

## **PROGRAM**

**Monday 13 November 2017**

09:30-10:00

### **Registration**

10:00-10:30

### **Opening session**

#### **Opening address**

*Yong Tang*

*Chairman of AFAS2017 Steering Committee*

#### **Welcome address**

*Yoshinori Miyamoto*

*Chairman of Asian Fisheries Acoustics Society*

#### **Group photo**

10:30-10:45

### **Tea Break**

10:45-11:00

#### **Commemorative Speech**

**Chair:** Yoshinori MIYAMOTO

*Xianyong Zhao*

*Vice Chairman of AFAS2017 Steering Committee*

11:00-11:30

### **General Meeting**

11:30-13:00

### **Lunch**

13:00-15:00

#### **Session I: Echo Survey (SGES)**

**Chair:** Xianyong ZHAO, Kazushi MIYASITA

13:00 **Characteristics of echograms of fishery resources in coastal marine ranches in the East and West Seas in Korea**

*Doo-jin Hwang, Eun-A Yoon, Kyoungheon Lee, Bo-Kyu Hwang, Yoo-Won Lee, Sung-Ho Suh, Ho-Sang Kim, Kyung-Seon Lee, and Eunbi Min*

13:15 **The performance of the new fishing gears of the anchovy boat seine fishery using a hydroacoustic method**

*Myounghee Kang, Junsu Park, Junseong Park, Choong-Sik Jang, Youn-Hyoung Cho, Young-Su An*

13:30 **Use of hydroacoustics and gillnet sampling for assessing fish abundance and biomass in Khun Dan Prakarnchon reservoir, Thailand**

*Deeka Ratanachamnong*

13:45 **Vertical distribution and diel migration of mesopelagic fishes on the northern slope of the South China Sea**

*Xinliang Wang, Jun Zhang, Xiaotao Yu, Jichang Zhang, Xiansen Li, Xianyong Zhao*

**Chair:** Doo-jin HWANG, Xinliang Wang

14:00 **Acoustics Survey and Research on the Biological Resources of the Northern Waters of Antarctic Peninsula in January 2016**

*Chen Shuai, Huang Hongliang, Li Lingzhi, Qu Taichun*

14:15 **Vertical and horizontal distribution of copepods abundance in the western Arctic Ocean during summer 2016**

*Eunho KIM, Hyoung Sul La, Wuju Son, Kyoung-Ho Cho, Jinyoung Jung, Eun Jin Yang, Sung-Ho Kang and Doojin Hwang*

14:30 **Estimating the catch efficiency of a framed midwater trawl for Juvenile Walleye Pollock (*Gadus chalcogrammus*) using an acoustic method - High accuracy estimation with a black net at night –**

*Zhen LU<sup>1S\*</sup>, Tohru MUKAI<sup>2</sup>, Yasuzumi FUJIMORI<sup>2</sup> and Kohji IIDA<sup>2</sup>*

14:45 **Acoustic distinction between pothead flounder and juvenile walleye pollock using a quantitative echo-sounder in and near Funka Bay, Hokkaido, northern Japan**

*Naizheng YAN<sup>1S</sup>, Tohru MUKAI<sup>2</sup>, Jun YAMAMOTO<sup>3</sup>*

15:00-15:20

**Tea Break**

15:20-16:05

**Session II: Theory and Target strength (SGTS)**

**Chair:** Myounghee KANG, Jun ZHANG

15:20 **Development of a new counting system of caged bluefin tuna using multi-transducer sonar and pinger**

*Toyoki Sasakura<sup>1</sup>, Akira Hamano<sup>2</sup>*

15:35 **Measurements of backscattering strengths of the red tide species (*Akashiwo sanguinea* and *Alexandrium affine*) using ultrasound**

*Hansoo Kim<sup>1,2,S</sup>, Donhyug Kang<sup>1</sup>, Mira Kim<sup>1</sup>, Seung Won Jung<sup>3</sup>, and Byoung Kweon Kim<sup>4</sup>*

15:50 **Modelling study on the target strength of *Ceratoscopelus warmingii* in the South China Sea**

*YU Xiaotao, WANG Xinliang, ZHAO Xianyong*

16:05 **In situ measurement of Antarctic krill density contrast and its application used in estimation of Target strength**

*WAN Shujie<sup>S</sup>, YANG Yang, WANG Teng, TONG Jianfeng, ZHU Guoping*

16:20-17:50

**Session III : Ecosystem Monitoring (SGEM)**

**Chair:** Tohru MUKAI, Donhyug KANG

- 16:20 **Acoustic monitoring of giant jellyfish *Nemopilema nomurai* using quantitative echosounder EK60 and scientific multibeam echosounder ME70**  
*Tomohiko MATSUURA<sup>1\*</sup>, Koki ABE<sup>1</sup>, Haruya YAMADA<sup>2</sup>, Yoko KIYOMOTO<sup>2</sup>, and Satoshi KITAJIMA<sup>2</sup>*
- 16:35 **Attempt of behavior observation of skipjack in Kuroshio Current region around Yonaguni Island**  
*Saki Asai<sup>1,S\*</sup>, Keiichi Uchida<sup>2,8</sup>, Kazushi Miyashita<sup>3,8</sup>, Nobuaki Arai<sup>4,8</sup>, Hiromichi Mitamura<sup>5,8</sup>, Takashi Kitagawa<sup>6,8</sup>, Hokuto Shirakawa<sup>3,8</sup>, Yoshinori Miyamoto<sup>2,8</sup>, Toyoki Sasakura<sup>7,8</sup>*
- 16:50 **Characterization of the fish distribution in coast water in Kochi prefecture**  
*Yanhui Zhu<sup>1S\*</sup>, Yuka Iwahara<sup>2</sup>, Kenji Minami<sup>3</sup>, Kentaro Oda<sup>2</sup>, Koichi Hidaka<sup>2</sup>, Osamu Hoson<sup>2</sup>, Daichi Oshiyama<sup>1</sup>, Hokuto Shirakawa<sup>3</sup>, Kouji Morishita<sup>2</sup>, Sentaro Tsuru<sup>2</sup>, Masahito Hirota<sup>2</sup>, Kazushi Miyashita<sup>3</sup>*
- 17:05 **Spatial and Temporal Variation of Zooplankton Backscattering Strength from Mobile ADCP Data**  
*Angga Dwinovantyo<sup>1S</sup>, Henry M. Manik<sup>2\*</sup>, Tri Prariono<sup>2</sup>, Susilohadi Susilohadi<sup>3</sup>*
- 17:20 **Seabed multibeam backscatter mapping of Jakarta Bay**  
*Steven Solikin<sup>1S</sup>, Henry M. Manik<sup>2\*</sup>, Sri Pujiyati<sup>2</sup>, Susilohadi<sup>3</sup>*
- 17:35 **Comparing the fish aggregation effect among wind turbine foundation, wind tower and artificial reefs using acoustic and scuba diving surveys – a case study in Miaoli offshore wind farm area, Taiwan**  
*Shih-Hsuan Sun<sup>1S\*</sup>, Hsueh-Jung Lu<sup>1</sup>, Jia-Rong Lin<sup>1</sup>, Ching-Hsien Ho<sup>2</sup>, Jing-Yi Chen<sup>3</sup>*

18:00-20:00

Welcome reception at TongYu International Hotel

**Tuesday 14 November 2017**

8:30-9:30

**Session IV : Acoustic Technology (SGAT)**

**Chair:** Yasushi NISHIMORI, Xichang TAN

08:30 **A simple low frequency calibration method of autonomous recorders in a very quiet lake**

*Tomonari Akamatsu<sup>1\*</sup>, Ryuzo Takahashi<sup>2</sup>, and Tomohito Imaizumi<sup>2</sup>*

08:45 **Use of Passive Integrated Transponder (PIT) technology for passage efficiency estimating on the Angu fishway (Dadu River), China**

*Jiangping Tao<sup>1,2</sup>, Wangbin Hu<sup>1</sup>, Jingya Wen<sup>3</sup>, Chuanang Liu<sup>4</sup>, Qilin Shu<sup>5</sup>*

09:00 **A preliminary study on nautical area scattering coefficient and distribution of mesopelagic fishes in the central-southern part of the South China Sea**

*Jun Zhang<sup>1,2</sup>, Zuozhi Chen<sup>1,2</sup>, Mingshuai Sun<sup>1,2</sup>, Yan Wang<sup>1,3</sup>*

09:15 **A Study on an Extensive Ranges Echo Sounder by Using of Multiple Transducers**

*Jianghuai ZHENG<sup>S</sup>, Yoshinori MIYAMOTO, Keiichi UCHIDA, Kazuo AMAKASU*

9:30-9:50

**Tea Break**

09:50-11:05

**Session V: Acoustic Application (SGAA) Part I**

**Chair:** Tomonari AKAMATSUA, Raja Bidin Raja HASSAN

09:50 **Monitoring of fish behavior in large scale set net**

*Keiichi Uchida<sup>1\*</sup>, Yoshinori Miyamoto<sup>1</sup>, Noro<sup>2</sup>, Yuka Wada<sup>3</sup>, Yuuki Tanaka<sup>3</sup>, Yousuke Ochi<sup>4</sup>, Aki Miyagi<sup>5</sup>*

and Seiji Akiyama<sup>1</sup>

10:05 **Detection and localization of Croaker's fish calls using beamforming**

*Ikuo Matsuo<sup>1\*</sup>, Kazuki Yamato<sup>2</sup>, Ryuzo Takahashi<sup>3</sup>, Tomohito Imaizumi<sup>3</sup>, Tomonari Akamatsu<sup>4</sup>*

10:20 **DESIGNING TRANSMITTING – RECEIVING SYSTEM FOR OCEAN ACOUSTIC WAVEGUIDE REMOTE SENSING**

*Henry M. Manik<sup>1</sup>, Susilohadi<sup>2</sup>, Totok Hestirianoto<sup>1</sup>, Billi R. Kusumah<sup>3</sup>, Angga Dwinovantyo<sup>3</sup>, Steven Solikin<sup>3</sup>*

10:35 **Movement range and behavior characteristics of gray rockfish (*Sebastes schlegeli*) by acoustic telemetry in Byeonsan Peninsular, Korea**

*Hyeon-Ok Shin<sup>1\*</sup>, Min-A Heo<sup>2</sup>, Gyeom Heo<sup>2</sup> and Doo-Jin Hwang<sup>3</sup>*

10:50 **Short-term fidelity, habitat use and vertical movement behavior of the black rockfish *Sebastes schlegelii* as determined by acoustic telemetry**

*Yingqiu Zhang<sup>1,2</sup>, Qiang Xu<sup>2</sup>, Alós Josep<sup>3</sup>, Hongsheng Yang<sup>2</sup>*

11:30-13:00

**Lunch**

13:00-13:30

**Poster session**

**Comparing the fish aggregation effect among wind tower and artificial reefs using acoustic and scuba diving surveys – a case study in Changhua offshore wind farm area, Taiwan**

*Jia-Rong Lin<sup>1\*</sup>, Hsueh-Jung Lu<sup>1</sup>, Shih-Hsuan Sun<sup>1</sup>, Ching-Hsien Ho<sup>2Y</sup>, Jing-Yi Chen<sup>3</sup>*

**Technical overview of a real time monitoring system for the detection and prediction of harmful algal bloom's (red tide) in Korea**

*Donhyug Kang<sup>1,\*</sup>, Hannsoo Kim<sup>1,2</sup>, Mira Kim<sup>1</sup>, Seung Won Jung<sup>3</sup>, Byoung Kweon Kim<sup>4</sup>*

**Monitoring the underwater noises of Large yellow croaker (*Larimichthys crocea*) in Deep-sea cage**

*Hongquan Li<sup>S</sup>, Yong TANG, Leiming YIN, Binbin XING, Xin ZHUANG, Jin LIU, Zhenyu WANG*

**Study on hearing capacities of greenling (*Hexagrammos otakii*) by using ECG method**

*Zhenyu Wang<sup>S</sup>, Guosheng Zhang, Binbin Xing, Leiming Yin, Xin Zhuang*

13:30-15:00

**Session V: Acoustic Application (SGAA) Part II**

**Chair:** Hyeon-Ok Shin, Keiichi UCHIDA

13:30 **Preliminary Study on Noise Removal Method of Antarctic Krill Acoustic Data Based on Support Vector Machine**

*Qu Taichun<sup>1</sup>, Huang Hongliang<sup>1</sup>, Li Lingzhi<sup>1</sup>, Chen Shuai<sup>1</sup>, Liu Jian<sup>1</sup>, Wu Yue<sup>1</sup>*

13:45 **The application of side scan sonar in impact assessment of artificial reefs in marine ranching**

*ZHANG Yazhou, BI Yuanxin*

14:00 **Sonar observations of Chinese sturgeon (*Acipenser sinensis* Gray, 1835) spawning behavior in 2015 and 2016**

*Pengcheng Lin<sup>1,2</sup>, Tao Chang<sup>1,2</sup>, Xin Gao<sup>1,2</sup>, Huanzhang Liu<sup>1,2</sup>*

14:15 **Monitoring behavioral characteristics of the large yellow croaker (*Larimichthys crocea*) in Deep-sea cage using ultrasonic positioning system**

*Leiming YIN<sup>1</sup>, Wei SONG<sup>2</sup>, Yong TANG<sup>1</sup>, Binbin XING<sup>1</sup>, Jing LIU<sup>1</sup>, Hongquan LI<sup>1</sup>, Xin ZHUANG<sup>1</sup>*

14:30 **Ordinary kriging as an efficient geostatistical supplement for marine fishery acoustic applications**

*Sun Mingshuai<sup>a,b,\*</sup>, Zhang Jun<sup>a,b</sup>, Zhang Kui<sup>a,b</sup>, Chen Zuozhi<sup>a,b</sup>*

14:45 **Application of passive acoustic technology in fish's sounding behavior**

*ZHANG Siyu<sup>S</sup>, HUANG Honghui, LU Weihua, GUO Shaozhong*

15:00-15:20

**Tea Break**

15:20-16:20

**Chair:** Kohji IIDA, Leiming Yin

**Company report session**

16:20-17:20

**Closing session**

18:00-20:00

Dinner at TongYu International Hotel