# 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)**

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| 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**

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| 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 aplication"**  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**

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| 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**

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| **(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**

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| 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 (*Sebastes schlegeli*) 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 *(Paralichthys loivaceus*) 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 *Trematomus bernacchii* and *T. pennellii* 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**

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| 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**

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| 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 (*Euphausia superba*) and crystal krill (*Euphausia crystallorophias*) 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 broadand acousitic measurement of 0-age walleye pollock and pointhead 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**

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| 15:30-15:45  **(TS-1)** | **"Study on the target strength of Sakura-ebi (*Lucensosergia lucens*)**  **- 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 (Lucensosergia lucens)**  **- 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**