

Tentative Program

11th November

08:50 **Registration**

09:20-10:00 **Opening Session**

Introduction of Guests and Leaders

Welcome Address Two Persons

Chairman's Address

Group Photo

10:00-12:00 **Keynote Session (Chair: Yoshinori Miyamoto)**

10:00-10:40 (SS-1)	"Main results from recent research projects in fisheries acoustics in Norway" by Dr. Egil Ona, Research Professor of Institute of Marine Research, Adjunct Professor of University of Bergen
10:40-11:20 (SS-2)	"Echo integration in fisheries acoustics" by Dr. Masahiko Furusawa, Professor Emeritus of Tokyo University of Marine Science and Technology
11:20-12:00 (SS-3)	"Fish calls in the coastal zones of western Taiwan" by Dr. Chi-Fang Chen, Distinguished Professor of National Taiwan University

12:00-12:30 **General Meeting**

12:30-14:00 **Lunch**

14:00-15:15 **Session I: Acoustic Technology (SGAT-1)**

Chair: Yasushi Nishimori, Doo-Jin Hwang

14:00-14:15 (AT-1)	"A new monitoring method for counting bluefin tuna in net pens -I" Akira Hamano, Toyoki Sasakura, Susumu Namari, Noboru Sakakibara, Shunsuke Ito, Kenji Kodera, Takaki Nomura, Katsuyo Watanabe, Kunio Inai, Ikuo Matsuo
14:15-14:30 (AT-2)	"A new monitoring method for counting bluefin tuna in net pens -II" Ikuo Matsuo, Akira Hamano, Toyoki Sasakura, Susumu Namari, Noboru Sakakibara, Shunsuke Ito, Kenji Kodera, Takaki Nomura, Katsuyo Watanabe, Kunio Inai

14:30-14:45 (AT-3)	"Broadband echo signals used for fish characterization" Henry Munandar Manik
14:45-15:00 (AT-4)	"Scientific echo sounder for any application" Ivar Wangen
15:00-15:15 (AT-5)	"Introduction to the Chonnam National University Training Ship Sae Ding Baek (Specializing in acoustic equipment, report of EK80 noise test, research equipment and sampling gear)" Doo-Jin Hwang, Eun-Bi Min, Kyong-hoon Lee

15:15-15:30 **Break**

15:30-16:45 **Session I: Acoustic Technology (SGAT-2)**

Chair: Kazuo Amakasu, Ming-An Lee

15:30-15:45 (AT-6)	"Echoview and Echoexplore: The latest developments" Briony Hutton
15:45-16:00 (AT-7)	"Sonar-based jellyfish detection and early warning systems for cooling water intakes" Tim Acker, Eric Munday
16:00-16:15 (AT-8)	"Prototype results of automatic collection system for fisheries data" Takuto Hazama, Yoshihiro Nishiyama, Akinori Kasai, Masaya Izumikawa, Ikuo Ezaki, Yuya Kitagawa, Marina Shirao
16:15-16:30 (AT-9)	"Review of echo data output function for conventional echosounder and future prospects" Yoshihiro Nishiyama, Takuto Hazama, Akinori Kasai, Shinya Tanimura
16:30-16:45 (AT-10)	"Fishing Monitoring System Using Echosounder" Daichi Oshiyama, Kenji Minami, Kenichi Kobayashi, Kazushi Miyashita

16:45-16:55 **Break**

16:55-17:45 **Poster Session**

(PS-1)	"The acoustic characteristics of shrimp school associated with the environment factors in the waters of I-Lan Bay, Taiwan" Szu-Chia Kao, Ming-An Lee
(PS-2)	"Comparison of fish aggregations by artificial reefs using scuba diving and echo sounder detection" Jia-Rong Lin, Hsueh-Jung Lu, Te-Ping Chen, Jing-Yi Chen

(PS-3)	"Preliminary analysis on the acoustic and catch data of the bottom trawl in coastal waters of northwestern Taiwan" Chun-Huei Li, Hsing-Han Huang, Ting-Chieh Huang, Chi-Chang Lai, Hsueh-Jung Lu, Hsin-Ming Yeh, Long-Jing Wu
(PS-4)	"An acoustical technique for the characterization of fish behavior in earthen fish pond" Wen-Miin Tian, Chih-Yung Shen, Shih-Liang Tsao, Bor-Ren Chang

18:30-20:00 **Welcome Reception**

12th November

09:00-10:45 **Session II: Acoustic Application (SGAA)**

Chair: Tomonari Akamatsu, Hyeon-Ok Shin

09:00-09:15 (AA-1)	"Characterizing diversity of fish sounds using audio information retrieval" Tzu-Hao Lin, Tomonari Akamatsu, Colin Kuo-Chang Wen
09:15-09:30 (AA-2)	"Seasonal change of soundscape in coral reef" Tomonari Akamatsu, Tzu-Hao Lin, Frederic Siniger, Saki Harii
09:30-09:45 (AA-3)	"Behavioral characteristics of gray rockfish (<i>Sebastes schlegeli</i>) around wind power stations by acoustical telemetry in Byeonsan Peninsular, Korea" Hyeon-Ok Shin, Gyeom Heo, Doo-Jin Hwang
09:45-10:00 (AA-4)	"Swimming behavior comparison of flatfish (<i>Paralichthys loivaceus</i>) major by acoustic telemetry in Byeonsan Peninsular, Korea" Gyeom Heo, Doo-Jin Hwang, Hyeon-Ok Shin
10:00-10:15 (AA-5)	"Behavioral observation of <i>Trematomus bernacchii</i> and <i>T. pennellii</i> by ultrasonic biotelemetry in the coastal area around Syowa Station, Antarctica" Yoshinori Miyamoto, Kotaro Ichikawa, Hideaki Nishizawa, Saki Asai, Nobuaki Arai, Hiromichi Mitamura
10:15-10:30 (AA-6)	"Automatic detection and classification of dolphin whistles and clicks" Shashidhar Siddagangaiah, Chi-Fang Chen, Tomonari Akamatsu and Nadia N. Pieretti
10:30-10:45 (AA-7)	"The possible chronic physiological impacts of noise on fish" Yi Ta Shao, Hao-Yi Chang, Tzu-Hao Lin, Kazuhiko Anraku

10:45-11:15 **Break**

11:15-12:30 **Session III: Ecosystem Monitoring (SGEM)**

Chair: Tohru Mukai, Jen-Ming Liu

11:15-11:30 (EM-1)	"An acoustical technique for the characterization of fish behavior in earthen fish pond" Wen-Miin Tian, Chih-Yung Shen, Shih-Liang Tsao, Bor-Ren Chang
11:30-11:45 (EM-2)	"Physics or Plankton? – from simultaneous high-resolution hydro-graphic and acoustic backscattering measurements" Zhen Lu, Daisuke Hasegawa, Takahiro Tanaka, David M. Spencer, Yuji Okazaki, Takeshi Okunishi
11:45-12:00 (EM-3)	"Development of integrated system for real-time detection and prediction of harmful algal blooms (HABs, red tide) in Korea: based on the hydroacoustic and environmental data" Hansoo Kim, Mira Kim, Yeongwook Lee, Junsu Kang, Seung Won Jung, Donhyug Kang, Byoung Kweon Kim
12:00-12:15 (EM-4)	"Standing stock of an aquaculture pond measured by using an acoustic camera" Jen-Ming Liu, Wan-Yu Kao, Hendra Setiazi, Elaine Q. Borazon
12:15-12:30 (EM-5)	"Acoustic monitoring of krills using quantitative echosounders for estimating of the fishing ground" Tomohito Imaizumi, Tomohiko Matsuura, Kohei Hasegawa, Tohru Mukai, Ryuichi Matsukura, Kouichi Sawada

12:30-13:30 **Lunch**

13:30-15:00 **Session IV: Echo Survey (SGES)**

Chair: Hsueh-Jung Lu, Koki Abe

13:30-13:45 (ES-1)	"Relationship between horizontal hydroacoustic stock estimates and gillnet catches of fish in shallow Lake (Kwan Phayao, Thailand)" Deeka Ratanachamnong
13:45-14:00 (ES-2)	"Spatial distribution of Antarctic krill (<i>Euphausia superba</i>) and crystal krill (<i>Euphausia crystallorophias</i>) in the Western Ross Sea during summer 2018" Wuju Son, Hyoung Sul La, Wooseok Oh, Jeong-Hoon Kim
14:00-14:15 (ES-3)	"Evaluation the fish aggregation effect of wind turbine facilities by using scientific echosounder in Nanlong wind farm area" Ting-Chieh Huang, Hsueh-Jung Lu, Jia-Rong Lin, Shih-Hsuan Sun, Jing-Yi Chen

14:15-14:30 (ES-4)	"In situ broadband acoustic measurement of 0-age walleye pollock and pinnhead flounder in Funka Bay" Kohei Hasegawa, Tohru Mukai, Naizheng Yan
14:30-14:45 (ES-5)	"Measuring volume-backscattering spectra of Antarctic krill in the eastern Indian sector of the Antarctic" Natsuki Yamamoto, Kazuo Amakasu, Koki Abe, Ryuichi Matsukura, Tomohito Imaizumi, Tomohiko Matsuura, Hiroto Murase
14:45-15:00 (ES-6)	"Acoustic characteristic estimates of zooplankton in the Taiwan Strait" Kuo-Wei Yen, Ting-Chieh Huang, Hsueh-Jung Lu

15:00-15:30 **Break**

15:30-16:15 **Session V: Theory and Target Strength (SGTS)**

Chair: Kouichi Sawada, Henry Manik

15:30-15:45 (TS-1)	"Study on the target strength of Sakura-ebi (<i>Lucensosergia lucens</i>) - Part 1: Measuring method of target strength spectra in a small tank" Souma Tsuyuki, Hirotaka Nonaka, Saygili Burak, Kazuo Amakasu
15:45-16:00 (TS-2)	"Study on the target strength of sakura-ebi (<i>Lucensosergia lucens</i>) - Part 2: Material properties for theoretical acoustic scattering models" Burak Saygili, Ryoya Fujimaki, Souma Tsuyuki, Hirotaka Nonaka, Natsuki Yamamoto, Kenichi Kobayashi, Tetsutaro Aikawa, Hiroko Sakamoto, Shinya Oka, Toshifumi Hayashi, Kazuo Amakasu
16:10-16:15 (TS-3)	"Preliminary analysis of mass density and sound-speed contrasts of Antarctic krill measured in the Indian sector of the Antarctic Ocean in 2018/19" Hanae Doiguchi, Ryuichi Matsukura, Koki Abe, Natsuki Yamamoto, Tohru Mukai, Hiroto Murase

16:30-17:00 **Closing Session**

18:30-20:00 **Banquet**