



# Certification of Participation

This is to certify that

**MOHAMMAD MUSTAFIZUR RAHMAN**

has participated in

*2<sup>nd</sup> IIUM Congress on Science iCOS 2016*

**2<sup>nd</sup> INTERNATIONAL CONFERENCE ON OCEANOGRAPHY AND SUSTAINABLE MARINE PRODUCTION (ICOSMAP 2016)**

**DATE:**

**23<sup>rd</sup> - 24<sup>th</sup> AUGUST 2016**

**VENUE:**

**KULLIYAH OF SCIENCE, IIUM KUANTAN, MALAYSIA**

**PROF. DR. KAMARUZZAMAN YUNUS**

Dean,

Kulliyah of Science,

International Islamic University Malaysia

**ASSOC. PROF. DR. SHAHBUDIN SAAD**

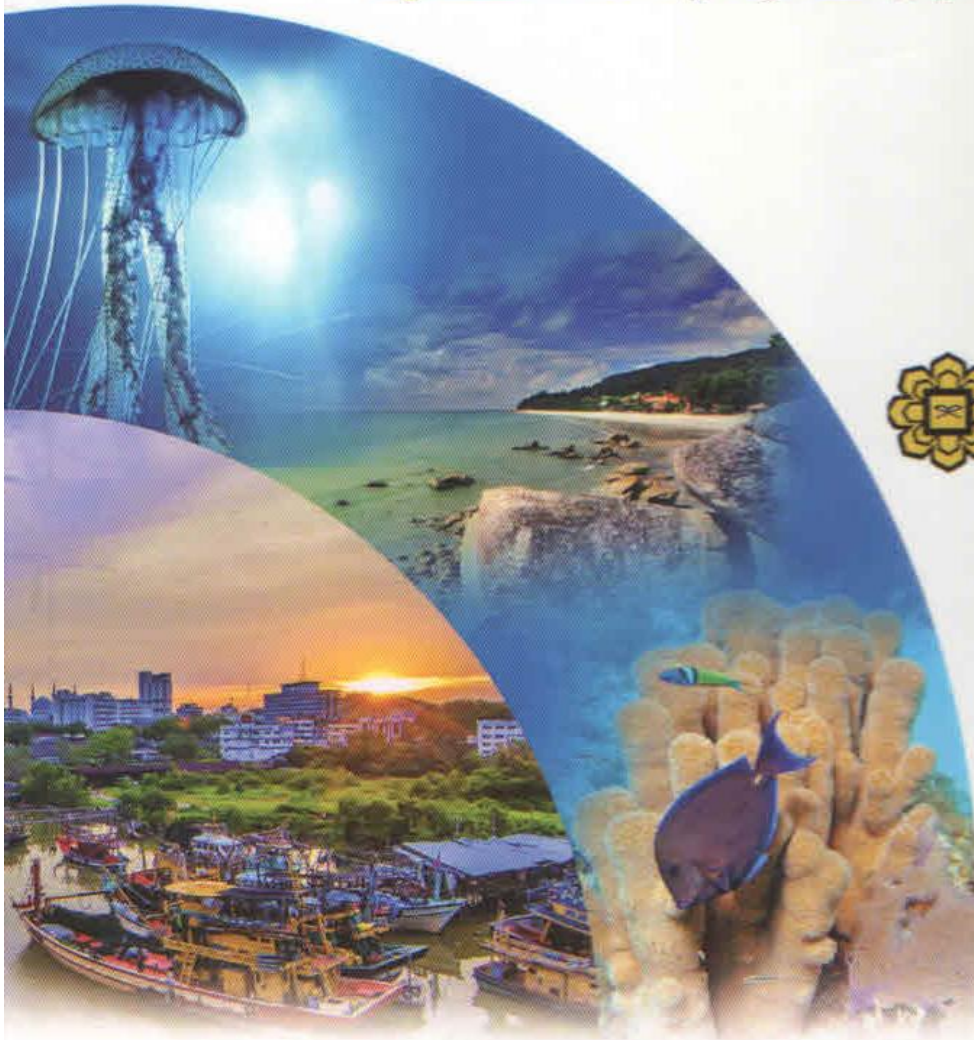
Chairman,

2<sup>nd</sup> International Conference on Oceanography  
and Sustainable Marine Production (ICOSMAP 2016)

**2<sup>nd</sup> International Conference on  
Oceanography and Sustainable Marine  
Production (ICOSMaP 2016)**

**International Islamic University Malaysia. Kuantan,  
Pahang**

**JOINTLY ORGANIZED BY  
Department of Marine Science, Kulliyah of Science,  
International Islamic University Malaysia (IIUM),  
Malaysia  
&  
Kagoshima University, Kagoshima, Japan**



الجامعة الإسلامية العالمية  
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA  
وَمِنْ مَنَعَتِهِ الْوَعْدُ وَالْمَعِينُ

鹿児島大学  
Kagoshima University

**Venue: Main Auditorium  
Day 1: 23/08/2016 (Tuesday)**

<b>Theme: Oceanography, Coastal Processes and Geomorphology (OPG)</b>				
<b>Chairperson: Assoc. Prof. Dr. Shahbudin Saad</b>				
<b>Time</b>	<b>Presenter</b>	<b>Presentations Titles</b>	<b>Abs. ID</b>	<b>Page No.</b>
10:30 am - 11:10 am	<b>Plenary Session 1 (Prof. Dr. Ryuichiro Nishi, Japan. Theme: Oceanography, Coastal Processes and Geomorphology)</b>			
11:20 am - 11:40 am	Wei-Koon Lee	Advection and Dispersion of Water Quality Constituents in Batu Ferringhi Penang	OPGO01	14
11:40 am—12:00 pm	Muhammad Shaheed Shammodin	3-Dimensional Flood Inundation Model Of Pekan Sub-District, Pahang using Geographic Information System (GIS)	OPGO02	15
12:00 pm -12:20 pm	Dickson Lukose	Ontology Model for Oceanography Data, Information and Knowledge Management	OPGO03	16
12:20 pm—12:40 pm	Juliana Mohamed	Sustainable Coastal Development In Malacca: Experiences on Reclamation Projects	OPGO04	17
12:40 pm - 02:00 pm	<b>LUNCH BREAK</b>			
<b>Theme: Oceanography, Coastal Processes and Geomorphology (OPG)</b>				
<b>Chairperson: Asst. Prof. Dr. Zuhairi Bin Abmad</b>				
02:00 pm -02:20 pm	Shahbudin Saad	Current Status of Euphylliidae Corals in Marine Protected Areas of Tioman, Redang and Payar Islands, Malaysia	OPGO05	18
02:20 pm -02:40 pm	Muhammad Faiz Mohd Hanapiah	Estimating Dispersal of Coral Larvae for Ecosystem Management in Tioman Island	OPGO06	19
02:40 pm -03:00 pm	Areezo Fereidoonian Dashti	Removing Colour and Chemical Oxygen Demand, From Palm Oil Mill Effluent (POME) using Horizontal Roughing Filter	OPGO07	20
03:00 pm - 03:20 pm	<b>REFRESHMENT AND POSTER VIEWING SESSION</b>			
<b>Theme: Biotechnology and Marine Natural Products (BNP) Aquaculture and Fisheries (AFI)</b>				
<b>Chairperson: Asst. Prof. Dr. Nur Shuhada Tajudin</b>				
03:20 pm - 03:40 pm	Deny Susanti	Bis-Indole Alkaloids from Malaysian Seaweed, <i>Caulerpa Racemosa</i> , and Their Bioactivities	BNPO01	52
03:40 pm - 04:00 pm	Ali Abdallah	Comparison of Fatty Acid Composition of Two Nudibranchs Species and one of its Dietary Sources, the Sponge <i>Xestospongia vansoesti</i>	BNPO02	53
04:00 pm - 04:20 pm	Rashidah Abdul Razak	Biological Screening of Selected Medicinal Plants from UPM's Agriculture Park using Brine Shrimp ( <i>Artemia salina</i> ) Toxicity Bioassay	BNPO03	54
04:20 pm - 04:40 pm	Yukinori Mukai	A Simple and Effective Method to Culture Ciliated Protozoans as a Starter Diet for Marine Finfish Larvae	AFIO04	59
04:40 pm - 05:00 pm	Mohammad Mustafizur Rahman	Sustainable Exploitation of Marine Fishes with an Emphasis on Overexploited Fish Stocks	AFIO05	60

## SUSTAINABLE EXPLOITATION OF MARINE FISHES WITH AN EMPHASIS ON OVEREXPLOITED FISH STOCKS

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Although total marine capture production in Malaysia is still increasing by 10% since 2000, the production of some fishes such as yellowstripe scad and other carangids are decreasing very rapidly. An intensive research is needed for an urgent basis to find out the actual reason of reducing production of these species. However, the possible reason of dramatic reduction in catch might be due to over exploitation. Once any fish stock is overexploited, it produces lower yields than their biological and ecological potential. Therefore, proper management is urgently needed for sustainable production to ensure long-term sustainability of these fishes. To recover overexploited stock many suggestions has been proposed in the literature. After synthesizing literatures, two main approaches can be proposed for sustainable fisheries production: (i) establishing protected areas, or (ii) limiting capacity and number of fishing vessels, and the allocation of access rights. Continuous data collection and their analysis are prerequisite for the successful of both approaches. Collaboration between scientists, policymaker and fishers is extremely valuable in managing fisheries for sustainable production. Apart from these, managing competing uses such as fishing industry, aquaculture, energy companies, shipping companies, government interests and conservation groups, and reducing by-catch should also be considered for sustainable fisheries production.

*Keywords:* yellowstripe scad, carangids, marine fisheries, overexploitation