

**THE INTERNATIONAL CONFERENCE ON UNDER WATER ACOUSTICS FOR SUSTAINABLE
FISHERIES IN ASIA, 2010**

**CONFERENCE SCHEDULE
Day 1: December 14, 2010**

Time	ID	Program	Page
08:30		Registration	
09:15		Welcome Address by Mr. Raja Mohammad Noordin Raja Omar, Director Research of Fisheries Malaysia	6
09:35		Greeting for AFAS 2010 by Professor Kohji Iida Chairman of Asian Fisheries Acoustic Society (AFAS)	7
09:55		Opening Remark by the Honourable Dato' Ahamad Sabki Mahmood, Director General of Fisheries Malaysia	5
10:15		Poster Exhibition and Group Photography	
10:30		Refreshment	
Session I : Present State and Characteristics of Asian Fisheries Acoustics (Keynote) Chairman: Kohji Iida (Hokkaido University, Japan) Subchairman: Raja Bidin Raja Hassan (SEAFDEC-MFRDMD, Malaysia)			
11:00	I-1	Acoustic Surveys for Fish-Abundance Estimation: From Principle to Analysis by Kouichi Sawada (National Research Institute of Fisheries Engineering, Japan)	13
11:30	I-2	Application of Acoustic Science and Technology by Raja Bidin Raja Hassan (SEAFDEC-MFRDMD, Malaysia)	14
12:00		AFAS General Meeting	
13:00		Lunch	
14:00	I-3	Application of Underwater Sound for Fisheries by Toyoki Sasakura (Fusion Inc., Japan)	15
14:30	I-4	Listening to Fish: Application of Passive Acoustics for Determination of Underwater Fish Habitat in Kuala Terengganu Coastal Waters, Malaysia by Khalid Samo (Universiti Malaysia Terengganu, Malaysia)	16
Session II : Advanced Technologies in Fisheries Acoustics (WGAT) Chairman: Yashusi Nishimori (Furuno Electric Co., Ltd, Japan) Subchairman: Hadil Rajali (FRI Bintawa, Malaysia)			
15:00	II-1	The Multi-Dimensional Analysis of Various Artificial Reef Data Sets by Myounghee Kang (Myriax Software Pty Ltd, Australia)	17

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15:20	II-2	Feature Extraction for Discrimination Between Jack Mackerel and Chub Mackerel by Using the Split Beam System by Ikuo Matsuo (Tohoku Gakuin University, Japan)	18
15:40		Tea Break	
16:00	II-3	Development of a New Broadband Split-Beam Echo Sounder with Variable Beam-Width by Yong Wang (Furuno Electric Co., Ltd., Japan)	19
16:20	II-4	Observation of Sandeel using a Combination of Scientific Multibeam Echo Sounder, Omni Directional Sonars, and Multi Frequency Split Beam Echo Sounders by Lars Nonboe Andersen (Simrad, Norway)	20
16:40	II-5	Discrimination of Three Tuna Species Using the Broadband Split-Beam System by Masanori Ito (Tohoku Gakuin University, Japan)	21
17:00-17:20		Discussion	
20:00		Official Dinner (Hosted by Department of Fisheries Malaysia)	

Day 2: December 15, 2010

Time	ID	Program	Page
Session III : Theoretical Research and Target Strength of Marine Animals (WGTS) Chairman: Kouichi Sawada (National Research Institute of Fisheries Engineering, Japan) Subchairman: Samsudin Basir (FRI Kg. Acheh, Malaysia)			
08:30	III-1	Characteristics of Three-Dimensional Target Strength of Fish for Horizontal Sonar by Kohji Iida (Hokkaido University, Japan)	22
08:50	III-2	On the Sound Production Mechanisms and Acoustic Characteristics of the Sea Catfish <i>Hexanematichthys sagor</i> (Hamilton, 1822) by Ho Hui Xuan Grace (Universiti Kebangsaan Malaysia, Malaysia)	23
09:10	III-3	Characteristics of Mean Volume Backscattering Strength for Multiple Frequencies of Phytoplankton (<i>Cochlodinium polykrikoides</i>): Focus on the 3.5, 5.0 and 7.5 MHz by Junghun Kim (Hanyang University, Korea)	24
09:30	III-4	Simple and Yet Precise Fisheries Acoustic System and Survey by Masahiko Furusawa (Tokyo University of Marine Science and Technology, Japan)	25
09:50	III-5	Dorsal Target Strength Observation of Free Swim Juvenile yellowfin Tunas (<i>Thunnus albacore</i>) by Shing-Hang Huang (National Taiwan Ocean University, Taiwan R.O.C.)	26

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10:10		Tea Break	
10:25	III-6	Laboratory Measurement of Target Strength Using Quantified Fish Finder by Henry Manik (Bogor Agricultural University, Indonesia)	27
10:45		Discussion	
Session IV : Methodologies and Evaluation of Acoustic Surveys (WGES) Chairman: Kazushi Miyashita Subchairman: Alias Man (FRI Kg. Acheh, Malaysia)			
11:10	IV-1	Environmental Factors Influencing the Vertical Distribution of Walleye Pollock Juveniles in Funka Bay, Japan Before and After the Transition Period of Food Organisms by Yohei Kawauchi (Hokkaido University, Japan)	28
11:30	IV-2	Spatial and Temporal Distribution of Oncaeide in Chababar Bay by Neda Fazeli (Khorramshahr University of Marine Science, Iran)	29
11:50	IV-3	Comparision of Acoustic Zooplankton Biomass Related to Different Mesh Size in the Waters off Northern Taiwan by Szu-Chia Kao (Taiwan Ocean University, Taiwan)	30
12:10	IV-4	Acoustic Scattering Measurements of Zooplankton in the East China Sea in Early Summer 2010 by Euna Yoon (Chonnam National University, Korea)	31
12:30	IV-5	Acoustic Characteristics of <i>Sergia lucens</i> Resources in Waters off Southwest Part of Taiwan by Jen-Ming, Liu (National Kaohsiung Marine University, Taiwan, ROC)	32
12:50	IV-6	The Development of Fish Forecasting System Using Sea Surface Temperature and Chlorophyll Satellite Images by Mohamed Rawidean Mohd Kassim (MIMOS Berhad, Malaysia)	33
13:10		Lunch	
Session IV: (Continue)			
14:00		Discussion	
Session V : Broad Aspects of Underwater Acoustics for Fisheries (WGAA) Chairman: Yoshinori Miyamoto (Tokyo University of Marine Science and Technology) Subchairman: Syed Abdullah Syed Abdul Kadir (FRI Rantau Abang, Malaysia)			
14:20	V-1	The Application of Micro Transponder to the Fish Cage Shape Measurement System by Yoshinori Miyamoto (Tokyo University of Marine Science and Technology, Japan)	34
14:40	V-2	Underwater Sounds of Biological Origin for Habitat Monitoring in Kuala Terengganu Coastal Waters by Aziani Ahmad (Universiti Malaysia Terengganu, Malaysia)	35

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15:00	V-3	Development and <i>in situ</i> Application of Ultrasonic Acoustic System for Real-Time Marine Harmful Algal Bloom's Detection by Seonho Lim (Hanyang University, Korea)	36
15:20		Tea Break	
15:40	V-4	Development of a New Ultrasonic Biotelemetry System Using The Multilayer Piezoelectric Actuator by Kouhei Hasegawa (Tokyo University of Marine Science and Technology, Japan)	37
16:00	V-5	Change of the pinger source level due to implanted fish by Aki Miyagi (Tokyo University of Marine Science and Technology, Japan)	38
16:20	V-6	A review of passive acoustic monitoring methods for the detection of cetaceans in southeastern Asia region by Tomonari Akamatsu (Fisheries Research Agency, Japan)	39
16:40		Discussion	
17:00-17:30		Closing Ceremony	
20:00		Dinner (Hosted by AFAS)	

Day 3: December 16, 2010

Time	ID	Program
09:00		Technical Visit – Optional
		(Visit to small scale fisheries related industries around Penang Island and the Universiti Sains Malaysia - CEMACS)

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P-1	Spatial and Temporal Variation of Paracalanus in Chahbar Bay-Gulf of Oman by Rasool Zare	40
P-2	Effect of pH on the Waste Production of Catfish in Running Water System by Junaidi Mohd Shukri (University of Malaya, Malaysia)	41
P-3	Study on the Jellyfish Acoustic Scattering in Korea Coastal Region : Major Three Species (<i>A. aurita</i> , <i>N. nomurai</i> and <i>C. nozakii</i>) by Seonho Lim (Hanyang University, Korea)	42
P-4	Application of Micro Cavitations Bubbles for Mitigation of Harmful Phytoplankton in Seawater by Junghun Kim (Hanyang University, Korea)	43
P-5	The Characteristics of Biomass Distribution Summarized by Acoustic Surveys Conducted in the Waters Adjacent to the Continental Shelf of Northeast Taiwan By Hsueh-Jung Lu (National Taiwan Ocean University, Taiwan)	44
P-6	Acoustic Quantification of Bottom Backscattering Strength using Multibeam Echosounder By Henry M. Manik (Bogor Agricultural University, Indonesia)	45