly and indirectly to the leaders and prominent figures from around the world who attend the WOC'09, to seek for a common understanding on the benefits and impacts of ocean to world society.

The host city of Manado is a seaside beautiful place, rich in natural and cultural resources. Hence, participants of the WOC'09, symposium, and other related events may also avail themselves of the wonders of Manado and its enthralling surrounding places. The famous and most beautiful Bunaken Marine Park, the flowery town of Tomohon and the tuna town of Bitung.

In this regards, I sincerely invite you to participate and to involve in the symposium.

I do hope that your participation will bring forward useful and meaningful impacts toward the sustainability and long-existences of our shared and common ocean ecosystem.

Sincerely Yours,

**Freddy Numberi,**

Minister of Marine Affairs and Fisheries  
Republic of Indonesia

**MESSAGE FROM THE GOVERNOR OF NORTH SULAWESI PROVINCE  
FOR THE INTERNATIONAL OCEAN SCIENCE, TECHNOLOGY AND  
POLICY SYMPOSIUM 2009**

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*Greetings from Manado ‘the land of smiling people’*

We have to give thanks to God Almighty for His love and blessings that the Government of North Sulawesi, in collaboration with the Ministry of Marine and Fishery Republic of Indonesia, will hold the *International Ocean Science, Technology and Policy Symposium* as a supporting event for the *World Ocean Conference in 2009*.

This symposium will discuss various aspects related to ocean including *physical, biological, technological and social economic* aspects, which will be presented in the 28 parallel sessions for three days. The purposes of this symposium are:

1. As an arena for sharing latest information among the *scientists, managers, practitioners, entrepreneurs and policy-makers* of their knowledge and understanding;
2. As a promotional event for inviting leaders and experts from various countries, directly or indirectly, to attend the WOC 2009 in Manado, North Sulawesi.

Manado, North Sulawesi is a strategic place to hold this symposium for its beautiful scenery of ocean, and its richness of natural resources and unique cultures. Therefore, it is hoped that participants of both WOC and symposium and other international events could help promote the exotic beauty of Manado, North Sulawesi as an attractive place for tourist destination and for investment.

Several famous and beautiful places are Bunaken Marine Park, the Flower City of Tomohon and the Bonita City of Bitung which have abundant various spices, mouth-watering seafood and many other ‘not to miss’ places for tourists to visit.

Ahead of us is a multinational event, an international event which will bring up North Sulawesi and Indonesia in the global stage, it is the *World Ocean Conference (WOC)* which will be held on May 11 – 15, 2009. With the *WOC 2009* we hope to introduce to the world that **North Sulawesi is an exceptional place for trade, tourism and investment**. This is part of promotion of a region in a global scale.

I am certain that the event of *World Ocean Conference 2009*, will open the eyes of the world that Indonesia is blessed with numerous stunning places for tourism and is a safe and prospective area for investment. Therefore, our target is *after WOC*, in which we expect that it will trigger the growing and developing of investment and tourism in Indonesia and North Sulawesi. Finally, I would like to welcome your participation in the *International Ocean Science, Technology and Policy Symposium 2009*. May God Almighty bless us with all wisdom and strength to develop our beloved region and country.

*Thank you.*

**S. H. SARUNDAJANG**  
GOVERNOR OF NORTH SULAWESI

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## Rationale And Objective

Ocean is the largest world's ecosystem that renders multifarious aspects of human beings. There is apparently nothing happened under the sky without directly or indirectly affecting or being affected by the ocean. Being a complex system that importantly determining global life, ocean must be scientifically understood, politically comprehended, and environmental friendly managed in order that it can support and sustain human life. That is the main reason to conduct this symposium as a scientific arena for all participants to share their experiences and come to conclusion of having better insight on the complexity of the ocean.

The common objectives of this symposium are:

- Sharing cutting-edge information, sciences, and technologies on all aspects and functions of ocean.
- Collect and disseminate scientific information that may be used by government and other concerned parties to improve the quality of ocean policy toward benefiting human race.

## 1. Sharks And Ray

### Management and Conservation for Sustainable Development

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#### Topic of Coverage

Several aspects as important components of management and conservation (such as: biology, dynamics and exploitation/fisheries as well as law/regulation and international/regional initiatives) of sharks and rays fisheries and management will be presented and discussed in this session.

#### Objectives

The objectives of this session are to:

1. Review existing international, regional and other initiatives to improve the management conservation status of sharks and rays.
2. Understand biodiversity of sharks/rays and their spatial distribution.
3. Review status of shark and rays fisheries and their resource management
4. Introduce Indonesia's initiative to develop Shark and Rays National Plan of Action.

#### Speakers

1. **Dr Natasha Stacey**  
Traditional Ecological Knowledge of Whale Sharks: Collaborating with Bajo Fishermen of Eastern Indonesia for Whale Shark Conservation
2. **Dr. Frazer McGilvray**  
Improving the Conservation and Management of Sharks in the Asia Pacific Region
3. **Drs. Dharmadi**  
BIODIVERSITY OF SHARKS AND RAYS IN SOUTH - EASTERN INDONESIA
4. **Fahmi, M.Sc**  
SPECIES DIVERSITY OF SHARKS AND RAYS IN INDONESIA
5. Ir. Nilanto Perbowo, M.Sc  
Draft of NPOA Sharks and Rays
6. **Lida Pet Soed**  
Management of Sharks & Rays Fisheries in the Coral Triangle
7. **Michael AW**  
Sustainable Management for Sharks Draw Upon Model From South Africa, Australia and Fiji
8. **Prof. Peter R. Last**  
Sharks and Rays in The Border of Australia and Indonesia Waters : Species Composition, Distribution and It's Management Option

#### Oral Presenter

1. **Chumaidi, Agus Priyadi, I Wayan Subamia Zafril Imran and Saurin Hem**  
THE EFFECT OF COMMERCIAL FEED AND LIVE FOOD (MAGGOT, CHIRONOMID LARVAE AND EARTH WORM) COMBINATION ON GONAD MATURATION OF BALA SHARK ( *Balantiocheilus melanopterus* BLEEKER) BROOD STOCK
2. **Dr. Prianto Rahardjo, M.Sc**  
Sharks and Rays Fisheries in Indonesia

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## **2. Fisheries Assessment and Management**

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### **Topic of Coverage**

The topic tentatively covers the following subjects: (a) climate change as an emerging issue in fishery governance, (b) Tuna RFMOs: challenges for sustainable fisheries development, (c) dealing with risk and uncertainty in fisheries, and (d) any others relevant subjects.

### **Objectives**

The primary objectives of this symposium are to ensure global sustainable fisheries and healthy, diverse ecosystems by advancing the scientific knowledge available to resource managers to evaluate and appropriately manage fishing activities, exchange ideas and information and further global fisheries management strategy.

### **Speakers**

1. **Dr. Abdul Ghofar**  
Impacts of Government Subsidies on the Sustainability of Indonesia's Marine Fish Resources and Management
2. **Dr. Campbell Davies**  
Tuna RFMOs: challenges for sustainable fisheries development
3. **Dr. Purwito Martosubroto**  
Perspective On Global Oceans Stewardship: Improving Fisheries Governance
4. **Dr. Sung Kwon**  
Tuna Fisheries Management by Small-islands Nations



5. **Ir. Nilanto Perbowo, M.Sc**  
Ecosystem-Based Fisheries Management in Indonesia
6. **Prof. Ron West**  
Linking Policy and Science for Effective Fisheries Management

### Oral Presenter

1. **Debora M De Frietas;**  
Assessing the strengths, weaknesses, opportunities, and threats of Small Farmed Shrimp Aquaculture to Food Security in the Patos Lagoon Estuary, Brazil
2. **St. Aisjah Farhum(1), James P. Panjaitan(2), Bonar P. Pasaribu(2), Indra Jaya(2), Hariyanto(3)**  
Exploring Performance of Pole and Liner Fishing Operation in South Sulawesi Waters
3. **Ivonne M. Radjawane(1), E. Indrayanti(2) and S. Hadi (1)**  
Study on The carrying Capacity of Ekas Bay Ecosystem Using mass Balance Trophic Approximation
4. **John Hampton, Simon Nicol, Anthony Lewis**  
Delivering Sustainable Fisheries: The Role Of Tuna Tagging Data For Fisheries Stock Assessment And Management
5. **Mlaponi, E., Mkumbo, O.C. Budeba, Y. L., Salehe, M. A., Ezekiel, C. N., Waya, R., Musiba M. and Mbonde, A.**  
Composition, Biomass Distribution And Population Structure Of The Fish Stocks In Lake Victoria Tanzania Side
6. **Mukti Zainuddin, Ph.D(1), Ir. Muhammad Jamal, Msi (2)**  
Satellite remote sensing and geographic information system of potential fishing zone and migration pattern of skipjack tuna in Bone Bay South Sulawesi
7. **Hagi Yulia Sugeha (1), Nego Elvis Bataragoa (2), Daniel Limbong (3), Katsumi Tsukamoto(3)**  
Inter-Annual Variation on the Recruitment Time of the Tropical Anguillid Glass Eels in the Estuary of Poigar River, Northern Sulawesi Island Indonesia
8. **Bambang Sumiono**  
Distribution And Stock Density Of Deepsea Fish Resources In The Waters Of South Off Java
9. **Lilis Sadiyah (1), Natalie Dowling (3), Budi Iskandar Prisantoso (1), Retno Andamari(4), Craig Proctor (3), Leon Barmuta(2)**  
Characterising Indonesia's Indian Ocean Tuna Longline Fishery, Based On Newly Established Sources Of Information
10. **Dewayany Sutrisno**  
Responsible fisheries management model: Resources accounting approach
11. **Dmitry Lajus, Julia Lajus**  
How Historical Studies Can Be Used For Improving Fisheries Management
12. **GW Ngupula and R Kayanda**  
Benthic macroinvertebrates: Diversity, abundance and distribution in the inshore and offshore waters of Lake Victoria
13. **Wedjatmiko**  
Study on fisheries resources around the Aceh waters before and after the tsunami event

**14. Salehe, M.A; Prof. Hersøug.B; Luomba, J1; and Medard, M1**

Restructuring the first-hand sales system of fisheries resource to improve fisher's income and their Livelihoods; A case of the Nile-perch fisheries in Lake Victoria, Tanzania

**15. Craig Proctor1, Retno Andamari2&3, Budi Iskandar Prisantoso2, and Jessica Farley1**

The history of Indonesia-Australia collaboration for monitoring of tuna fisheries

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### **3. Taxonomy, Natural History, Population, Dynamics, Exploitation and Management of Wild Stock Groupers**

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**Topic of Coverage**

Taxonomy, biological aspects (eg. food and feeding habits, maturity, fecundity, etc.), population dynamics (eg. growth, mortality etc.), exploitations (eg. fishing gears, methods, broodstock, seeds etc.), and management (some typical reference points).

**Objectives**

The objectives of this session are to:

- gather information regarding taxonomy and species diversity in each region,
- review the existing data and information on the status of exploitation,
- collect information regarding stock assessment model,
- collect data and information on the natural history and population dynamics,
- analyse some biological aspect of certain grouper species having good prospect for aquaculture,
- identify some indicators for sustainable development.

**Speakers**

**1. Ir. Retno Andamari, M.Sc,**

"PERFORMANCE OF BROODSTOCK CANDIDATE OF CORALTROUT (Plectropormus leopardus ) FROM WILD"

- 2. Siti Nuraini, M.Sc,**  
"TEMPORAL PATTERN OF SNAPPER AND SNAPPER IN THAI FISHNET FISHERY IN ARAFURA SEA"

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## **4. Responsible Capture Fisheries**

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### **Topic of Coverage**

The topic of responsible on capture fisheries sessions cover the following subjects: (a) sustainable fishing technologies, include the using of eco-friendly and efficient fishing gears; (b) maximum utilization of catch, including the reduction of by-catch and discards; (c) fisheries management options for achievement of sustainable for capture fisheries.

### **Objectives**

1. Review the existing fishing technologies that could cause depletion of fish stock and decreasing of quality of environment.
2. Alternative solution to fishermen how to catch the fish with eco-friendly and efficient fishing technologies.
3. Appropriate fishing technologies with reducing by-catch and discard.
4. Some options how to utilize resources with maximum to sustainable of fish resources.

### **Speakers**

- 1. Bundit CHOKESANGUAN**  
The promotion of responsible trawl fishing practices in Southeast Asia through the introduction of Juvenile and Trash Excluder Devices (JTEDs)
- 2. Dr. Emile Reppie**  
Development of Lift Net Fisheries in Indonesia

3. **Dr. Isao Koya**  
Data Required for Developing Sustainable Capture Fisheries: Japanese and Indonesian Experiences
4. **Dr. Somboon Siriraksophon**  
Responsible Capture Fisheries in the ASEAN Region
5. **Mahiswara, Msi**  
Research on By Catch Reduction Devices (BRD) in Indonesia
6. **Prof. Dr. Daniel Monintja**  
Impact of Fish Aggregating Device (FAD) on Sustainable Capture Fisheries
7. **Prof. Dr. Osamu Baba**  
Social Economic Indicators as Reference Points for Sustainable Capture Fisheries: Experiences of Japan and Other Asian Countries
8. **Prof. Dr. Sudirman**  
Impact of Light Fishing on Sustainable Fisheries in Indonesia
9. **Prof. Dr. Takafumi Arimoto**  
Eco Friendly Fishing By Using Set Net

#### **Oral Presenter**

1. **Catharine K. Winata**  
Dynamics of Turtle Conservation in Bintan
2. **Dr.Siri Ekmaharaj**  
Strategy for Aquaculture Development in the Southeast Asian Region
3. **Ngurah N. Wiadnyana**  
IMPORTANT ROLE AND CONTRIBUTION OF INDONESIA TO THE WORLD SEA TURTLES CONSERVATION
4. **LI Jianwei**  
Closing the Net against IUU Fishing : The Case of China

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## 5. Fisheries Aqua Culture

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### Topic of Coverage

Topics of this special sessions cover the following but not restricted to:

1. Breeding, Genetics and Husbandry Technology
2. Fish Nutrition and Feed Technology
3. Fish Pathology, Emergency Preparation, and Response to Disease
4. Aquaculture Engineering
5. Water Quality and Environment Management
6. Safety of Fisheries Aquaculture

### Objectives

Review and discussion on new research findings and the latest advancement, and commentary on world fish production from aquaculture.

### Speakers

1. **Dr. Endhay Kusnendar**  
The Effect of Global Climate Change in Aquaculture in Indonesia
2. **Dr. Ketut Sugama**  
Aquaculture Outlook
3. **Dr. Made L. Nurjana**  
Aquaculture Development Acceleration
4. **Jacques Slembrouck**  
Conservation and valorization of biodiversity through domestication of freshwater fishes in Indonesia: the case study of *Chromobotia macracanthus* (Bleeker 1852)
5. **Saurin HEM**  
Valorization of Palm Kernel Meal (PKM) via Bioconversion: an alternative solution to aquafeeds deficiency in Indonesia
6. **Mr. Sugano dan Mr. Fujisawa**  
SUSTAINABLE DEVELOPMENT OF SHRIMP INDUSTRY: FOOD SAFETY AND ENVIRONMENTAL PROBLEM
7. **DR. Mike Rimmer**  
Mariculture Development : Prospect and Constraint

### Oral Presenter

1. **Adi Susanto**  
GROWTH AND REPRODUCTIVE PERFORMANCE OF 2nd GENERATION POND REARED *P. Monodon* BROODSTOCK
2. **Alfred G.O Kase**  
Growth Rate of Caulerpa species Grown under Two Light Conditions

3. **Anytha Purwareyni Umbas**  
BANGGAI CARDINAL FISH (*Pterapogon kauderni*) DOMESTICATING AND ESTABLISHING MATING PAIRS
4. **Batam Mariculture Development Center Team**  
THE DEVELOPMENT CULTURE OF SILVER POMPANO (*Trachinotus blochii*, Lacepede) AT BATAM MARICULTURE DEVELOPMENT CENTER
5. **Coco Kokarkin**  
Commodity Diversification for Community Aquaculture Recovery
6. **D. Hardiantho**  
PRESENT STATUS GENETIC IMPROVEMENT NILE TILAPIA IN NATIONAL TILAPIA BROODSTOCK CENTER
7. **Dr. Kukuh Nirmala**  
The Decomposition Rate of Aquaculture Sediment Organic Matter on Cirata Reservoir in West Java, Indonesia
8. **I Made Suitha**  
Brackishwater Culture of *Anguilla* sp Enhances Production Yield
9. **IBM Suastika Jaya**  
EEL AQUACULTURE DEVELOPMENT IN FRESHWATER POND
10. **M. Nurhudah**  
The ecological roles of *Anadara* sp. In tiger prawn culture system
11. **M.N. Fahmi**  
BREEDING AND CULTIVATION OF JELAWAT (*Leptobarbus hoeveni* Blkr)
12. **Mimid A. Hamid**  
Improvement on Breeding Technique of Asian Catfish (*Pangasianodon hypophthalmus*) in Jambi Indonesia ; Technical View and Dissemination
13. **Melchor Cerdania**
14. Water Quality Assessment of Sicopong River, Bayawan City, Negros Oriental, Philippines
15. **Norman Quinn**
16. Variation in the settlement of lobster pueruli on Witham Collectors in Vaavu Atoll, Republic of Maldives in comparison with results in Jamaica and the US
17. **Persie Mark Q. Sienes**
18. Distribution and Abundance of the Dinoflagellate *Noctiluca scintillans* in North Bais Bay, Negros Oriental, Philippines
19. **Stenly Wullur**  
Minute rotifer *Proales similis* de Beauchamp; a new promising candidate of live food
20. **Wilson L. Tisera**  
REPRODUCTIVE STUDY OF *Kappaphycus alvarezii* AND *Eucheuma denticulatum* (SOLIERIACEAE, GIGARTINALES, RHODOPHYTA), IN RELATION TO ICE-ICE DISEASE FARMED IN BAIS BAY, NEGROS ORIENTAL, PHILIPPINES
21. **Somaye saki**  
Effect levels of protein and energy on growth parameters on *Barbus grypus* in fingerling
22. **Anang Hari Kristanto**  
EFFECT OF DIFFERENT CONCENTRATION OF LUTENIZING HORMONE RELEASING HORMONE ON THE PRODUCTION OF HYBRID CHANNEL

CATFISH FEMALE (*Ictalurus punctatus*) AND BLUE CATFISH MALE (*Ictalurus furcatus*) FRY

23. **Dr. Viv Dj. Prasita**  
Analysis of The Environmental Carrying Capacity of the Brackish Water Fishponds in the North Coast of Gresik Regency, East Java
24. **Adi Hanafi**  
ASSESSMENT AND IMPACTS OF WASTE FROM HATCHERY DEVELOPED AREA AT GEROKGAK DISTRICT, BALI INDONESIA
25. **Haryanti**  
PERFORMANCE OF PHENOTYPE AND GENOTYPE OF BLACK TIGER SHRIMP *P.monodon* WITH FAST GROWTH TRAITS
26. **A.Sudradjat**  
Population Genetics of the Silver-Lipped Pearl Oyster (*Pinctada maxima*) Based on Mitochondrial DNA COI (Cytochrome oxidase I) Region
27. **Joni Haryadi**  
THE STUDY ON MANGROVE LITTER AS A SOURCES OF NUTRIEN FOR BLANAKAN POND AREA, SUBANG - WEST JAVA
28. **Muharijadi Atmomarsono**  
USING LOCAL PROBIOTIC BACTERIA AS THE BEST PROBLEM SOLVING FOR TIGER SHRIMP CULTURE IN INDONESIA
29. **Rusman**  
Feasibility of seaweed culture development spesies *Cottonii* in Society
30. **Slamet Subyakto**  
PERFORMANCE OF DOMESTICATED WHITE SHRIMP (*Penaeus vannamei*) THROUGH BREEDING PROGRAM AT BADC SITUBONDO – INDONESIA
31. **Yuli Yulianti**  
Mass production of young oceanic seahorse, *Hippocampus kuda* in Lampung province, Indonesia
32. **Portunus pelagicus, Linn**  
APLICATION OF PROBIOTIC AND MOLACE FOR IMPROVING REARING MEDIA ON CRABLET MASS PRODUCTION OF SWIMMING CRAB (*Portunus pelagicus*, Linn)
33. **Achmad Sudradjat**  
Population Genetics of The Silver-Lipped Pearl Oyster, *Pinctada maxima* (Jameson 1901) based on Mitochondrial DNA COI (Cytochrome Oxydase I) region
34. **Ahmad Musa & Melta Rini Fahmi**  
DIFFERENCE OF EELS (*Anguilla marmorata*) ABUNDANCE BETWEEN SALUSANA AND LASUSUA RIVER, TWO RIVERS AT BONE GULF COAST AREA
35. **Thirunavukkarasu, N1\*. Moses Inbaraj. R1, Deepak Samuel. V1 and A. Shanmugam2**  
Mud crab fisheries trade in India Challenges and opportunities

## Poster Presentation

1. **I Nyoman Adiasmara Giri**  
Effect of Dietary Protein and Lipid Levels on growth of Red Snapper *Lutjanus sebae*
2. **Ani Widiyati**  
AN ALTERNATIVE STRATEGY FOR MANAGEMENT OF FLOATING-CAGE CULTURE WASTE SEDIMENT IN CIRATA RESERVOIR
3. **Wiwin Windupranata**  
Measurement and Modelling of Hydro-Oceanographic Parameters for the Sustainable Mariculture Site Selection
4. **Eni Kusriani**  
GENETIC VARIANCE OF BANANA PRAWN (*Fenneropenaeus merguensis*) FROM SEVERAL POPULATIONS AT INDONESIA WATERS BASED ON MORPHOMETRIC MEASUREMENT
5. **Tutik Kadarini**  
EFFECT OF WATER HEIGHT AND DARK-BRIGHT ON SURVIVAL RATE AND DEVELOPMENT OF LARVAL BALASHARK (*Balantiocheilus melanopterus*)
6. **Emma Suryati**  
The use of Sponge *Haliclona* sp. For Fishery Culture
7. **Lili Sholichah, Pawartining Yuliati**
8. NATURAL GONAD MATURATION TECHNIQUE OF BLACK SPOT RASBORA (*Rasbora dorsiocellata*)
9. **Nina Meilisza, I Wayan Subamia and Slamet Sugito**
10. DOMESTICATION OF FRESHWATER PUFFER FISH OR BUNTAL (*Tetraodon palembangensis*)
11. **Agus Priyono**  
GONADAL DEVELOPMENT AND SPAWNING OF COBIA, *Rachycentron Canadum* IN CAPTIVITY
12. **Bambang Susanto**  
SEED PRODUCTION TECHNOLOGY FOR ABALONE TO SUPPORT CULTURE DEVELOPMENT IN INDONESIA
13. **Bejo Slamet**  
OBSERVATION ON NATURAL SPAWNING OF CORAL ROCKCOD, *Epinephelus corallicola* (*Valenciennsis*, 1828) IN CAPTIVITY
14. **Des Roza**  
DISEASES INFECTION ON MASS MORTALITY CASE OF COBIA, *Rachycentron canadum* LARVAE
15. **Fris Johnny**  
THE INFLUENCE OF DIFFERENT FEED TO COBIA JUVENILE'S HAEMOCITIC IN HATCHERY
16. **Ibnu Rusdi**  
LARVAL REARING OF MANGROVE CRAB (*Scylla olivacea*) LARVAE IN DIFFERENT SALINITY CONDITIONS
17. **Johan Risandi**  
MANYS, A MATLAB BASED APPLICATION FOR MARICULTURE ANALYSIS



18. **Ketut Maha Setiawati**  
REPRODUCTION OF BLUE TANG FISH (*Paracanthurus hepatus*) IN CONTROLLED TANK
19. **Ketut Suwirya**  
REPLACEMENT OF FISH MEAL PROTEIN BY SOY BEAN AND CORN GLUTEN MEAL PROTEIN IN DIETS FOR MUD CRAB, *Scylla paramamosain*
20. **Muhammad Marzuqi**  
THE UTILIZATION OF SINGLE CELL PROTEIN AS SUBSTITUTION OF FISH MEAL IN DIETS FOR GROWTH OF CORAL ROCKCOD GROUPER (*Epinephelus corallicola*) JUVENILE
21. **Suko Ismi**  
DEVELOPMENT OF MULTI SPECIES MARINE FISH HATCHERY IN BALI INDONESIA
22. **Tatam Sutarmat**  
COMPARISON OF DRY PELLET AND TRASH FISH FOR CORAL TROUT P. leopardus CULTURED IN FLOATING NET CAGE
23. **Titiek Aslianti**  
INCREASING PERFORMANCE OF RED SNAPPER, *Lutjanus sebae* SEED FED RED FRUIT, *Pandanus conoideus* OIL AS BETA-CAROTEN SOURCE FORTIFIED DIET
24. **Tony Setiadharna**  
EFFECT OF DIFFERENT WATER DEPTH MEDIUM ON CANNIBALISM CHARACTER REDUCTION AND GROWTH ON INTERMEDIATE CULTURE OF TIGER GROUPER FRY (*Epinephelus fuscoguttatus*)
25. **Tridjoko**  
PERFORMANCE OF OOCYTE DEVELOPMENT OF HUMPBACK GROUPER, *Chromileptes altivelis* FROM F-2 CULTURE SELECTION
26. **Anak Agung Alit**  
PRELIMINARY ECONOMIC ANALYSIS OF GOLDEN TRAVELLY *Gonathanodon speciosus* Forsskal AT HATCHERY
27. **Zafran**  
THE EFFICACY OF INACTIVATED VIRUS VACCINE AGAINST VIRAL NERVOUS NECROSIS (VNN) IN JUVENILE HUMPBACK GROUPER (*Cromileptes altivelis*)
28. **Irwan Setyadi**  
THE EFFECT OF DIFFERENT FEED ON THE GROWTH OF ROCKCOD GROUPER *Epinephelus corallicola* JUVENILE
29. **Wartono Hadie**  
PHENOTYPIC PLASTICITY EXPRESSION OF *Macrobrachium rosenbergii* IN THE SALINE ENVIRONMENT
30. **Otong Zenal Arifin**  
GROWTH PERFORMANCE OF THE BLACK AND RED NILE TILAPIA (*Oreochromis niloticus* L) UNDER SEPARATE REARING CONDITION
31. **Angela Mariana Lusiastuti**  
FIRST REPORT OF *Streptococcus agalactiae* OF TILAPIA (*Oreochromis niloticus*) FROM CIRATA RESERVOIR OF WEST JAVA

- 32. Lies Setijaningsih**  
KAJIAN KANDUNGAN LOGAM BERAT TIMBAL (Pb) DAN MERKURI (Hg) PADA AIR DAN IKAN MAS (*Cyprinus carpio*) BUDIDAYA KERAMBA JARING APUNG (KJA) DI WADUK CIRATA – JAWA BARAT
- 33. Lies Emmawati Hadie**  
Implementation of Selection Index to Improve Growth of Giant Freshwater Prawn (*Macrobrachium rosenbergii*)
- 34. Lies Emmawati Hadie**  
Productivity Assessment and Implication of Culture Development to Red-Claw (*Cherax quadricarinatus*)
- 35. Nurbakti Listyanto**  
36. SWAMP EEL (*Monopterus* sp.): DEFIANCE AND HOPE FOR NOW AND FUTURE
- 37. Rasidi**  
38. WATER QUALITY ASSESSMENT OF PONDS FORMED BY BRICKS DIGGING LAND IN PALEMBANG CITY, SOUTH SUMATRA, INDONESIA
- 39. Tri Heru Prihadi**  
EVALUATION OF THE SUSTAINABILITY OF AQUACULTURE PRODUCTION SYSTEMS IN INDONESIA
- 40. Tri Heru Prihadi**  
Life Cycle Assessment for sustainable aquaculture management: A case study of two-net cage aquaculture systems for carp (*Cyprinus carpio*) and tilapia (*Oreochromis niloticus*) in Cirata reservoir, Indonesia
- 41. Anjang Bangun Prasetyo**  
Genetic Variation of Abalone *Haliotis asinina* Wild Brood Stock and Its Offspring (F-1) Through Allozyme Electrophoresis
- 42. Tuti Sumiati**  
THE SUSCEPTIBILITY OF FISH CELL CULTURES TO KOI HERPESVIRUS (KHV)
- 43. Uni Purwaningsih**  
Effect of Vitamin C to Non-Specific Immunity Response on Huna (*Cherax* sp.)
- 44. Desy Sugiani**  
Temnocephalids Ectosymbiont *Craspedella* sp. on *Cherax quadricarinatus* and *Cherax albertisii* “Papua freshwater lobster” in crayfish rearing unit
- 45. M. H. Fariduddin Ath-thar**  
EFEKTIFITAS LARUTAN TANIN UNTUK MENDUKUNG KEBERHASILAN MIKROINJEKSI TELUR PADA IKAN LELE *Clarias gariepinus*
- 46. Yohana**  
MACROBENTHOS DIVERSITY IN AQUAPONIC POND
- 47. Jojo Subagja**  
GARING FISH (*TOR DOURONENSIS*) DOMESTICATION AS AN ALTERNATIVE EFFORT FOR CONSERVATION OF POTENTIAL COMMODITIES OF WEST SUMATRA PROVINCE
- 48. Joni Haryadi**  
THE STUDY ON MAKROBENTHOS AS AN INDICATOR FOR THE PRODUCTIVITY OF POND ECOSYSTEM AT BLANKAN, SUBANG
- 49. Gunarto**  
WATER QUALITY CONDITIONS IN INTENSIVE WHITE SHRIMP (*Litopenaeus*

vannamei) BRACKISHWATER PONDS GIVEN DIFFERENT DOSAGES OF FERMENTED PROBIOTIC

**50. Sidi Asih**

Identifying Heritability Quantitative Phenotype Growth Traits of Common carp (Cyprinus carpio L.) Rajadanu Strain for to selection programs

**51. Sulaeman**

52. Genetic variation of the giant tiger shrimp, Penaeus monodon around Sulawesi Waters

**53. Sulaeman**

Electrophoresis analysis of Mangrove crab Genus Scylla: Methodology and the interpretations

**54. Tarunamulia**

ASSESSMENT OF LAND OR WATER SUITABILITY FOR SUSTAINABLE COASTAL AQUACULTURE BY UNDERSTANDING THE EFFECT OF CLIMATE CHANGE ON SPATIAL MODELLING OF HYDRO-OCEANOGRAPHIC VARIABLES

**55. Erlania**

56. IMPACT OF HEAVY METAL TO FISH AQUACULTURE IN FLOATING NET CAGE IN CIRATA RESERVOIR, INDONESIA

**57. Iswari Ratna Astuti**

58. Management of Sustainable Floating Net Cage Aquaculture on Reservoir. The Case Study of Cirata Reservoir, West Java Province, Indonesia

**59. M. Nurhudah**

The ecological roles of Anadara sp. In tiger prawn culture system

**60. M. Nurhudah**

The ability of seaweed to absorb organic and inorganic substances in tiger prawn

**61. Stella Kaunang and Remy E.P Mangindaan**

A Study on the Hatch-Ability of Rotifer (Brachionus Sp.) Resting Eggs using Disinfectants

**62. Yushinta Fujaya and Emma Suryati**

Hormonal Approach to Molting Stimulation in the Blue Swimming Crab (Portunus pelagicus)

**63. N. Gustaf F. Mamangkey**

APPROACHES TO IMPROVE PEARL QUALITY FROM PEARL OYSTERS: WITH A NOTE ON SOUTH SEA PEARLS

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## 6. Coelacanth:

### Management and Conservation for Sustainable Development

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#### Topic of Coverage

Several important components of management and conservation (i.e. biology, ecology, biogeography, population genetic, dynamics and exploitation/fisheries as well as law/regulation and international/regional initiatives) of Coelacanth.

#### Objectives

The objectives of this session are:

1. Review of existing international, regional and other initiatives to improve the conservation status of coelacanth.
2. Biodiversity of coelacanth and its spatial distribution in Indonesian sea waters.
3. Review of status of coelacanth in Indonesia.
4. Plan of Coelacanth conservation

#### Speakers

1. **Sudarto,**  
"WHICH ORIGIN FOR THE SECOND INDONESIAN COELACANTH?"
2. **Hiroshi Koie,**  
"ANALYSIS OF INDONESIA COELACANTH BY CT SCANING  
Arief Setyanto, M.App.Sc Status Reports of Coelacanth (*Latimeria chalumnae* Smith, 1939)"
3. **Masa Iwata\*1, Shinya Yamauchi1, Kenichi Fujii1, Kotaro Yoshimura1, Akira Komoda1, M. Kasim Moosa2, Augy Syahailatua3, Djoko H. Kunarso3, Kawilarang W. A. Masengi4, Ixchel F. Mandagi4, Ping Astony Angmalisang4, Johnny Budiman4, Fransisco P. T. Pangalila4, Yoshitaka Abe1,**  
"Biological Survey on Indonesian Coelacanth, *Latimeria menadoensis*"
4. **FORREST A. YOUNG AND C. BEN DAUGHTRY,**  
"USE OF REBREATHING AS A DIVING TOOL TO CONTINUE TO EXPLORE AND STUDY THE DEEP REEF SLOPE, AND SPECIFICALLY THE LIFE HISTORY OF THE COELACANTH"
5. **Yasuhiko Naito, Nobuyuki Miyazaki and Yoshitaka Abe**  
"Biologging technique for coelacanth research"
6. **Yoshitaka Abe,**  
"The Coelacanth and Aquariums"
7. **Shinya Yamauchi\*1, Masa Iwata\*1, Kotaro Yoshimura1, Akira Komoda1, M. Kasim Moosa2, Augy Syahailatua3, Djoko H. Kunarso3, Kawilarang W. A. Masengi4, Ixchel F. Mandagi4, Ping Astony Angmalisang4, Johnny Budiman4, Fransisco P. T. Pangalila4, Yoshitaka Abe1,**  
" Biota of deep sea around 200m in Sulawesi Island by ROV observation"

8. **Kenichi Fujii\*1, Chiho Nakamura, Masa Iwata\*1, Shinya Yamauchi1, Kotaro Yoshimura1, Akira Komoda1, M. Kasim Moosa2, Augy Syahailatua3, Djoko H. Kunarso3, Kawilarang W. A. Masengi4, Ixchel F. Mandagi4, Ping Astony Angmalisang4, Johnny Budiman4, Fransisco P. T. Pangalila4, Asep Mohammed5, Yoshitaka Abe1,**  
"Educational Exhibition of Indonesia Coelacanth, Latimeria menadoensis"
9. **Mandagi Ixchel Feibie, Hidemi Watanabe, Kanako Koyanagi and Kazutaka Takeshita,** "MOLECULAR PHYLOGENETIC ANALYSIS OF COELACANTH (Latimeria menadoensis) LIVING ON AND AROUND MANADO BAY, SULAWESI ISLAND OF INDONESIA"
10. **Mandagi Ixchel Feibie 1, Hidemi Watanabe1, Kanako Koyanagi1 and Kazutaka Takeshita1,**  
"MOLECULAR PHYLOGENETIC ANALYSIS OF COELACANTH (Latimeria menadoensis) LIVING ON AND AROUND MANADO BAY, SULAWESI ISLAND OF INDONESIA "

### **Oral Presenter**

1. **Hiroshi Koie**  
ANALYSIS OF INDONESIA COELACANTH BY CT SCANING

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## **7. Exotic Marine Organism**

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### **Topic of Coverage**

Biodiversity, Conservation, Breeding and Culture Technology

### **Objectives**

The objectives of the session are to:

1. Provide the most recent knowledge on (a) Major environmental problems facing marine exotic organisms in the tropics (biodiversity), (b) Counter measures to problems encountered by coral reefs and their allied organisms for sustainable ecological balance (conservation), and (c) Actions taken to sustain marine organism industry (culture).
2. Provide a good forum for scientist, decision makers and other stakeholders to come together to find a common ground and solutions to problems facing the marine exotic animals (finfish, crustaceans, mollusks etc.) and their existence through conservation. It will be also a useful platform to showcase the latest advances of aquaculture research, development and breeding and culture technology of many marine ornamentals in the tropics.

### Speakers

1. **A. Ruwindjarto**  
Our Coastal Villages Beyond Adaptation to Climate Change
2. **Thomas J. Goreau, PhD**  
Coral Reef and fisheries habitat restoration in the coral triangle

### Oral Presenter

1. **1Zaleha, K. , 2Abang Jefri Abang Mansor and 2Hasimah Mohd. Said**  
Species diversity of Porcellidiidae Sars, 1860 (Copepoda: Harpacticoida) from seagrass bed of Sungai Pulai, Malaysia
2. **Awwaluddin**  
(Perciformes: Blenniidae) based on molecular data
3. **Imron, PhD**  
Evolutionary patterns of Lysin Gene Sequence Confirm Species Integrity of Highly Divergent Indo-Pacific Tropical Abalone, *Haliotis asinina*
4. **Irma Kesaulya**  
How well do we know the molluscs around Maluku archipelago? Biodiversity of gastropods and molluscs in Ambon and Nusalaut islands of Maluku Archipelago
5. **Martin Shi Jie Chew**  
Spatial aggregation in the boring giant clams (*Tridacna crocea*) at Tioman Island, Malaysia
6. **Mei Lin Neo**  
Preliminary studies on the larval biology of fluted giant clam, *Tridacna squamosa*
7. **Oh Siew Yong**  
PRELIMINARY STUDY OF *Acetes serrulatus* (DECAPODA, SERGESTIDAE) IN THE COASTAL WATERS OF PONTIAN, JOHOR, PENINSULAR MALAYSIA: POPULATION CHARACTERISTICS
8. **Pamela Soo**  
Giant clams in Singapore: past, present and future
9. **Sara Nikoo**  
SPATIAL AND TEMPORAL VARIATION OF COMMERCIALY JUVENILES FISH FROM MAHSHAHR CREEKS

**10. Timery S. DeBoer**

Symbiodinium and giant clams (genus: Tridacna): Patterns of distribution across three host species in the biodiverse Bird's Head region of Indonesia

**Poster Presentation**

**1. Hikmah Thoha Nurul Fitriya**

Plankton Abundance in Raja Ampat of Papua Province, Indonesia

**2. Aida Sartimbul\*, Erfan Rohadi**

The diversity of molluscs at the coastal zone of Panjang coast, Ngliyep, South of Malang, Indonesia

**3. Coralie TAQUET**

Genetic connectivity of marine invertebrates in the South-East Asia and West Pacific region, component 1 of the SEA-WP Project

**4. Kresna T Dewi, Suhartati M Natsir DAS Ranawijaya**

The Diversity of Ostracoda and Foraminifera from East Kalimantan Indonesia (Off Berau and Mahakam Deltas)

**5. Mei Lin Neo**

Predator-prey dynamics in the fluted giant clam, *Tridacna squamosa*

**6. NUR AZEYANTI NORHASHIM AND SAIFULLAH A. JAAMAN**

Boat effects on the behaviour of Indo-Pacific Humpback (*Sousa chinensis*) and Irrawaddy (*Orcaella brevirostris*) dolphins in Cowie Bay, Sabah

**7. Nur Leena Wong**

Relationship between *Anadara* (*Scapharca*) gubernaculum community and marine plant coverage on Merambong Shoal, Peninsular Malaysia

**8. Nurrahmi Dewi Fajarningsih, Thamrin Wikanta)\*, Muhammad Nursid**

Indonesian Macroalgae *Turbinaria decurrens* : Potential Source of Bioactive Compounds for Nutraceutical Products

**9. Pamela Soo**

Review of giant clam behaviour

**10. Sara Nikoo**

Species composition of Penaeidae shrimps in bottom trawl landings from Mahshahr Creeks

**11. Suhartanti M Natsir**

Distribution of Benthic Foraminifera, environmental Factor and Morphology Variation in Seribu Archipelago During Summer and Winter season

**12. Media Fitri Isma Nugraha 1)and Gede S. Sumiarsa2**

ABUNDANCE OF COPEPOD SPECIES (ORDER: CALANOIDA) AT PAGEMETAN BAY, NORTH BALI

**13. Sulistiono, dkk**

KEMATANGAN GONAD KEPITING KELAPA (*Birgus latro*) DI PULAU YOI, MALUKU UTARA

**14. Zaleha, K. and Anil Chatterji**

ECOLOGICAL SURVEYS ON THE POTENTIAL HABITAT OF MANGROVE HORSESHOE CRAB, *CARCINOSCORPIUS ROTUNDICAUDA* (LATREILLE) IN THE EAST COAST OF PENINSULAR MALAYSIA

**15. Y.G Seah, A.G. Mazlan and G Usup**

Phylogenetic Relationship and Morphological delineation of Leignathid from coastal water of Malaysia

**16. Nazura zainudin et al**

Diversity Manglicolous macrofungi from selected mangrove forest in Peninsular malaysia

**17. Siti Aisyah Alias, Nazura Z et al**

Occurrence of marine fungi in Malaysia and their biological activity

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## **8. Coral Reef Management**

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**Topic of Coverege**

Topics of this special sessions cover the following but not restricted to:

1. Coral reef condition, coral population and coral distribution
2. Coral and other coral reef organism reproduction, biology and ecology
3. Coral disease, bleaching related with pollution and climate change issues
4. Coral reef management and restoration effort
5. Coral and other coral reef organism trade

**Objectives**

1. Discussing the current issues related with coral reef in the world
2. Information resources of the developing management program and the successful effort in managing coral reef in the world
3. Initiation place for collaboration program and research to answer the current issue related with coral reefs.

**Speakers**

**1. Suharsono**

Overview of the successful of coral reef management and coral reef condition in Indonesia



2. **Rili Djohani**  
Komodo National Park - towards a sustainable World Heritage Site.
3. **Des. Alwi Abubakar**  
Banda's experiences in managing coral reefs for tourism and local economy.
4. **Jim PRESCOTT**  
Against all Odds: Holothurian populations persist under extreme fishing pressure
5. **Ove Hoegh-Guldberg, Prof.**  
Coral reefs in a rapidly heating and acidifying global ocean: reasons for hope and strategies for survival.
6. **Terry Done, Dr**  
Resilience in coral reefs: assessment, diagnosis and management
7. **Jamaluddin Jompa, Prof. Dr.**  
The Fate of Indonesian Coral Reef: Challenge for Community Based and Ecosystem Approach Management
8. **Bert W. Hoeksema, Dr.**  
West-East variation in Indonesian reef coral diversity: lines of division or zone of transition?
9. **Mineo Okamoto, Prof. Dr.**  
Introduction of a new coral reef restoration technology applicable for Indonesia.
10. **Gayatri Liley**  
Working toward a sustainable marine aquarium trade in Indonesia.
11. **Eric Borneman**  
Sustainable Production Methods for Threatened and Desirable Marine Ornamentals

### Oral Presenter

1. **Carlos G. A. Ormond**  
Education and its role with co-management to empower sustainable practices in coral reef conservation
2. **Ferdinand P. Cruz1\* and Abrosius Ruwindrijarto2**  
MICRO-ENTERPRISE TRAINING AS A METHOD FOR SUSTAINABLE CHANGE IN THE MARINE ORNAMENTALS TRADE
3. **Frida Lanshammar**  
Eco-Tourism Helps Protect Coral Reefs for the Future, more than 10 Years of Private MPA Management of Chumbe Island Coral Park, Zanzibar Tanzania.
4. **Raimundo Espinoza (NOAA Fellow), Paul Sturm (CWP), Alexi Boado (CWP), Jennifer Kozlowski (NOAA).**  
Sea level to 3000 Feet : Watershed Management and Coral Reef Conservation in Southwestern Puerto Rico
5. **Heidi Schuttenberg**  
Understanding and strengthening approaches to effective coral reef governance in Southeast Asia
6. **Kazuo Nadaoka**  
Introduction of a project: "Conservation Strategy based on Regional Reef Connectivity and Environmental Load Assessment in SEA-WP Region"

7. **Joeharnani Tresnati**  
Damage of Gill and Liver of Blue spotted Ray *Dasyatis kuhlii* (Muller and Henle, 1841) caused by Pb.
8. **Laetitia Hédouin<sup>1\*</sup>, Bernardo Vargas-Angel<sup>2</sup>, Amanda Reichelt-Brushett<sup>3</sup> and Ruth D Gates<sup>1</sup>**  
Developing tools for assessing the effects of land-based contamination on coral health: a case study focusing on the southeast fringing reef of Molokai
9. **Neviaty P Zamani**  
Perspective on coral reef rehabilitation: How to select the right method which effective and efficient for reef rehabilitation
10. **Adonis S. Floren**  
DISTRIBUTION PATTERNS OF ICHTHYOPLANKTON IN THE SOUTH CHINA SEA AND PART OF THE SULU SEA
11. **Arthur R. Bos<sup>\*1,2,3</sup>, Girley S. Gumanao<sup>1</sup>, Marjho M. Saceda<sup>1</sup>**  
Population Development of the Indo-Pacific Beach Star, *Archaster typicus* (Echinodermata; Asteroidea)
12. **Eric A. Treml, Dr.**
13. Dispersal pathways: revealing patterns of connectivity and isolation throughout the Coral Triangle
14. **Stuart J. Campbell**  
Herbivory at the heart of reef resilience
15. **Clarissa Reboton, Amida Diwata Macansantos and Pablina Cadiz**  
Recruitment and Recruit Survival of Scleractinian Corals on a Shallow Ship-Grounded Site in Banilad, Dumaguete City, Philippines
16. **Diego L. Gil-Agudelo**  
Abundance, distribution and taxonomic composition of juvenile scleractinian corals at Nuestra Señora del Rosario archipelago, Colombian Caribbean.
17. **Hugh Sweatman**  
Decadal dynamics of coral cover on Australia's Great Barrier Reef
18. **Igulu MM<sup>\*,1,2</sup>, Nagelkerken I<sup>2</sup>, Mgaya YD**  
The potential role of habitat and conspecific cues during settlement by the reef fish species *Lutjanus fulvivflamma*
19. **Intan Suci Nurhati**  
Coral Records of Late 20th Century Warming and Freshening in the Central Tropical Pacific
20. **Paul H. Barber<sup>1</sup>, Ambaryanto<sup>2</sup>,**  
Identification and conservation of evolutionary processes in the Coral Triangle biodiversity hotspot.
21. **JTI Tanzil<sup>1,4 \*</sup>, BE Brown<sup>1</sup>, AW Tudhope<sup>2</sup> , RP Dunne<sup>3</sup>**  
Decline in skeletal growth of the coral *Porites lutea* from the Andaman Sea, South Thailand between 1984 and 2005
22. **Minlee Yap, Kakaskasen A. Roeroe, Mineo Okamoto**  
A new assessment method for coral reefs restoration applied in Nagura Bay, Japan.
23. **A. Kunzmann**  
PHYSIOLOGICAL PERFORMANCE OF GIANT CLAMS (*Tridacna maxima*, *T. squamosa*, *T. derasa*) IN A RECIRCULATION SYSTEM

24. **Ambariyanto**  
Effects of several pollutants on zooxanthellae isolated from three corals
25. **Arthur R. Bos\*1,2,3, Girley S. Gumanao1**  
Biological Observations on the Crown-of-thorns-eating Corallimorph *Pseudocorynactis* sp.
26. **Ma. Natalia A. Ciasico,**  
Structural Typology of Benthic Community and Sedimentation Rate at Selected Reef Sites Surrounding Manicani Island, Guiuan, Central Philippines
27. **Nikki Traylor-Knowles1,2,\*\*, Burton Shank1, Rachel Golden1, John Finnerty1,**  
Polyp Lesions: How Do Corals Recover From Small Scale Damage?
28. **Peter Alan Todd**  
Crypsis and polymorphism in the boring clam (*Tridacna crocea*): potential strategies against visual predators
29. **Silvianita Timotius**  
A review on Ornamental Coral Propagation Effort in Indonesia
30. **Dedi Soedharma\*1, Beginer Subhan1, Citra Satria1**  
Ten Years of Research and Development of Coral transplantation in the Thousand Islands
31. **Diah Permata W\* and Elis Indrayanti**  
Reproductive activities of four Acroporids Scleractinians from Sambangan Island, Karimunjawa Islands
32. **Thamasak Yeemin\*, Makamas Sutthacheep, Sittiporn Pongsakun and Se Songploy**  
Trends in Coral reef restoration in Thailand
33. **Richard Thomas B. Pavia Jr.1,2**  
Variations in Growth and Colony Formation Between Color Morphs of *Galaxea fascicularis* (Linn.): Implications for Reef Restocking and Rehabilitation Practices

#### Poster Presentation

1. **Kee-Alfian ABDUL-ADZIS (Mr.)**  
In-situ Photosynthetic Yield Measurement of *Pocillopora damicornis* in Pulau Tioman , MALAYSIA
2. **Agdalena**  
Indonesia and international Marine aquarium trade
3. **Andriwarsa, Sri Turni Hartati**  
Sites Selection For Artificial Reef At One Thousand Archipelago
4. **Edi Rudi1, Syamsul Rizal1, Sayyid Afdhal Elrahimi1, Tasrif Kartawijaya2, Yudi Herdiana 2, Fakhrizal Setiawan2, Shinta T. Pardede2, Stuart J. Campbell2, Jerker Tamelander3**  
Reef Fish Status in Northern Acehnese Reef Based on Management Type
5. **Hawis H. Madduppa12\*, Tina Dohna1, Karen von Juterzenka2, Andreas Kunzmann3, Marc Kochzius1**  
Population-level impacts of collecting ‘Nemo’ and its host for the marine aquarium trade in Spermonde Archipelago, Sulawesi, Indonesia
6. **Hendra Yusran Siry**  
DEALING WITH CHALLENGING TASKS: DECENTRALIZED COASTAL ZONE MANAGEMENT IN EASTERN INDONESIA

7. **Hery Yusamandra, S.Si**  
IMPLEMENTING OF POSTLARVA REEF FISH COLLECTION AND GROWING-UP TECHNIQUE IN SALEMO ISLAND PANGKEP DISTRICT, SOUTH SULAWESI
8. **Karlyn Langjahr**  
Creation of the Virgin Islands Network of Environmental Educators (VINE) to bridge inter-departmental agencies, NGOs and private sector in the U.S. Virgin Islands and build capacity in marine environmental education.
9. **Karlyn Langjahr**  
Establishment of the St. Croix East End Marine Park to implement NOAA's Local Action Strategies for coral reef management and conservation in the U.S. Virgin Islands.
10. **Nur Fadli 1\***, **Andreas Kunzmann2**, **Karen von Jutarzenka3**  
Use of Modified Coral Rubble as Medium for Coral Transplantation
11. **Ofri Johan, Ongko Praseno**  
Comparison of coral mortality on two different places of Piramida artificial reef in Seribu Island
12. **Putu Widyastuti AS,SP.i, MSi**  
Laporan Monitoring Hasil Tangkapan Ikan Hias 2003-2007 Kabupaten Buleleng
13. **Rita Rachmawati**  
ADAPTATION STRATEGY OF CORAL TO PREVENT MORE SEVERE DESTRUCTION UNDER ELEVATED TEMPERATURES
14. **Rita Rachmawati**  
HOW CAN CORAL ABSORB ATMOSPHERIC CARBON?
15. **W. Prayogo1**, **I. Bachtiar2,3**,  
Coral Colonization on Reef Ball™ modules at the Benete Bay, Sumbawa Island, Indonesia
16. **Yellen R. A. Lumingkewas, R. Poerbandono**  
ASSESSMENT OF CORAL CAY stability OF SEMAK DAUN REEF PLATFORM SERIBU ISLANDS, JAVA SEA, INDONESIA
17. **Yunaldi Yahya,SP.i**  
Resource assessment surveys on the reef condition and ornamental fishes 2003-2007 in Buleleng District
18. **Muhammad Syahrir, Silvianita Timotius, Mikael P. S. Widodo, Idris, Nugroho S. Wijoyo, & Safran Yusri**  
Lesson Learned from Coral Reef Ornamental Fisheries Management in Seribu Islands, Indonesia: Beyond MAC Standard
19. **Peter J. Rubec, Dr and Ferdinand P. Cruz**  
Use of Remote Sensing and Geographic Information Systems To Support Spatial Management and Conservation of Marine Resources In Tropical Countries
20. **Richard K.F. Unsworth**  
The risks of seagrass and mangrove exploitation to Indo-Pacific coral reefs'.
21. **Hendra Yusran Siry**  
THE QUEST OF BETTER COASTAL ZONE MANAGEMENT IN INDONESIA
22. **Janny D. Kusen, Youdi J.H. Gumolili**  
An evaluation of coral reefs condition in Manado Bay, North Sulawesi
23. **Girley S. Gumanao\*1, Arthur R. Bos1,2,3**  
Biological and Socio-economic Impacts of MPAs in the Davao Gulf, the Philippines

24. **Kakaskasen A. Roeroe, Minlee Yap, Mineo Okamoto.**  
Present condition and reproduction potential of corals in Bunaken Island, Indonesia
25. **Munasik**  
Pattern of coral larval settlement at Panjang Island, Central Java
26. **Tengku Kamil T.F.K, Abdul Rashid M.K. and Redzuan S.A**  
The Distribution of Hard Coral at Bidong Island, South China Sea Waters, Terengganu, Malaysia
27. **Ywee Chieh Tay1\*, Peter Alan Todd1 and Loke Ming Chou1**  
Connectivity of the coral reefs in the Singapore Strait
28. **G.J. Fontje Kaligis, Janny. D Kusen**  
Community Structure of reef-fishes Fam. Chaetodontidae on the Artificial Reef 'ReefBall' in Ratatotok waters Peninsulla, South-West Minahasa, North Sulawesi, Indonesia
29. **Gandi Y.S. Purba**  
STUDY OF SEA SURFACE TEMPERATURE AT PAPUA SEA : CORAL REEF RESILIENCE
30. **Joeharnani Tresnati**  
Biology Reproduction of Squid (*Sepioteuthis lessoniana* Lesson, 1830) in North Galesong Waters, Takalar Regency, South Sulawesi.
31. **Jarina Mohd Jani**  
THE PLACE OF ARTIFICIAL REEFS IN THE LIVES OF TERENGGANU FISHERFOLKS
32. **Fuad A. Al-Horani**  
Strategies for mitigation the coral reefs' damages caused by the sea based human constructions
33. **Otto S.R. Ongkosongo**  
PROPER DREDGING IS NOT HARMFUL TO CORAL REEFS: THE SERIBU EXPERIENCES, INDONESIA
34. **Janny D. Kusen**  
Biodiversity of Scleractinian Coral at "Reef Ball" (Artificial Reefs) at Totok Peninsula, Southern Minahasa, North Sulawesi
35. **Sri Turni Hartati\*), Didik Wahyu Hendro Tjahjo\*\*) and Isa Nageb Edrus\*)**  
Habitat Rehabilitation Through Artificial Reefs Development to Increase the Carrying Capacity of Coral Reefs Resources at Teluk Saleh, NTB
36. **Sascha B.C. Romatzki and Andreas Kunzmann**  
Gametogenesis Of Four Scleractinian Corals In The Celebes Sea

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## 9. Marine Biotechnology

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### Topic of Coverage

Marine Biotechnology, Marine Microbiology, Marine Natural Product, Marine Ecology

### Objectives

The primary objective of this session is to build a common understanding on how such climate changes affect the active metabolites produced by marine biota and the strategy used further on the marine biodiscovery.

### Speakers

1. **Prof. Dr. Johannes Imhoff**, Biomining the treasure of the ocean. Alamat : Marine Mikrobiologie IFM-GEOMAR, Germany; email : jimhoff@ifm-geomar.de, "Biomining the treasure of the ocean"
2. **Prof. Joern Piel** : Sponge- derived natural products : a whodunit story, University of Bonn, Germany. Email joern.piel@uni-bonn.de
3. **Prof. Dr. Michiko Namikoshi** : Chemical studies on the defense system of starfish, Tohoku Pharmaceutical University, Sendai 981-8558, Japan, "Chemical studies on the defense system of starfish."
4. **Anthony Wright, PhD** : Marine natural Product research : are the cost and effort worthwhile, Email : adwright@hawaii.edu,

### Oral Presenter

1. **Agustinus R. Uria<sup>1,2</sup>, Katja M. Fisch<sup>1</sup>, Cristian Gurgui<sup>1</sup>, Sonia van der Sar<sup>1</sup>, Jörn Piel<sup>1</sup>**  
Targeting Gene Sequences Encoding the Biosynthesis of Bioactive Metabolites from the Metagenomes of Marine Sponges
2. **Andi Parenrengi, Emma Suryati**  
The biotechnology research progress on seed production of seaweed *Kappaphycus alvarezii* and *Gracilaria verrucosa*.
3. **Delianis Pringgenies dan Iin Putriyani**  
ANTIBACTERIAL POTENCY FROM SIMBIOTIC BACTERIA OF *Photobacterium phosphoreum* FROM LIGHT ORGAN OF SQUID *Loligo duvaucelii*
4. **Dian Handayani**  
Investigation of antibacterial substances from West Sumatran marine sponge, *Petrosia nigran*
5. **Dr. rer. nat. Elmi N. Zainuddin, DES**  
Exploitation of culturable cyanobacteria to develop pharmaceutical compounds

6. **Ekowati Chasanah**  
Anticancer screening of Indonesian marine organisms and their associated fungi
7. **Indra Januar**  
A Preliminary Study, Fine Chemicals from Nephthea and Sarcophyton in a Local Pressure from Environmental Stressor at Seribu Islands Indonesia
8. **Inneke Rumengan**  
Growth performance of laboratory-cultured Prochloron sp isolated from the host Lissoclinum patella at Manado Bay, North Sulawesi, Indonesia
9. **Lenin Arias-Rodriguez, Jeane R. Indy\***  
CHROMOSOMES ANALYSIS IN THREE NATIVE SPECIES OF Centropomus (PISCES: CENTROPOMIDAE) FROM GULF OF MEXICO AND ITS POTENTIAL FOR ARTIFICIAL HIBRIDIZATION
10. **Maggie Kaponyos**  
Three New Compounds Diterpenes type from soft coral Sarcophyton sp from Indonesia
11. **Ocky Karna Randasa**  
Antibacterial activity of a pigment producing-bacterium associated with Halimeda sp. from land-locked marine lake Kakaban, Indonesia
12. **Thamrin Wikanta**  
Indonesian macroalgae Turbinarian decurrens : potential serach of bioactive compound for nutraceutical product
13. **Walter Balansa**  
Biomedical Prospecting (Bioprospecting) on Indonesian Marine Biodiversity–Where Are We Heading?
14. **Weizhu Chen, Ruizao Yi**  
Detection Technology for Marine Biological Toxin
15. **Wilmar Maarisit1, Takayuki Ogi 1,2 and Katsuhiko Ueda**  
Bioactive Metabolites from Okinawan Marine Organisms
16. **Yoshihiro OCHIAI, Hideo OZAWA, and Shugo WATABE**  
Strategies of aquatic animals for adaptation to ambient temperatures as estimated from the thermal stability of myofibrillar proteins
17. **Yosi Bayu Murti**  
New Manzamine A-antipode derivate from sponge Acanthostrongylophora Ingens collected on Ujungpandang Sea, Indonesia
18. **Weizheu Chen and Ruizao Yi**  
Detection Technology for Marine Biological Toxin

### Poster Presentation

1. **Ariyanti Dewi**  
Identification of Indoleamine-2,3-dioxygenase (IDO) inhibitor from the Indonesian marine sponge Aaptos cf. suberitoides
2. **Delianis Pringgenies, Ali Ridlo and Kemal TAJ**  
The Potency antibacterial of bioactive compound of Holothuria atra Extract from territorial water of Bandengan, Jepara

3. **Dewi Seswita Zilda**  
Restriction Fragment Length Polymorphism (RFLP) Analysis of PCR Amplified 16S rRNA of Thermophilic Bacteria Isolated from Marine Environment
4. **Dian Handayani**  
Preliminary studies on cytotoxic agent isolated from algae *Tydemania expeditionis*
5. **Emas Suryati**  
The Use Of Sponge *Haliclona* Sp For Fishery Culture
6. **Ifah Munifah**  
Hydrocarbon profile of some Indonesian marine microalgae and its potential for biofuel
7. **Kresno Yulianto**  
Survival rate of *Hippocampus kuda* Bleeker, 1852 on indoor and outdoor seahorse culture at Pari Island
8. **Mujizat Kawaroe**  
Biofuel from Microalgae : Research and Development of the Biomass Production
9. **Nuri Fawzya**  
Exploration of Indonesian marine chitinolytic enzyme and their application
10. **Sri Amini**  
Indonesian Micro-algae : Recent Status for Food, Feed and Bioenergy Potential

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## **10. Fish Product Processing**

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#### **Topic of Coverage**

Topics of this session cover the following but not restricted to:

- **Fish Handling**  
Methods of fish handling in both artisanal and industrial fisheries as well as assessment of fish quality and shelflife



- **Fish processing**  
Fish curing (salting, drying, smoking, marinading), canning, freezing, product development, seaweed processing
- **Packaging**  
Fish packaging, labeling, shelflife
- **Distribution and Marketing**  
Fish product distribution and marketing, consumer preferences
- **Food safety legislation**  
Science and risk based approaches to harmonization, application of risk analysis in food control.

## Objectives

This symposium is designed to motivate all fish processing plant, research institute and related organization as well as fish product traders to seek continuous improvement of fish handling and processing as well as fish product distribution and marketing.

## Speakers

1. **Dr. Jose Ramirez,**  
"Production of like-ham fish products from low valued fish species combining washing and microbial transglutaminase"

## Oral Presenter

1. **Boimin**  
Functional drink from brown algae (*Sargassum* Sp)
2. **Bagus S. B. Utomo, Ismael Marasabessy and Rizal Syarief**  
SHELF LIFE OF SMOKED TUNA IN PLASTIC PACKAGING
3. **Ellya Sinurat, Murdinah, Bagus S.B. Utomo**  
Characterization of jelly powder for jelly candy application
4. **Tri Winarni Agustini, Herda Bolly, Sudibjono**  
The effect of bearded croaker fish (*Johnius dussumieri* Richardson) marinbeef addition using different concentration toward the quality of boiled noodles
5. **Rosmawaty Peranginangin**  
ISOLATION AND CHARACTERIZATION OF GELATIN FROM FISH WASTE MATERIAL. SKIN AND BONE
6. **Th. Dwi Suryaningrum**  
EFFECT OF THE ADDITION OF MODIFIED TAPIOCA STARCH AND EGG WHITE TO KAMABOKO MADE FROM SILVER CATFISH (*Pangasius* sp)
7. **Hari Eko Irianto**  
CHEMICAL AND ORGANOLEPTICAL CHANGES IN "PINDANG CUE" (BOILED SALTED FISH) MADE OF INDIAN MACKEREL (*Rastreliger* sp) DURING STORAGE AT AMBIENT AND CHILLED TEMPERATURE
8. **Jamal Basmal**  
EFFECT CONCENTRATION OF KCl SOLUTION TO EXTRACT SOLID CARRAGEENAN FROM CARRAGEENAN JELLY

9. **Bakti B Sedayu**  
Modification of Pilot-scale Press Apparatus to Produce Particle Board from Solid Waste of Seaweed Processing
10. **Ninoek Indriati**  
Moulds associated with Indonesian traditional fisheries products
11. **Endang Sri Heruwati**  
Food Safety issues in fishery products intended for local consumption in Indonesia
12. **Achmad Poernomo**  
Assuring seafood safety in Indonesia: what research can contribute
13. **Farida Ariyani**  
The potential uses of natural products as fish preservatives
14. **Dwiyitno**  
Traceability system for fish and seafood authentication
15. **Endang Sri Heruwati**  
The potential use of pangium (*Pangium edule* Reinw) kernel as fish preservative

### Poster Presentation

1. **Murdinah**  
SUPPLEMENTATION FISH ON PRODUCT EXTRUDED SNACK FOODS
2. **Murniyati\*, Ijah Muljanah\* and Ninoek Indriati**  
The effects of salted, spiced and starch added on fish finger MADE from *Jangilus* (*Istiophorus gladius*) minced fish
3. **Ir. Murdinah, MS**  
PROCESSING OF EDIBLE COATING FROM ALGINATE, GLISEROL WITH GELLING AGENT  $\text{CaCl}_2$  AND Ca Lactat
4. **Rosmawaty Peranginangin**  
PRODUCT DEVELOPMENT FROM NON ECONOMIC MARINE FISH TO INCREASE IT'S VALUE ADDED
5. **Jovita Tri Murtini**  
Subchronic toxicity effect of formalin residue in fish on the liver of mouse
6. **Ifah Munifah**  
Isolation and characterization of hydrocarbon lipid from marine micro-algae

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## 11. Marine Entrepreneurship

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### Topic of Coverage

The topics in this session will focus on but not restricted to Entrepreneurship in fisheries and trade, marine tourism, and marine biotechnology which include:

- Opportunities and challenges, global trend, strategy options available for entrepreneurship development, current and future policies necessary to support development of entrepreneurs, and strategies necessary for strengthening industries.

### Objectives

The objectives of this session are to :

- share experience and ideas about developing entrepreneurship in the marine-based industries
- build a common understanding about what marine-based entrepreneurs around the world do best to create most profitable yet sustainable industries.
- advise policy makers about what should be done to support development of marine-based industries.

### Speakers

1. **Assoc. Prof. Franz Josef Kahlen**  
Global Issues in Marine Entrepreneurship
2. **Dr. Siegfried Bank**  
The Emergence of the Marine Biotechnology Entrepreneurship
3. **Susi Pujiastuti**  
The Challenge of Indonesia Fish Trade Entrepreneurship

### Oral Presenter

1. **Achmad Zamroni**  
Typical Challenges Facing the Indonesia Marine and Fisheries Small Scale Entrepreneurs
2. **Anissa Abubakar**  
Economic Study on Some Potential Mangrove Areas in Bay Coastal Area in Bontang, East Kalimantan
3. **Edi Susilo dan Harsuko Rini**  
Developing Economic and Coastal Community Finance, Base on Principles of Social Entrepreneurship
4. **Giyatmi**  
Institutional Analysis of Marine Fisheries Agroindustry Development

5. **H.M IBRAHIM and M.SHAHRYARI**  
The Ship Carrying Capacity of the Malacca Strait
6. **Harsuko Riniwati dan Edi Susilo**  
Create Environmental Ethical Code for arine and Coastal Resources Sustainable Management
7. **Lia Karmelia Aisya**  
Shrimp Domination High Value Versus Higher Risk Case Study of Indonesia Shrimp Export
8. **Makamas Sutthacheep**  
Scientific Information for Tourism Development at Kood Island, Gulf of Thailand
9. **Pamuji Lestari**  
Coastal Micro Banking for Empowering Coastal Community in Indonesia
10. **Tajerin**  
Transforming the Global Economic Crisis into Business Oppurtunities for Tuna Industry
11. **Tuti Wahyuni**  
Study of Bio Diesel Physical Chemistry Characteristic as an Alternative for fuel of Fisherman Motorship
12. **W. Farid Ma'ruf, Anny Kustantiny, Harnita Hadiastuty**  
The Development of Seaweed Industry "Cluster" in Indonesia for Improving People Welfare

#### **Poster Presentation**

1. **Achmad Zamroni**  
How to Build Entrepreneurship within socio-economically under developed communities: a lesson learned from the traditional fishing community in West Irian Jaya
2. **Armen Zulham**  
Indonesia Mariculture Entrepreneurship Challenge
3. **Lia Kamelia Aisya**  
Indonesia Shrimp Restriction Policy and Its Impact on Export Sustainability to Japan
4. **Lia Kamelia Aisya**  
Is Milk Fish Business Profitable for Indonesia Farmer as an Alternative
5. **Polite Dyspriani**  
Governance Issues in The Development of Fisheries Industry-a Lesson Learned From The Indonesia Shrimp Revitalization Program
6. **Sonny Koeshendrajana**  
Fish Supply Chain of The Nanggroe Aceh Darussalam Fishery
7. **Tjahjo Tri Hartono**  
An Opportunity for Marine Tourism Development in Bangka CPR Management

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## 12. Ocean Ethic

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### Topic of Coverege

- Scope and importance of ocean ethics in the context of marine degradation and global climate change (the current relevance of ocean ethics; the late modernity of perspective related to ocean ethics; boundary of ocean communities; ocean ethics and global climate change)
- Ocean ethics discourses for future of marine science and technology (ecology of ocean spatial planning; ecological-economy of marine development; marine protected area management; marine ecotourism development; economic valuation of marine goods and services; local ecological knowledge; common pool resources and ocean management; sustainable of fisheries resources utilization; mining technologies; marine environmental protection).
- Marine resource governance and ocean ethics (power distribution in ocean governance; local indigenous knowledge/ indigenous resources management system; social structure and government roles; civil society development and empowerment; marine resource governance).

### Objectives

The objectives of this session are to :

- foster elaborations on various perspectives on ocean ethics;
- communicate views regarding the existence of challenge facing the current ocean ethics;
- communicate views regarding the implication of the existence of ocean ethics on the development of marine resource utilization, technology, governance and policy.

### Speakers

1. **Prof. Jun Takeda**

The Important of coral reef Ecosystem as Viewed from Ecological Antropology

### Oral Presenter

1. **Abdul Goffar**

Indonesia's Marine Fisheries at the Cross Roads: Social Reflection and the Basic way forward

2. **Arif Satria**  
Dimensions of Fisheries Empowerment for Marine Conservation
3. **Dedi Supriadi Adhuri**  
Conflict in Decentralized Indonesian Fisheries: Anatomy, Distribution and Consequences
4. **Len R. Garces at al**  
Evaluating the Management Effectiveness of the Marine Protected Areas Network in the Calamianes Islands, Palawan Province, Philippines: Key Results and their Implications
5. **Ria Fitriana**  
Community Participation in MPA Establishment in Indonesia: Lessons for Future Initiatives
6. **Rilus A. Kinseng**  
Ethical Factors in Managing Fishery Resources
7. **Sonny Koeshendrajana**  
Ethical Issue in Inland Fishing: A Lempuing River Fisheries of South Sumatra – Indonesia Experience
8. **Umi Muawanah**  
Does Land Conflict Matter to Farm Productivity

#### **Poster Presentation**

1. **Agus Heri Purnomo**  
Saving Both The People and The Environment in the Sidoarjo Mudflow
2. **Tjahjo Tri Hartono**  
Buyat Bay Mining: The Need for Rebuilding Community Life
3. **Tjahjo Tri Hartono**  
Bajo Tribe's Experience in Sustaining Their Tominy Bay Fishery Resources

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## **13. Social Ecological System Analysis in Ocean and Coastal Governance**

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#### **Topic of Coverage**

Topics of this session cover the following but not restricted to :  
§ Vulnerability and resilience of ocean and coastal resources system

- § Adaptive ocean and coastal governance
- § Integrated coastal and ocean governance
- § Disasters management in terms of coastal and ocean system
- § Sustainable fisheries and other ocean resources uses

### **Objectives**

Ocean and coastal resource systems are complex and vulnerable systems. Therefore, any human attempt to make the best of them would certainly need complete understanding on the nature of complexity of the world's ocean and coastal resource system and the follow-on appropriate approaches or treatments. Social-Ecological System (SES) analysis is a scientific relevant tool and concept in this context. Based on SES analysis, adaptive governance aiming at sustainability of ocean and coastal resources uses can be identified more accurately. In this particular session, reports related to and recent progress on the SES-based coastal and ocean governance would be presented. In line with this, the primary objective of this session is to build a common understanding on how such scientific reports as presented in the symposium session can be brought into effective actual policy actions.

The primary objective of this session is to build a common understanding on how scientific experiences on social ecological systems and governance can be brought into effective policy actions.

### **Speakers**

1. **Bernhard Glaeser**  
Social-Ecological Systems (SES) Analysis: A LOICZ Priority Theme
2. **Marion Glaser**  
Transdisciplinary Multi-Agent Modelling for Social-Ecological-Systems Analysis: Achievements and potentials
3. **Michael Flitner**  
Social-Ecological Research and Nodal Governance

### **Oral Presenter**

1. **Agus Heri Purnomo**  
In Search of Leverage in the Social-Ecological System of the Jakarta Bay, Indonesia
2. **Bernadetta Puspita Devi, S.Pi, MEMD, MAIDS**  
Key Governance Factors of Integrated Coastal Management at the Local Level, North Sulawesi – Indonesia
3. **Brendan Corrigan**  
SES Analysis of Aru Islands
4. **Débora M. De Freitas**  
Understanding Science-Technology-Management Interfaces of Linked Public
5. **Deborah Cleland**  
SimReef and ReefGame: two tools to support integrated ocean research and management
6. **Dr. Andonowati**  
Challenges from Climate Change for Integrated Coastal Zone Management

7. **Dr. Jamalunlaili Abdullah**  
Coastal Development Management in Malaysia: Issues and Challenges
8. **Dr. Sebastian Ferse**  
Integrated Mariculture as a Livelihood Option for Coastal Communities: Investigating the Potential for Coral Reef Resource Users in Spermonde/South Sulawesi
9. **Hendra Yusran Siry**  
The Quest of Better Coastal Management Zone in Indonesia
10. **Ir. Andi Amri, PhD**  
Eco-Shrimps: An Innovation for Sustainable Livelihood and Coastal Management
11. **Irendra Rajawali**  
Participatory Agent-Based Model for Social Ecological System in Marine and Coastal Areas
12. **Lina Nordlund**  
Intertidal Invertebrate Collection on Northern Zanzibar, Tanzania
13. **Luky Adrianto**  
Building Sustainability of SES of Shallow Water Ecosystems: The Case of Sea Farming of Semak Daun, Seribu Islands, Jakarta
14. **Marthin Lukas**  
Volcanic Eruptions and the Slow Disappearance of a Lagoon in South Java
15. **Michael Pido**  
Institutional Aspects for Marine Payment for Ecosystem Services
16. **Patrick Sakiusa Fong**  
Socioeconomic and Governance Impacts of Marine Managed Areas on Local Communities in Fiji
17. **Suprajaka<sup>1</sup>, Sri Lestari Munajati<sup>2</sup> and Agung Christianto<sup>3</sup>**  
Settlement Growth and Dynamics of the Tropical Coastal Area
18. **Susanto Sambasri**  
Control Systems in our Daily Life
19. **Syamsir Andili**  
Ternate Waterfront City, A sustainable Coastal Management Concept
20. **Tenny Apriliani**  
A Lesson Learned from Xiamen-China ICM: How Is It Compatible to the Indonesia Coastal Zone Management Problems?
21. **Venda Jolanda Pical, John Haluan, M. Fedi A. Sondita dan Victor Nikijuluw**  
Performance Evaluation and Existing of Marine Sasi in Molluca Village
22. **Zahri Nasution**  
Social Ecological System of River Floodplain Fisheries in Indonesia
23. **Agus Heri Purnomo**  
Linking governance to the existing Social Ecological System: a lesson learned from the Jakarta Bay

## Poster Presentation

1. **Agus Santoso Budiharso**  
Flood Hazard Mapping is an attempt to reduce risk on Coastal Cities



2. **Débora M. De Freitas**  
Resolving tradeoffs between upstream and down stream conservation objectives in Coastal Catchments of the Coral Triangle
3. **Fatriyandi Nur Priyatna**  
Applied Economic Valuation Methods on Floodplain Resources of Indonesia: Case Study at Lempuing and Pedamaran Sub District, South Sumatera Province
4. **Hendra Yusran Siry**  
Dealing With Challenging Tasks: Decentralized Coastal Zone Management In Eastern Indonesia
5. **M. Eko Rudianto, Rido MS Batubara and Yaseri D. Arpitasi**  
Planning by Community, a Systematic Paradigm to Manage Coastal Area
6. **Sastrawidjaya**  
Typical Characteristics of Social Ecological Systems in the Indonesian Capture Fisheries
7. **Siti Hajar Suryawati**  
Community Resilience Analysis In the Segara Anakan Lagoon, Central Java, Indonesia
8. **Tjahjo Tri Hartono**  
Management Institutional Arrangement of Tomini Bay Coastal Resources
9. **Yessy Dewitasari**  
Management Options for Lemuru Fishery of Bali Strait: A Bioeconomic Approach

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## 14.Ocean Science:

### Understanding Land-Sea-Air Interaction for Climate Change Adaptation and Mitigation

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#### Topic of Coverage

El Nino, La Nina, Climate Change effects on Oceanic Systems, Implications of Global Change for Coastal Ecosystems and Sustainable Development, Biogeochemical in Coastal and Shelf, Ocean Carbon and Biogeochemistry, Marine Ecology, Physical Oceanography, Vulnerability of Coastal Systems and Hazards to Society, Coupled Ocean Atmosphere Model

#### Objectives

From the report of the Intergovernmental Panel on Climate Change on the impacts of climate change shows that climate change is affecting people in various ways: ecosystems, water resources and coastal zones across the world. One of the strategies is increasing research and technological development that supports the program on climate change mitigation and adaptation. This session aims to strengthen understanding of climate change and our capacities to manage and adapt to it. The objectives include:

1. Enhancing the understanding of the climate change and its impacts
2. Improving the prediction of future evolution of the climate-earth system
3. Improving the accuracy of climate information through the modeling techniques and their application to the ocean's life.

#### Speakers

1. **Dr. Michael Spranger**

#### Oral Presenter

1. **Mochamad Saleh Nugrahadi, Friedhelm Schroeder**  
The influence of Brantas River discharge on hydrodynamics and mixing in the Madura Strait coastal water
2. **B. Realino, Bambang Sukresno, Herlina Sri Martanti**  
Sea Surface Temperature Changes in Indonesian Seas Correlation with ENSO and ITF Phenomenon
3. **Elaine A. Villaluz**  
Monthly changes in biomass of green tide-causing algae in two sites at Macajalar Bay, northern Mindanao, Philippines
4. **Khafid**  
Toward to a better Indonesian Bathymetric Model
5. **Iwan G. Tejakusuma**  
Sediment and Suspended Particulate Matter of Jakarta Bay, Indonesia

6. **Edison Macusi**  
Top-down control and spatial variation in a tropical rocky intertidal shore
7. **Denny Wijaya**  
Correlation Between Sea Surface Temperature and Tropical Cyclone in Indonesia Region
8. **Dr. rer. nat. Poerbandono**  
Turbidity Dynamics on Lagoon of Semak Daun Reef Platform Seribu Islands, Java Sea, Indonesia
9. **Thomas F. Pattiasina**  
Assessment of the Impact of Sea Level Rise in the City of Sorong, West Papua, Indonesia
10. **Teja Arief Wibawa**  
Understanding the Abundance of Pelagic Fish in Bali Strait during Southeast Monsoon
11. **Komang Iwan Suniada, Nyoman Dati Pertami**  
Seasonal Distribution of Total Suspended Matter in Sumbawa Sea
12. **Dwiyoga Nugroho , Wahyu W. Pandoe**  
The Application of Hydrodynamics and Transport Model To The Perancak Estuary, Jembrana District, Bali - Indonesia
13. **Elvan Ampou, Frida Sidik, Candhika Yusuf, Nyoman Dati, Nuryani Widagty Affandi Asri**  
Marine Ecological Assessment in Bali and East Lombok Coast
14. **Lamona I. Bernawis, Hadikusumah**  
Microstructure to vertical heat flux of double diffusive convection in Makassar Strait
15. **Radjawane, Ivonne M, Safwan Hadi and Meita Riana**  
Seasonal Variability Of Physical-Chemical Ecosystem Parameters In Maluku Sea And Its Adjacent Waters
16. **Angmalisang, P.Astony, Budiman, Johny, Pangalila Fransisco, Masa Iwata, Shinya Yamauchi**  
Temperature and Salinity Profile in Manado Bay
17. **Chen Zhi-hua, SHI Xue fa, MENG Xian-wei**  
Sm-Nd Isotopes in Clay Fraction of Surface sediments from The Western Arctic Ocean : Implications for Sediment Sources and Marine Circulation
18. **Ruixiang Li, Xinming Pu, Zongli Wang, Mingyuan Zhu**  
Planktonic Community succession in the past five decades in the Yellow Sea : to What Extent is climate Change Responsible

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## 15. Ocean Observing System

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### Topic of Coverage

In this session we invited the speaker to describe about

1. In situ and Space-Based Measurements of Ocean Climate Change
2. Operational Oceanography :Assimilation, Modeling, and Applications in the Global Ocean and in Coastal/Estuarine Ecosystems and Living Marine Resources
3. Operational Oceanography: Observing System Design & Implementation
4. Operational Applications of Ocean Satellite Observations
5. Ocean Circulation Using Satellite Gravimetry and Altimetry
6. Observatories, Operational Oceanography, New Technology
7. Education and Outreach Using Ocean Observing Systems.
8. Oceanic Measurements : Research progress and Technology
9. Sea level Measurement

### Objectives

The ocean observing system has been declared by many institutions such as GOOS initiative by IOC (Intergovernmental Oceanographic Commission) for global scope. This System has been used by the ocean and climate research communities to improve our understanding about ocean and its processes. Ocean observing system helps communities to provide accurate descriptions of the present condition, forecast for the future conditions of the ocean dynamic and furthermore analysis of the impact of the ocean dynamic for community.

The Application of this system is not only for the basis for forecasts of climate change, but also can be used for many fields such as coastal area management, disaster mitigation and fisheries and ecosystems. The latest technology is needed to provide continues and real time data such as satellite and in-situ measurement devices

1. Review of sustained of ocean observing system in regional and global scale
2. Operational oceanography activity and products
3. Design for Indonesia operational oceanography
4. Introducing technology and application related to ocean observing system

### Speakers

1. **Cho-Teng Liu et al**  
Determination of Water Depth with Formosat-2 Multispectral Image
2. **Sidney Thurston**  
NOAA's Global Ocean Observation Program
3. **Philipe Gaspar**  
Forecasting the evolution of Tropical Tuna populations under an IPC Scenario
4. **Marc Naije**  
The Radar Altimeter Database System project RADS

5. **Ir.H. Eko Maulana Ali, M.sc**  
BOOST CENTRE IN WATERS UTILIZATION AT AREA BANGKA BELITUNG PROVINCE
6. **Safwan Hadi(1), Nining Sari Ningsih(1), Marthina Dian Utami(1)**  
Simulation of Storm Surges Caused by Cyclone Jacob in Southern Part of West and Central Java Coastal Waters

### Oral Presenter

1. **Jingsong YANG, He WANG, Rong ZHANG, Xiaoyan CHEN, Weigen HUANG**  
Error analysis of Envisat ASAR level 2 algorithm and primary correction
2. **Liqi Che, Zhongyong Gao, Yuanhui Zhang, Xulin Yang, Suqing Xu, Wen Yu,**  
Variations of Air-Sea Fluxes of CO<sub>2</sub> for Climate Change Adaptation in the Southern Ocean and the Western Arctic Ocean
3. **Erwandi**  
An Experimental Study on Vertical Axis Marine Current Turbine in Indonesian Hydrodynamic Laboratory
4. **Warsito (1), Sri Ratna Y (2) and Yatman (2)**  
Design of Sea Level Measurement Instrument and the Acquisition System Using Personal Computer
5. **Amiruddin<sup>1</sup> Mukti Zainuddin<sup>2</sup>, Samsu Arif<sup>1</sup>, A.Galsan Mahie<sup>3</sup>**  
Numerical Modelling of Wind-Driven Ocean Circulation in Spermonde Archipelago, South Sulawesi Province
6. **Bayu Priyono<sup>1</sup>, Nining Sari Ningsih<sup>2</sup>, Asmi Napitu<sup>1</sup>,**  
Geostrophic current derived from altimetry data in Indonesian Seas
7. **Dr. Agus Hartoko, MSc.**  
Ocean Observation on SST Variability and Sub-Surface Spatial Analysis off The North Papua (West End Pacific), the Fate of El Nino 1997 & 2007 and La Nina 2002 :  
Field Measurement, TRITON Buoy and MODIS Satellite Data
8. **Dominik Kneer, MSc**  
The Potential of Kite Aerial Photography (KAP) as a near-earth imaging technology for mapping and monitoring shallow water ecosystems
9. **Ridho Hantoro(1), I Ketut Aria Pria Utama(2), Erwandi(3)**  
Flow Visualization and Shape Mode in the Study of Vortex-Induced Vibration (VIV) and Torsional Vibration (TV) on Vertical-Axis Ocean Current Turbine (VAOCT)
10. **Suhendar I Sachoemar<sup>1</sup>, Nani Hendiarti<sup>1</sup>, M. Sadly<sup>1</sup> and Tetsuo Yanagi<sup>2</sup>**  
SEASONAL VARIABILITY OF SEA SURFACE CHLOROPHYLL-a AND SMALL PELAGIC FISH IN THE LAMPUNG BAY, SOUTHERN COASTAL AREA OF SUMATERA, INDONESIA
11. **JIA Yongjun, ZHANG Jie, YANG Jungang, MENG Junmin**  
Spatio-temporal Character Analysis of the Kuroshio Frontal Instability in The East China sea

12. **Ligi Chen, Zhongyong Gao, Yuanhui Zhang, Xulin Yang, Sugging xu,**  
Variations of Air-Sea Fluxes of CO<sub>2</sub> for Climate Change Adaption in The Southern Ocean and Western Aarctic Ocean
13. **Linyang Zhan [1] and Liqi cen [2]**  
Distribution of N<sub>2</sub>O and its Air-Sea Fluxes in Seawater along Cruise Tracks between 30oS - 67oS and in Prydz bay, Antarctica
14. **Song Zhenya, Qiao Fangli**  
The Establishment of The Atmosphere-wave-Ocean Circulation Coupled Models. The Improvement of CGMs,s Simulations by The wave induced vertical mixing.
15. **Xiangnyao Chen, Norden E. Huang, Zhaohua wu**  
On The Global Sea level Ring Rate
16. **Zexun Wei, Guohong fang, Yonggang Wang, and R. dwi susanto**  
Numerica Asimilation of The Tides in Indonesian Seas

### **Poster Presentation**

1. **Asmi marintan Napitu<sup>1</sup>, Kandaga Pujiana<sup>2</sup>,**  
An Introduction to using satellite altimeter for the observation of coastal dynamic in Indonesia seas
2. **Bambang Semedi**  
FORCASTING OF FISHING GROUND OF SHORT MACKEREL (RASTRELLIGER SPP) USING INTEGRATED MODIS SATELLITE IMAGES AND GIS, IN THE MAKASSAR STRAIT, INDONESIA
3. **Hsien-Wen Chen et al**  
Volume Transport in the Taiwan Strait
4. **Maryani Hartuti**  
Identification and Application of Potential Fishing Zone Information in Manado and Its Surrounding Waters
5. **Muhamad Sadly et al**  
The Development and Implementation of Rule Based Expert Systems Based on Remote Sensing Data Fishing Ground Prediction : A Management Tool for Marine Resources
6. **Nani Hendiarti et al**  
Remote sensing investigation of coastal processes and their influences to marine environment changes in Java Sea
7. **Rinny Rahmania**  
: Field Measurement, TRITON Buoy and MODIS Satellite Data

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## 16. Indonesian Throughflow and Global Ocean Circulation and Climate

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### Topic of Coverage

What controls the origin of the Indonesian throughflow (ITF)? The effect of the Indonesian throughflow on global ocean circulation and heat exchange with the atmosphere. The important of Indonesian throughflow to the regional and larger scale climate. The processes within the Indonesian seas alter the the profile (temperature, salinity, mass) of inter-ocean stream, coupled to the local sea-air fluxes and mixing environment. Observational strategies. Indonesian throughflow in a general ocean circulation model.

### Objectives

The primary objective of this symposium are: to understand the important of Indonesian throughflow to the regional and larger scale climate; to understand the processes within the Indonesian seas alter the the profile (temperature, salinity, mass) of inter-ocean stream, coupled to the local sea-air fluxes and mixing environment; to plan a long term observational strategies; to use as a benchmark for global ocean and climate numerical model.

### Speakers

1. **Janet Sprintall**  
Transport Variability in the Exit Passages of the Indonesian Throughflow
2. **Susan Wijffels**  
Intraseasonal Variability in The Indonesian Throughflow Export Straits: Comparison on Instant Observations and The Australian Community Ocean Model (AUSCOM) and Bluelink Ocean Forecasting System
3. **Arnold L Gordon**  
From the tropical Pacific to the Indian Ocean : defining the Indonesian Throughflow
4. **Dwi Susanto**  
Dynamics of Sunda Strait
5. **Hendrik M. van Aken**  
The deep-water motion through the Lifamatola Passage and its contribution to the Indonesian throughflow

## Oral Presentar

1. **Charina Lyn Amedo-Repollo<sup>1</sup>, Xavier Flores Vidal<sup>2</sup>, Cesar L. Villanoy<sup>3</sup> , Cedric Chavanne<sup>4</sup> and Pierre Flament<sup>1</sup>**  
HF RADAR observations of coastal currents and upwelling forced by wind stress curl in the lee of the Island of Panay during the northeast monsoon
2. **Bernhard Mayer**  
Long-term numerical simulation of the ITF (1970 – 2006)
3. **Kyla Drushka**  
Indian Ocean Kelvin waves in the Indonesian Throughflow Exit Passages
4. **Robin Robertson**  
Tidal Effects On Circulation on Mixing in The Ombai Strait Region
5. **Aditya. R. Kartadikaria**  
Development of a New Indo-Pacific Ocean Circulation Model and Its Application to Reveal Larval Dispersal Patterns in SEA-WP regions
6. **Edvin Aldrian**  
Sea Air interaction study over the major Indonesian throughflow passage
7. **Iskhaq Iskandar**  
Variability of marine biology near the outflow straits of Indonesia as simulated in a coupled physical-biological model
8. **Syamsul Rizal**  
Modelling of General Circulation in the Andaman Sea
9. **Guohong Fang**  
Significant volume, heat and freshwater transports from South China Sea to Java Sea observed in the boreal winter 2007-2008
10. **A. Atmadipoera<sup>1,5</sup>, R. Molcard<sup>1</sup>, G. Madec<sup>1</sup>, J. Sprintall<sup>2</sup>, S. Wijffels<sup>3</sup>, A. Supangat<sup>4</sup>**  
Inflow between Ashmore and north coast of Australian and its impact on Timor Passage Throughflow

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## 17. Maritime Industry:

**Ocean and Coastal Engineering, Ocean Energy, Maritime Surveillance, Shipbuilding Industry**

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## Topic of Coverege

What is the challenge to develop the ocean business entity and how such a large country still very much depends on land sector industry yet own massive marine area like Indonesia can gain



benefit as much as profit from maritime sector. How could the ocean energy potential be harvested with good financial balance sheet.

### **Objectives**

As one of the largest archipelagic country in the world, Indonesian role on marine technology development is not quite significant yet its potential on renewable energy resources from the ocean (wave, tidal, sea wind, sea current, ocean thermal energy conversion) which awaits to be harvested could contribute up to several hundreds giga watts electric energy equivalent. Other maritime sector, to be précised the ocean technology business such as shipbuilding, marine infra structures, ocean cable networking are also far behind another maritime countries. So to speak, from its 7.9 million square kilometers marine area, the contribution to GNP is less than 5 percent.

The primary objective of this symposium is to be one of the most respected meeting place for the maritime related industry and ocean technology community in year 2009

### **Speakers**

1. **Mr. Asrin Rafli Haznam**  
The future of Offshore oil industry in Indonesia, a SWOT analysis
2. **Mr. Douglas W. Swain**  
The future of oil service industry in Indonesia, a SWOT analysis
3. **Mr. Arthur Tanudjaja**  
Potential and Prospect of Salt Industry in Indonesia

### **Oral Presenter**

1. **IKAP Utama cs**  
Development of efficient, safer, and enviroment friendly passenger vessel etc.
2. **Bagiyo Suwasono**  
A Strategic of Labour Productivity to Support Shipyard Competitiveness in Partial Least Square (PLS) Path Analysis: PLS Algorithm and Bootstrapping
3. **Handy Chandra**  
The Fisheries floating port, it's implication on traditional fishing vessel industry
4. **Daniel M. Rosyid**  
RETHINKING DEVELOPMENT PARADIGM FOR THE ARCHIPELAGO  
INDONESIA : A Preliminary Study
5. **Nazery khalid and Margaret Ang**  
Treasures from the deep : Frontier marine resources

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## 18. Marine Energy, Mineral and Hazard

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### Topic of Coverage

Advance the understanding of the Nation's energy and mineral resources in a global geologic, economic, and environmental context, coastal and marine earthquake sources, coastal and marine ground failure and earthquake effects, and tsunami occurrence and effects.

### Objectives

The objectives of this symposium are to develop the science base for policy and management relating to a broad array of issues, to describe and understand the geophysics and geologic processes that occur along the Indonesia include hazards related to earthquakes, landslides, and tsunamis.

### Oral Presenter

1. **Yudi Darlan and Udaya Kamiludin**  
BIOGENIC GAS FOR UNDERPRIVILEGED COASTAL COMMUNITY: THE KAPUAS DELTA WEST KALIMANTAN
2. **Noor C.D ARYANTO and Y. NOVIADI**  
Contribution of coastal geology information to the coastal characteristic on Nunukan region, East Kalimantan as a border area
3. **Totok Suprijo (1) (\*), Huda Bachtiar (1), and, Achmad Masduki (2)**  
Marine Current Energy in the Alas Strait - Indonesia
4. **Dr. A. Harsono Soepardjo, M. Eng**  
Indonesia Potency Renewable Marine Energy
5. **Muhammad Alham Djabbar**  
EXPERIMENT OF LARGE BODY IN STRONG-WAVE
6. **Muhammad Alham Djabbar**  
STRONG-WAVE RESISTANT HYDRODYNAMIC COASTAL BUILDING EXPERIMENT
7. **Parabelem ROMPAS**  
A NUMERICAL MODEL FOR STUDY MARINE CURRENTS IN THE BANGKA STRAIT, NORTH SULAWESI, INDONESIA
8. **Ali Arman**  
Sediment accumulation rates in coastal area of Muria Peninsula (Site Plan of Nuclear Power Plant, Indonesia) elucidated from environmental isotope  $^{210}\text{Pb}$

9. **Helfinalis**  
TOTAL SUSPENDED SOLID AND BOTTOM SEDIMENT AROUND MOROTAI HALMAHERA WATERS
10. **Yunia Witasari**  
Paleoclimate interpretation based on clay mineral contents in the surface sediment of Cirebon waters
11. **Safri Burhanuddin1, Florent Hinschberger2, Jacques-André Malod3 and Jean-Pierre Réhault3**  
Contribution of seafloor morphology to the geodynamics of the Banda Sea, Eastern Indonesia
12. **Triyono**  
Tsunami Risk Assessment in Parangtritis Area, South of Yogyakarta : A Coastal Geography Approach
13. **Men Xianwei, Liu yangguang, Zhang Jun, Xia Peng**  
Terrestrial Supply to the South China Sea and Its Response to Climate Change and Phased uplifts of Tibetan Plateau since The Quaternary : Evidence of Strontium isotope

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## 19. Sustainable Marine Tourism

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### Topic of Coverage

The symposium will explore kinds of MARINE TOURISM DIVERSITIES such as marine wild life tourism; diving/snorkeling; cruise industry; marine adventure and sports tourism; marine festivals, events and heritage; etc including the shared best practices and green technologies applied in marine tourism. At the same time, there are discussions about the CONSTRAINT AND THREATS OF MARINE TOURISM DEVELOPMENT and also some REGULATIONS AND POLICIES to harmonize the business with nature.

### Objectives

The objectives of this session are to :

1. create an environment for discussions and exchanging views on sharing and learning from best practices marine tourism applied promote a sustainable tourism sector that boost the economy and create jobs while at the same time, ensure the protection of the environment and the quality of life of the permanent residents and tourists.
2. explore emerging issues and encourage conservation as a best management practice through discussions
3. collaboratively explore and develop ways of working together towards marine areas as sustainable destination through promoting, respecting, and protecting the region's shared natural resources.

### Speakers

1. **Dr. Geoffrey Wall**  
Integration in the Coastal Zone
2. **Feishol Hasyim**
3. **Mr. Robin Engel**  
Recommendations for a Sustainable Marine Tourism Industry
4. **Prof. James Higham**
5. **Prof. Marc L. Miller**
6. **Sapta Nirwandar**

### Oral Presenter

1. **Arief Rosyidie, PhD**  
SUSTAINABLE TOURISM DEVELOPMENT OF SERIBU ISLANDS
2. **Bet E.S.Lagarene**  
Challenges For Sustainable Marine Tourism Development; Human Aspects And Cots Threat In Bunaken And Adjacent Waters
3. **Dionisius Bawole and Yolanda. M.T.N. Apituley**  
Strategy of Tourism Development in Manupitaeng Island, Sangihe Regency

4. **Mr. Dita Trisnawan, M. Arch. STD., ST.**  
COASTAL AND MARINE TOURISM: Between Developments and The Nation's Territory and Integrity
5. **Professor Dr. Pedro Fernández**  
Impacts of Tourism on central coast of vietnam. Hoi An City

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## **20. Marine Conservation**

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### **Topic of Coverage**

The symposium will explore several important components of marine conservation such as marine species diversity, habitat condition and degradation, marine protected area, etc, including the shared best practices of marine conservation. At the same time, there are discussions about the constraint and threat of marine conservation, as well as the regulation and policies.

### **Objectives**

The objectives of this session are to :

- To create an environment for discussions and exchanging experiences in the field of marine conservation.
- To explore the emerging issues in marine conservation
- To collaborate, explore, and develop a cooperation between the participants in the future

### **Speakers**

1. **Arnr Redsted Rasmussen, Ph.D**  
Conservation Of Sea Snakes: How A Deadly Poisonous Predator Needs Help To Survive
2. **Dr Ib Svane**  
The Trawled Habitats of Spencer Gulf, South Australia: Trawl Impacts and Management
3. **Dr. Kathe R. Jensen, PhD**  
Conservation and the "Taxonomic Impediment" in Southeast Asia

**4. Prof. Bob Pressey**

Three Essential Improvements to Conservation Planning for Effective Management of Marine Biodiversity in The Coral Triangle

**Oral Presenter**

**1. Frederick T. Short**

Seagrass as a Global Indicator: SeagrassNet Monitoring Yields Information on Trends in Coastal Health Worldwide

**2. Toru Shimoda (1), Kouki Fukuoka (1) and Yoshiko Iizumi (2)**

Load reduction functions of mangroves and *Ulva* sp. in coastal areas of Ishigaki Island, Japan

**3. Winata, Catharine K.; R. Samanya; R. Febriana; H.R. Wahyuni; M. Rofiq**

Dynamics of Hawksbill Turtle Conservation in Bintan, Indonesia

**4. Hans de Iongh, Hutomo Malikusworo, Wawan Kiswara and Marloes Moraal**

Conservation Strategy and Action plan for the dugong (*Dugong dugon*) in Indonesia; Implications of climate change

**5. Abdul Halim, Hesti Widodo, Tri Soekirman, and Rili Djohani**

Stakeholder Perceptions on Marine Protected Area as a Tool for Resource Management: Findings from Surveys conducted by The Nature Conservancy in Five MPA sites in Indonesia

**6. Hedley S. Grantham, Edward T. Game, Amanda T. Lombard, Alistair J. Hobday, Anthony J. Richardson, Lynnath E. Beckley, Robert L. Pressey, Jenny A. Huggett, Janet Coetzee, Carl D. van der Lingen, Samantha L. Peterson, Dagmar Merkle, Jane E. Alpine and Hugh P. Possingham**

Conservation planning in spatially and temporally dynamic marine environments: designing a network of pelagic protected areas

**7. Hilconida P. Calumpong, Amida Diwata L. Macansantos, Janet Estacion, Ma. Rio A. Naguit, Jacinta Lucañas, Adonis Floren and Edna Sabater**

Connectivity Among Marine Reserves in Central Philippines as Reflected by Genetic Profiles of Broadcast and Demersal Spawners and Current Studies

**8. Yang-Chi Chang, Chun-Te Chen, Hsing-Juh Lin**

Marine protected area planning – the case of Gaomei wetland

**9. Craig J. Starger , Rebecca S. Hersch , Ma. Carmen Ablan-Lagman , Mark V.**

**Erdmann, Ambariyanto, Abdul Hamid Toha, Kent E. Carpenter, Paul H. Barber**  
Genetic Connectivity Of Coral Populations Between Two Biodiversity Hotspots: Indonesia And The Philippines

**10. Alan White(1), Stuart Green(1), Anna Meneses(1), Stacey Kilarski(1), Patrick Christie(2), Barbara Best(3), Giselle Samonte-Tan(4), Kate Newman(5), Caleb McClennen(6), Helen Fox(5), Stuart Campbell(5), Leah Bruce(4)**

Marine Protected Area Networks in the Coral Triangle: Development and Lessons from the Marine Learning Partnership

**11. Suzanne Livingstone**

Identifying important conservation zones for supporting KBA and MPA designation using species level information in the Coral Triangle

12. **Paul H. Barber**  
Inferring patterns of connectivity and defining conservation priorities in the Coral triangle through the integration of genetics and modelling
13. **Kent E. Carpenter**  
Using IUCN red list assessments as indicators in the Coral Triangle Initiatives
14. **Carissa Klein, Natalie Ban, Ben Halpern, Kerrie Wilson, Stuart Kininmonth, Eddie Game, Hedley Grantham, Eric Treml, Maria Berger, Alison Green and Hugh P. Possingham**  
Prioritizing Land- and Sea-based conservation investments to protect coral reefs in the Coral Triangle
15. **Giselle Samonte – Tan**  
MPA Management Effectiveness: Socioeconomic and Governance Aspects
16. **Safran Yusri , Muhammad Syahrir Irfan Yulianto & Yudi Herdiana**  
Providing access to marine protected areas data and marine related research in Indonesia, through [www.konservasi-laut.net](http://www.konservasi-laut.net)
17. **Estradivaria, Jan Vermaat & Leontine E. Becking**  
Trouble or Paradise? A scenario analysis of Berau's coastal zone
18. **Maria Beger, Matthew Watts, Romola Stewart, Eddie Game, Carissa Klein, Hugh Possingham**  
Planning for sustainable development and conservation of marine resources with MARXAN: Zoning, connectivity, risk, and resilience
19. **Maria Rio A. Naguit and Hilconida P. Calumpong**  
Mitochondrial DNA Analysis of the Geographic structure of the Giant Clam, *Tridacna crocea* As Indicator of Connectivity Among MPAs in Central Philippines
20. **Mikel A. Becerro**  
Functional Diversity in Marine Protected Areas
21. **Saleem Mustafa**  
Conservation Priorities for offsetting climate change effects on Tropical Marine Ecosystem of Borneo
22. **Mochamad Indrawan [1] and Suseno[2]**  
MORE SPACE: ESTABLISHMENT AND GOVERNANCE FOR PROTECTED AREAS, ESPECIALLY SEASCAPES IN EASTERN INDONESIA
23. **Kimirei, IA, Nagelkerken, I, Mgaya, YD**  
Does spatio-temporal variation affect ontogenetic habitat use by mangrove/seagrass-associated coral reef fishes?
24. **P. Lestari[1], E.L. Widiastuti[2], A. Djausal[3]**  
Evaluation on the Margasari Mangrove Conservation - East Lampung Indonesia for Mitigation through Its Potential Coastal Economic Development
25. **Rizya L. Ardiwijaya, Tasrif Kartawijaya, Fakhri Setiawan, Rian Prasetya, Yudi Herdiana, Sinta L. Pardede and Stuart J. Campbell**  
Coral Triangle's Last Frontier - An Ecological And Socioeconomic Evaluation Of Proposed Marine Protected Areas In Halmahera, Indonesia
26. **Diego Gil – Agudelo**  
Piangua fisheries: communities finding their solutions to environmental problems in Colombia

## **27. Frida Lanshammar**

Eco-Tourism Helps Protect Coral Reefs for the Future

### **Poster Presentation**

1. **Anders Knudby**  
Predation on sea urchins and the effect of a small protected area
2. **Rolando B. Cerezo, Shella C. Parreno**  
Assessment of seaweed production in Pangasinan
3. **Rolando B. Cerezo, Ceferino F. Toledo, Shella C. Parreno**  
Assessment of siganid production in selected coastal towns in Pangasinan
4. **Oliver R.T. Paderanga, Janet S. Estacionb, Ron Kirby Manit, Bernardo L. Jasma, Jr.**  
Coral Community Structure Of The Northeastern And Southwestern Sides Of Camiguin Island, Northern Mindanao
5. **Lies Indah Sutiknowati**  
Abundance of Phosphorus Bacteria in the Banten Bay Seagrass Bed
6. **K.D. Simon, A.G. Mazlan, A. Samat<sup>2</sup>and Z.C. Cob**  
On the Biology of Archer fishes (*Toxotes chatareus*, HAMILTON 1822 and *Toxotes jaculatrix*, PALLAS 1767) inhabiting malaysian estuaries
7. **Grantham, H.S., Agostini, V., Wilson, J. and Possingham, H.P.**  
Toward ecosystem-based management: multi-objective conservation planning for biodiversity conservation and sustainable fisheries in Raja Ampat, Papua.
8. **Nurul Huda Binti Ahmad Iskak**  
Taxonomy and ultrastructure of a phytal harpacticoid copepod *Amphiascopsis coralicola* (Sewell, 1940) (Harpacticoida:Thalestridae) from Bidong Island, Malaysia.
9. **Leslie Callanta, Ma. Louella Dolar and Janet Estacion<sup>1</sup>**  
RESIDENCE PATTERNS AND RANGE CHARACTERISTICS OF *Tursiops aduncus* in the Southern Tañon Strait, Central Visayas, Philippines
10. **Jacinta R. Lucañas , Hilconida P. Calumpong and Ma.Rio A. Naguit**  
Recovery of Damaged Seagrass Community in Banilad, Marine Sanctuary, Banilad Dumaguete City, Oriental Negros, Philippines
11. **Azman bin Abdul Rahim**  
Use of Image Analysis Software as a tool for selecting and calculating seagrass blades in underwater photograph
12. **E.L. Widiastuti**  
Mangrove Conservation for coastal mitigation model: Case Study of Margasari Village of East Lampung - Indonesia
13. **Igulu MM, Nagelkerken I, Mgaya YD<sup>3</sup>**  
The potential role of habitat and conspecific cues during settlement by the reef fish species *Lutjanus fulviflamma*
14. **Wawan Kiswara**  
Seagrasses in Indonesian waters
15. **V. Dj. Prasita<sup>[1]</sup> , B. Widigdo<sup>[2]</sup>, S. Hardjowigeno<sup>[3]</sup>, S. Budiharsono<sup>[4]</sup>**  
Analisis of The Enviromental Carrying Capacity of The Brackish Water Fishponds In The North Coast of Gresik Regency East Java <sup>[1]</sup>



16. **DR. Thomas J. Vanagt**  
ECOLOGICALLY SOUND WAYS OF COASTAL DEFENCE? SOME EXAMPLES FROM THE DUTCH COAST.
17. **Irfan Yulianto, Yudi Herdiana and Stuart J. Campbell**  
DESIGNING A MARINE PROTECTED AREA NETWORK IN LEMBEH STRAITS, INDONESIA
18. **Syafiudin Yusuf, Magdalena Litaay, Jamaluddin Jompa & Dewi Yanuarita**  
Isis hippuris in Bone Bay South Sulawesi: bio-ecological study, status and conservation challenges
19. **Janet S. Estacion[1], Hilconida P. Calumpong[1], Ma. Louella L. Dolar[2], Pablina Cadiz[1] and Edna R. Sabater[1]**  
Assessment of Dugongs and Their Habitats in Davao del Sur, philippines
20. **Angelique Batuna, Mark V. Erdmann, Rezal Kusumaatmadja**  
Bunaken Management Advisory Board: A Challenge for Collaboratively Manage MPA
21. **Farnis Boneka, Fontje G.J. Kaligis, and Staynner Laleleh**  
Feeding Catagories of Coral Fishes Exploitated by Local Fishermen in Bunaken National Park, North Sulawesi, Indonesia
22. **Arthur . Bos**  
Biological and Socio-economic impacts of MPAs in the Davao Gulf, the Philippines
23. **Eric Crandall**  
Coalescent and Biophysical models of Long Distance Dispersal Dynamics in Neritid Snails

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## 21. Small Island Development

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### Topic of Coverege

Small island development (e.g. resources, policy, culture, histories, industry, ethnicity, socio-economic aspects, management, hazard) and climate change will be presented and discussed.

### Objectives

The objectives of this session are to :

1. Review and discussion on comprehensive understanding of island communities and their environment, as well as political and economic functions of island nations in international communities.
2. Establish the sustainable development of small island, to make policy and strategy facing the climate change.

### **Speakers**

1. **Drs. Winsulangi Salindeho**  
MANAGING THE BORDER ZONES AND SMALL ISLANDS OF SANGIHE  
TOWARDS CONSERVATION REGENCY
2. **Elly Engelbert Lasut**  
Outer Island Economic Development: Talaud's Experience in People Empowerment

### **Oral Presenter**

1. **Sensus Wijonarko**  
WATER BALANCE CALCULATION AND INSTRUMENT ON THE REEF FLAT OF  
PRAMUKA ISLE, INDONESIA, AFTER CUT AND FILL ACTIVITIES
2. **Mone Iye C. Marschiavelli**  
VULNERABILITY ASSESSMENT CONCEPT FOR SMALL ISLAND: An Adaptive  
Strategies to Climate Change
3. **Gatot Pramono and Rahadiati, A.**  
Island Directory – An Effort to Manage Indonesian Small Islands
4. **Affrudin, E.L. Widiastuti, and T. Dasaluti**  
Potential and Integrated Management of Small Islands in Pesawaran District of Lampung  
Province
5. **Alexander Soselisa**  
Management of Small Islands In Indonesia (Case study in Padaido Islands, Regency of  
Biak Numfor, Papua Province)
6. **Kosasih Prijatna**  
A preliminary approach to estimate small islands vulnerability index to sea-level rise:  
Indonesian archipelago case
7. **Sven Blankenhorn**  
DEVELOPMENT OF SMALL TO MEDIUM SIZED ENTERPRISES ON SMALL  
ISLANDS: BEHAVIOURAL CHANGE THROUGH SUSTAINABLE  
MARICULTURE
8. **Abimanyu Takdir Alamsyah**  
The right of islands countries to survive
9. **Verania Andria**  
Improving Local Economy in Small Islands through Implementation of Energy  
Generating Technology
10. **Wahyu S Hantoro**  
Sea level variation: threats and responses to the small island and coastal plain area of  
Indonesian archipelago.

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## **22. Marine Spatial Planning and Cadastre**

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### **Topic of Coverage**

The topic tentatively covers the following subjects: (a) policy and regulation, (b) coastal and marine dynamics, (c) boundary delimitation and demarcation, (d) coastal and marine mapping, (e) coastal and marine data infrastructure, (f) coastal and marine hazards and (g) marine cadastre

### **Objectives**

There are complex relationships and interactions between overlapping and often completing rights, restrictions and responsibilities, both in the marine environment and at the land-sea interface. In recent years there has been an increasing awareness of the importance of spatial data relating to the marine environment and the need for a structured and consistent approach to the definition, maintenance and management of offshore legal boundaries. It is within this context that the concepts of a marine spatial data infrastructure (Marine SDI) and a national marine cadastre have gained increasing prominence.

Science, technology, policy and implementation aspects related to the regulation, management and protection of the coastal and marine environment that addresses the multiple, cumulative and potentially conflicting uses of the coastal and marine area is the main concerns of this session. Results and lessons from the cases of marine spatial planning and marine cadastre all over the world are invited.

The primary objectives of this symposium are review and discussion on the latest scientific advancement and policy of marine spatial planning and cadastre.

### **Speakers**

1. **Prof. Dr. Roberto Mayerle**  
Modelling of Coastal Dynamics
2. **Prof. John R.V. Prescott**  
THE DELIMITATION OF INTERNATIONAL MARITIME BOUNDARIES  
BETWEEN STATES

### **Oral Presenter**

1. **Gatot Pramono, Suwahyuono, Poniman, A., Suriadi, A.B. and Dartoyo, A.**  
Development of an Integrated National Marine Spatial Database in Indonesia
2. **Chomariyah**  
The Road to Marine Cadastre : Evolurion of the Concept to Implementation in National Level (Legal Perspective)
3. **Otto S.R. Ongkosongo**  
Lessons Learned From The Indonesia Coast : An Anticipative Thinking In Worse Case Scenario As Response To Sea Level Rise And Erosion
4. **Dina Sunyowati**  
The Legal Framework Of Coastal Management Concerning The Implementation Of Integrated Coastal Management Concept Relating To Sustainable Marine Development
5. **Johar Setiyadi**  
Criterion Of Sea Boundary Delimitation For Support Integrated Sea Resources Management
6. **Viv Djanat Prasita**  
Analysis of the environmental carryng capacity of the brackish water fishponds in the Nort Coast of Gresik regency EastJava
7. **BA HAMZAH**  
Regional Cooperation in managing an enclosed water : The case of the Straits of Malacca and Singapore. The private sector has a moral obligation to contribute to the Aids to Navigation Fund.
8. **Engki A. Kisnarti**  
Nearshore Current Study Using A Quasi 3D Model
9. **I Made Andi Arsana**  
Towards the establishment of a system for the Indonesian Maritime Boundary Delimitation and Maintenance: A Preliminary Proposal
10. **Dr. Peter J. Rubec and Ferdinand P. Cruz**  
Use of Remote Sensing and Geographic Information Systems To Support Spatial Management and Conservation of Marine Resources In Tropical Countries
11. **Kresno Buntoro**  
Geographical position of Indonesia : advantage or disadvantage
12. **Lowell B Bautista**  
The Legal Status of the Philippine Treaty Limits and Territorial Water Claim in International Law: National and International Legal Perspectives
13. **Rizki Abdul haris, Andri Hernandi dan Eka Djunarsah**  
Customary Marine Cadastre in Maluku, Indonesia : Towards Empowermwnt of Local Wisdom for Spatial Management in Archipelagic State
14. **Dr. Sobar Sutisna**  
THE TECHNICAL ISSUES OF THE MARITIME BOUNDARY DELIMITATION BETWEEN INDONESIA AND PHILIPPINE
15. **FADM Sugeng Supriyanto, Cpt Samiyono, Cdr Trismadi**  
Coverage and Availability of Indonesian Electronic Navigational Chart
16. **Calado, H(\*). Alves, F(\*\*). Gamito, T(\*\*\*) . Sousa, L(\*\*)**  
Downscaling Marine Spatial Planning debate – from Europe to Small Islands
17. **Randolph Willy Hutauruk, Ridwan Sala, Roni Bawole**  
COASTAL REGION ZONING USING SPATIAL MODEL BASED ON CELL

## APPROACH: A CASE OF SPATIAL ARRANGEMENT PLAN FOR KAIMANA COASTAL ZONE

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## 23. HRD and Capacity Building

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### Topic of Coverage

This session will cover various issues related to human resources development required in supporting ocean and marine resources management such as coral reef, fisheries and aquaculture as well. The dialogue will include aspects of HRD as seen from technical, social, legal and environmental point of view.

### Objectives

The objectives of this session are to :

1. review of the “capacity gap” faced by each country relative to the task at hand - in this case, ocean as well as marine resources management.
2. review of existing international, regional and other initiatives to improve human resources related to ocean as well as marine resources management.
3. identify new and emerging issues regarding marine environment and resources management that are of relevance to HRD
4. sharing experiences among countries in their HRD program

### Speakers

1. **Dr. Indra Jaya**  
Supply and Demand for Fisheries Skilled Labors in Indonesia
2. **Prof. Dr. Johannes Hutabarat**  
Fisheries Training and Education in Indonesia: Current State and Future Perspective

3. **Wolfgang Busse**  
Competitiveness of Indonesian Seafarers – The Value of Public-Private Partnership

### **Oral Presenter**

1. **Prof Dr Lucky Sondakh**  
Compromise and the Increase of Power: A Political Economic Approach in Designing An Effective Post Mining Program in A Coastal Ecosystem

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## **24. Marine Pollution**

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### **Topic of Coverege**

Pollution impacts due to land-based substances, impacts of submarine tailings disposal (STD), wastewater management, pollution control technology, monitoring standart and protocol, mitigation and management measure of pollution impacts.

### **Objectives**

The primary objective of this session is to review and discussion on new research finding and lastest scientific advancement on pollution control, synthesis of mitigation measure and management to protect the marine environment, and report the status of global coastal marine areas.

### **Speakers**

1. **Dr Björn Dahlbäck**  
The challenge to find new sustainable solutions for antifouling on ships
2. **Judith Weis**  
The State of the World & Oceans
3. **Nobuyuki Miyazaki**  
What is the best way to resolve marine pollution issues?

4. **Yoshiaki Yasuda, PhD**  
Mercury Deposit Distribution in Minamata Bay

#### **Oral Presenter**

1. **Dr. Fanny HOULBREQUE.**  
109Cd: A great tool to study the problem of cadmium contamination in the Chilean blue mussel *Mytilus chilensis*
2. **Dr. Rohani AMBO RAPPE**  
Population and Community Level Indicator in Assessment of Heavy Metal Contamination in Seagrass Ecosystem
3. **Dr. Daniel LIMBONG**  
Total mercury in muscle of fishes from contaminated coastal waters of North Sulawesi, Indonesia
4. **Dr. Inneke RUMENGAN**  
Zooplankton as bioindicator for organotin contamination in aquatic environment
5. **Dr. Zainal ARIFIN**  
Geochemistry of heavy metals (Pb, Cr and Cu) in sediment and their potential bioavailability in Berau estuarine, East Kalimantan, Indonesia
6. **Dr. Seno ADI**  
The impact of river input to the coastal ecosystem of Jakarta Bay
7. **Mr. Craig CARTER**  
STOP (Stern Tube Oil Pollution)
8. **Dr. Thomas POHLMANN**  
Simulation of organic pollutants in the North Sea: First step towards an adaptation to the Malacca Strait
9. **Dr. Peter KELDERMAN**  
Sources of Pollutants and Source Protection Measures in Tondano River Basin Territory, North Sulawesi, Indonesia
10. **Dr. Agus SUDARYANTO**  
Assessment of persistent toxic substances in Jakarta Bay, Indonesia with special reference to brominated flame retardants and polychlorinated biphenyls
11. **Dr. Tomohiko ISOBE**  
Contamination Status and Accumulation Profiles of Brominated Flame Retardants in Eastern and Western Boundary Current Ecosystems of the North Pacific Ocean
12. **Mr. Muhammad ILYAS**  
Contamination by Brominated Flame Retardants in Surface Sediments from Coastal Waters of Surabaya: Levels, Distribution and Profiles
13. **Prof. Wolfgang BALZER**  
Pollutant metal run-off from a tropical river system (Siak river, East Sumatra), their estuarine modification and coastal zone distribution
14. **Dr. Mohamad Pauzi ZAKARIA**  
Historical profiles of polycyclic aromatic hydrocarbons (PAHs), sources and origins in dated sediment cores from Port Klang, Straits of Malacca, Malaysia

15. **Dr. Takaomi ARAI**  
Coastal pollution and bioaccumulation of persistent organochlorine compounds in the Asian waters
16. **Dr. Hiroya HARINO**  
Antifouling biocides contamination in marine environment from Japan
17. **Dr. K. INOUE**  
Environmental monitoring using medaka fishes in the genus *Oryzias*
18. **Dr. Ahmad ISMAIL**  
Java Medaka (*Oryzias Javanicus*) Culture as Test Organism in the Laboratory
19. **Dr. M. KINOSHITA**  
An attempt to evaluate estrogenic compounds contamination in Southeast Asia with transgenic medaka
20. **Mr. Dung LE QUANG**  
Heavy metals in a tropical eel *Anguilla marmorata* from the central part of Vietnam
21. **Prof. Che Abd Rahim MOHAMED**  
Enrichment model of natural and artificial radionuclides in the southern South China Sea
22. **Dr. Gullaya WATTAYAKORN**  
Ambient concentrations of polychlorinated biphenyls (PCBs) and organochlorine pesticides in selected Thai estuarine sediments and mussels
23. **Dr. Marina M. BASOVA**  
FISH ERYTHROCYTES CATECHOLAMINES AS THE INDICATOR OF POLLUTION
24. **Dr. Kei NOMIYAMA**  
Accumulation characteristics of hydroxylated polychlorinated biphenyl (OH-PCB) congeners in the blood of marine mammals and human
25. **Prof. Maricar S. PRUDENTE**  
Monitoring Network on Marine Pollution: Issues and Plans
26. **Dr. Pedro HERVÉ-FERNÁNDEZ**  
<sup>109</sup>Cd: A great tool to study the problem of cadmium contamination in the Chilean blue mussel *Mytilus chilensis*
27. **Prof. B. G. KULKARNI**  
Present Status of Coastal Pollution in and Around Mumbai (WEST COAST OF INDIA)
28. **Prof. Nicholas KATHIJOTES**  
Evaluation and Control, of Marine Pollution due to Land-Based Activities - A Preview of the Cyprus Case
29. **Mr. John Dempsey**  
Human health assessment focussing on metal intakes through consumption of fish and other seafood

### **Poster Presentation**

1. **Dr. Khusnul YAQIN**  
Potential Use Of Cholinesterase Activity From Tropical Green Mussel *Perna Viridis* As Biomarkers In Effect-Based Marine Monitoring In Indonesia



2. **Dr. Markus T. LASUT**  
Community's Environmental Knowledge and Attitude for Mitigating Impact of Wastewater Pollution in the Tropical Coastal City of Manado, Indonesia
3. **Dr. Yonik Meilawati YUSTIANI**  
Study on Pollution Load from the Fish Market Wastewater of Lempasing Market, Bandar Lampung, Indonesia
4. **Dr. Grace D. KANDOU**  
Point Source of Pollution: Condition and Capacity of Household Wastewater Treatment Systems in the Coastal City of Manado, Indonesia
5. **Mr. Imam BACHTIAR**  
When Submarine Tailings Disposal Becomes A (Good) Choice: Lessons Learned From Batuhijau Mine, Sumbawa Island, Indonesia
6. **Mr. Lilik Teguh PAMBUDI**  
Comparison Of Biofiltration Performance By Three Different Species Of Seaweeds In A Recirculating System
7. **Mr. James PULUS**  
THE STUDY NON POINT SOURCE OF DETERGENT AND PHOSPATE IN MANADO BAY
8. **Dr. Henneke PANGKEY**  
LC50-48 hours of several detergents to Daphnia Sp.
9. **Ms. Kristine A. GALARRITA**  
SHORT-TERM EFFECTS OF THE M/T SOLAR I OIL SPILL ON THE INTERTIDAL INFAUNAL COMPOSITION AND DENSITY
10. **Ms. Pablina L. CADIZ**  
EFFECTS OF BUNKER FUEL AND DISPERSANTS ON MANGROVE SEEDLINGS *Avicennia marina* (FORSSKAL) VIERHAPPER
11. **Capt. Rakish Suppiah**  
OIL SPILLS-RESPONDING TO THE RISK PORTRAYED IN THE STRAITS OF MALACCA
12. **Dr. Alfredo Tomas Ortega OJEDA**  
Urban EcoSan Utilities a model to help reduce marine pollution in rural and semi-urban communities: The case of AproSanidad Melaque

### **Contact**

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## **25. Wetland and Estuary: Marginal Ecosystem Conserved For Human Being**

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### **Topic of Coverage**

This session covers some components of ecosystem and aquatic management related to estuary and wet-land (e.g. biological, chemistry and physical characteristic, dynamics of aquatic organism, terrestrial living organisms, social economic and policy development). The significance of fisheries and aquaculture in the ecosystem, including harvesting techniques and methods will also be discussed.

### **Objectives**

The objectives of this session are:

1. Review existing international, regional and other initiatives to conserve wetland and estuary areas as habitat of many aquatic organism.
2. Understand biodiversity and dynamic of aquatic organisms of wetland and estuary.
3. Review status of wetland and estuary as a potential area for fisheries, aquaculture, and other economic activities
4. Share present state of resource utilization and management mechanisms.

### **Speakers**

1. **Husnah**  
Water Quality Degradation Of Wetland: Learning from Musi River
2. **Wolfgang Balzer**  
Trace metal run-off from five major wetland rivers of East-Sumatra to the coastal zone: association with humics
3. **Dede Irving Hartoto**  
The Model of Co-Management of Conservation Area in The Indonesia Estuaries :  
Lessons Learned from Muara Layang, Bangka Belitung
4. **Mas Tri Djoko Sunarno, dan Muchlis Kamal**  
Wetland environments as temporary habitat for various fish assemblages: an adaptation strategy
5. **Ngurah N. Wiadnyana**  
Present Status of green turtle nesting habitat in west java, Indonesia
6. **Sri Turni Hartati, M.Si**  
Habitat rehabilitation using artificial reef for increasing carrying capacities of Saleh Bay, West Nusa Tenggara
7. **Ali Suman and A. Indra Jaya Asaad**  
Estuary management in Indonesia: A Perspective for Inland Fisheries Management
8. **Amran Ronny Syam**  
ESTIMATING OF MUD CRABS POPULATION (*Scylla spp*) ON THE MANGROVE

WATERS OF MAYANGAN VILLAGE, REGENCY OF SUBANG, WEST JAVA  
PROVINCE

**Oral Presenter**

1. **Martin Lukas**  
Volcanic Eruptions and the Slow Disappearance of A Lagoon In South Java
2. **Tim Rixen**  
Dissolved oxygen and its influence on ecosystem functioning in the Siak river, central Sumatra, Indonesia
3. **Antje Baum**  
Dissolved nutrients and carbon exports from East Sumatran peat-draining rivers
4. **Aziz Arshad, M. Nurul Amin, Siti Shapor Siraj and Japar Sidik Bujang**  
Faunal Composition and Temporal Variation of Estuarine Push Net Catches Operating in the Shallow Coastal Waters of Malacca, Peninsular Malaysia
5. **Toru Shimoda, Kouki Fukuoka<sup>1</sup> and Yoshiko Iizumi**  
Load reduction functions by mangrove and *Ulva* sp in coastal area, Ishigaki Island, Japan
6. **Otto S.R. Ongkosongo**  
The Uniquity of the Indonesian Deltas with the Emphasis on the Diversity of the Java Deltas
7. **Herbert Siegel, Iris Stottmeister, Monika Gerth, Thomas Ohde<sup>1</sup>, Christin Jose, and Joco Samiaji**  
Characterisation of Coastal Discharge in South-East Sumatera and the Transport in the Adjacent Open Seas
8. **Kimirei, IA, Nagelkerken, I, Mgyaya, YD**  
Does Spatio-Temporal Variation Affect Ontogenetic Habitat Used By Mangrove/ Seagrass -Associated Coral Reef Fishes?
9. **Muhammad Lukman and Wolfgang Balzer**  
Understanding the fate of organic contaminants in marine and coastal areas for a better and sustainable coastal management: A case study of Polycyclic Aromatic Hydrocarbons in the Siak River, its Estuary and Riau coastal waters
10. **Abdunnur and Yoshihara Kiyoshi-Dept. of Aquatic Resources Management, Faculty of Fisheries and Marine Science, UNMUL – Samarinda**  
Research on the Mangrove Ecosystem: To the Aquatic Production and Thropic Position on Northern side of Mahakam Delta - East Kalimantan Using by Carbon Isotop Ratio Analysis
11. **ZHU Genhai [1], XU Hanxiang [2], CHEN Quanzhen [1], XUE Lijan [2], Jin haiwei [2], LIU Zhensheng [1]**  
Study on Indicator Species of Zooplankton in the changjiang Estuary and Zhoushan fishing Grounds and Adjacent Sea Area of the East China Sea

**Poster Presentation**

1. **Martin Lukas**  
Volcanic Eruptions and the Slow Disappearance of A Lagoon In South Java

2. **Tim Rixen**  
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10. **Abdunnur and Yoshihara Kiyoshi-Dept. of Aquatic Resources Management, Faculty of Fisheries and Marine Science, UNMUL – Samarinda**  
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11. **ZHU Genhai [1], XU Hanxiang [2], CHEN Quanzhen [1], XUE Lijan [2], Jin haiwei [2], LIU Zhensheng [1]**  
Study on Indicator Species of Zooplankton in the changjiang Estuary and Zhoushan fishing Grounds and Adjacent Sea Area of the East China Sea

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## 26. Marine Health and Biomedical

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### Topic of Coverage

This session covers the range of topics related to marine health, undersea and hyperbaric medicine. It is designed for the divers, instructors, hyperbaric technicians, or underwater researchers and especially the doctors, physiologists, physicists, chemists, mathematicians, engineers, or biologists.

### Objectives

The objectives of this international session are:

1. To gain better understanding about the impacts of ocean related activities such as diving, on human health.
2. To set standards/guidelines for either recreational, professional or scientific diving and undersea research procedure based on human health perspective
3. To gain awareness regarding the global climate change, particularly sea level rise and ocean warming and their impacts on human health
4. To produce recommendation regarding medical preparedness due to the impacts of global climate change such as ocean warming.

### Speakers

1. **Dr. Vennetia. R. Danes, MSc, PhD**  
HE EFFECTS OF LONG TERM DIVING TO VESTIBULAR, HEARING AND PULMONARY FUNCTIONS OF TRADITIONAL, DIVERS OF BAJO TRIBE IN NORTH MINAHASA AND SOUTH MINAHASA REGENCIES OF NORTH SULAWESI PROVINCE-INDONESIA
2. **Laksamana Dr. M. Guritno, PhD**  
The Hyperbaric Medicine Particularly Diving Medicine Such As Safety Regulation, And infrastructure Supporting Diving Medicine
3. **John Wantania, M.D., SpOG**  
Marine Health On Pregnancy
4. **Drs. Jan-Jaap Brandt Corstius**  
Let's make the oceans a safer place; minimum medical education standards for physicians in recreational diving.
5. **Dr Peter Germonpré, MD**  
The medical risks of underwater diving and their control

### Oral Presenter

1. **Prof. Dr. Med. Thierry Sluysmans**  
Patent Foramen Ovale, Divers and Decompression Rule

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**27.The Origin Species Theory:****Wallace and Darwin**

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**Topic of Coverage**

This session will tentatively covers several subjects : (a) species concepts, (b) evolutionary biology and genetics, (c) adaptation and natural selection, (d) evolution and biodiversity, (e) any others relevant issues.

**Objectives**

The objectives of this session is to

- Exchange recent knowledge regarding the species theory and the covered topics.
- To explore the emerging issues in biodiversity aspects
- To explore, collaborate and develop a cooperation among participants in the future

**Speakers****1. Leontine E. Becking<sup>1</sup>**

The sponge fauna of Indonesian marine lakes and mangroves

**2. S. M. Nurul Amin**

Population Biology of *Acetes indicus* (Decapoda: Sergestidae) from the Coastal Waters of Malacca, Peninsular Malaysia

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## 28. ASIAN Network for using algae as a CO2 SINK

### Seaweed Industry in the context of Climate Change

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#### Topic of Coverage

Various solutions to the problem of against global warming have been proposed. Seaweeds fix a prodigious quantity of CO<sub>2</sub>. We verify their mechanism as a CO<sub>2</sub> sink and develop seaweed CDM methodologies. Currently, the Asian Pacific Phycological Association launched a Working Group, the Asian Network for Using Algae as a CO<sub>2</sub> sink, for the purpose of collaborative R&D on the use of algae to remove CO<sub>2</sub>.

#### Objectives

As seaweeds have been recognized for their utility as CO<sub>2</sub> sinks, sustainable seaweed aquaculture has become an important prerequisite, and therefore, sustainable seaweed integrated multi-thropic aquaculture could be a practical way to develop a CCRB in coastal waters.

#### Speakers

1. **Ang Put O, Jr.**  
Diurnal and Seasonal Fluctuation in the Photosynthesis of Some Brown Algae from Hong Kong SAR, China
2. **Dang Diem Hong**  
Effect of irradiation on the protein profile, protein content and quality of agar from *Gracilaria tenuistipitata* Zhang et Xia (Rhodophyta)
3. **Danilo B. Largo**  
Philippine cultivated seaweeds: How much carbon can they consume?
4. **Hack-Churl You**  
Bio-Ethanol from Red Algae (Rhodophyta)
5. **Ik Kyo Chung**  
The potentialities of the seaweed industry in the era of climate change
6. **Siew-Moi Phang**  
CONTRIBUTION OF SEAWEED MASS CULTURE TO CARBON REDUCTION IN TROPICAL WATERS: THE MALAYSIAN SCENARIO
7. **Sung Min Boo**  
DIVERSITY AND PHYLOGENY OF THE MARINE PULP-PRODUCING ALGA GELIDIALES ( RHODOPHYTA)

#### Contact

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## 29. Indo-Pacific Ocean Climate Variability

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### Topic of Coverage

Climate variations on the earth are strongly influenced by climate modes appeared in the Indo-Pacific sector. The El Nino/Southern Oscillation (ENSO) phenomenon has been considered as a major player driving the weather and climate variations in this region. Identification of the Indian Ocean Dipole (IOD) mode has spawned a fresh challenge on the understanding and predictability of the climate variations. The ocean variability plays significant roles in these climate modes and their predictability. This session covers topics associated with any ocean variability in the Indo-Pacific basins related to the climate modes and variability. We welcome all studies based on observations, analyses of available data, and numerical model results. Papers are also invited for related studies on the tropical–extra tropical interactions and other process studies.

### Objectives

The main objective of this session is to describe the Indo-Pacific ocean variability in detail and understand mechanisms responsible for the variability, mutual interactions among the climate modes, their influences on local, regional, and global ocean climate systems. This session will help in exchanging new research outcomes and accumulating our knowledge on Indo-Pacific ocean climate variability.

### Speakers

1. **Dr. Martin Miguez**, *Belen Sea level Observation system*
2. **Dr. Mike McPhaden**
3. **Dr. Patrick Lehodey**
4. **Prof. Toshio Yamagata**

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## 30. Indonesia-Germany SPICE Programme

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### Topic of Coverage

The initiative *SPICE* (Science for the Protection of Indonesian Coastal Marine Ecosystems) was developed within the framework of an agreement on scientific and technological cooperation between Indonesia and Germany and addresses the scientific, social and economic issues related to the management of the Indonesian coastal ecosystems and their resources. The programmes are focused on the following research topics:

1. Coral Reef-Based Ecosystems and Resources
2. Strategies for a Sustainable Use of the Living Resources and Mariculture in the Segara Anakan Lagoon
3. Coastal Ecosystem Health
4. Marine Natural Products
5. Marine Geology and Biogeochemistry
6. Governance and Management of Coastal Social-ecological System

### Objectives

The symposium is aimed to disseminate the progress of SPICE programme on the focused research topics in addressing the strategic issues related to the Indonesian coastal ecosystems.

### Opening Speech

1. Dr. Teguh Rahardjo (The Ministry of Research and Technology – Indonesia)
2. Dr. Gelwynn Jusuf (Agency for Marine and Fisheries Research-Indonesia)
3. Mr. Reinhold Ollig (Federal Ministry of Education and Research - Germany)

### Speakers

1. Prof. V. Ittekkot (Germany)
2. Dr. Maggy Nuges (Germany)
3. Dr. Rachman Syah (Indonesia)
4. Dr. Jamaludin Jompa (Indonesia)
5. Dr. Tim. Jennerjahn (Germany)
6. Dr. Agus Kristijono (Indonesia)
7. Dr. Edy Yuwono (Indonesia)
8. Prof. Roberto Mayerle (Germany)
9. Dr. Endhay Kusnendar (Indonesia)
10. Dr. Ketut Sugama (Indonesia)
11. Prof. Hans-Peter Saluz (Germany)
12. Prof. W. Balzer (Germany)
13. Dr. Ali Suman (Indonesia)
14. Dr. Joko Samiaji (Indonesia)

15. Dr. Tim Rixen (Germany)
16. Dr. Seno Aji (Indonesia)
17. Dr. Marion Glaser (Germany)
18. Dr. Agus Heri Purnomo (Indonesia)
19. Dr. Luky Adrianto (Indonesia)

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## 31. Ocean Technology Assessment for Global Warming, Geohazard and Natural Resources Inventory

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### Topic of Coverege

Information about Indonesia Technology Assesment to reduce Greenhouse Gas Emission, natural resources potential in the Celebes Sea, Natural Disaster such as Earthquake, tsunami and landslide in the Celebes Sea and Sourrounding, Tsunami early Warning System (TEWS), Techniques and developed System to provide faster information of Earthquake and Tsunami, Studies on Climate Variation on Indo-Pasific Ocean and their relation with the El Nino/Southern Oscillation( Enso) Phenomenon.

### Objectives

The primary Objective of this Sesion is to exchange the recent knowledge of Ocean technology Assesment for global warming, natural resources potential in Celebes Sea, Prediction and Providing faster information of Earthquake, Tsunami, Climate Variability studies based on observation, analyses of available data, numerical model results

### Speakers

1. DR Kardono (BPPT)
2. DR. Aryo Hanggono (BRKP)
3. DR.Ridwan Djamalluddin (BPPT)
4. DR. Yusuf S. Djayadihardja(BPPT)
5. Kenyi Satake( University of Tohoku)
6. DR. Nani Hendiarti (BPPT)
7. DR.Fadli Syamsuddin (BPPT)
8. DR.Wahyu Pandoe(BPPT)
9. DR. Danny Hilman(LIPI)
10. Ir. Widiatmini Sih Winarti,MSi.(BPPT)
11. DR.Asep Suhendra (BPPT)
12. DR .Ir. Sadli. (BPPT)
13. DR. Andang Bachtiar(BPPT)
14. Toshio Yamagata ( University of Tokyo)

### Oral Presentation

1. **Ir Widiatmini Sih Winarti, Msi** *INDONESIA'S TECHNOLOGY NEEDS ASSESSEMNT (TNA) BACKGROUND, OBJECTIVE AND PROCESS*
2. **Dr. Ir. Asep Suhendra** "The Development and Implementation of Rule Based Expert System Based on Remote Sensing Data for Fishing Ground Prediction: A Management Tool for Marine Resources"
3. **Dr. Ir. Nani Hendiarti, Msc** *Remote sensing investigation of different coastal and ocean phenomena in Indonesian Seas*
4. **Dr. Ir Aryo Hanggono** "INDONESIA'S TECHNOLOGY NEEDS ASSESSMENT OCEAN SECTOR "
5. **Dr. Ir Danny Hilman Msc** *Geo Hazard in Relation with tectonic active*
6. **Dr. Ir Andang Bactiar** *Overview Of Hidrocarbon Exploration in Frontier areas (Tentative)*
7. **Dr. Ir. Yusuf Surahman** *Tectonic of Celebes Sea in Relation for natural resources*

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