

## International Conference on Fisheries Engineering 2019



### Program

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#### Saturday, 21<sup>st</sup> September

Time	Main Hall (Room 1)	Room 2	Rooms at 3 <sup>rd</sup> floor
13:00 – 13:15	Welcome speech		
13:15 – 14:00	Keynote presentation Nobuo Kimura		
14:10 – 14:55	Keynote presentation Ilana R. Zalmon	Keynote presentation Kyoungsoon Lee	
15:20 – 17:20	Oral presentations	Oral presentations	
18:00 – 19:30			Poster presentations and exhibitions (with drink & snacks)

#### Sunday, 22<sup>nd</sup> September

Time	Main Hall (Room 1)	Room 2	Rooms at 3 <sup>rd</sup> floor
09:00 – 12:20	Oral presentations	Oral presentations	
12:00 – 14:00			Poster presentations and exhibitions (lunch will be served)
14:00 – 17:40	Oral presentations	Oral presentations	

#### Monday, 23<sup>rd</sup> September

Time	Main Hall (Room 1)	Rooms at 3 <sup>rd</sup> floor
09:00 – 12:00	Symposium “Marine Renewable Energy and Fisheries Engineering”	
12:00 – 13:30		Poster presentations and exhibitions (lunch will be served)
13:30 – 17:00	Symposium “Marine Renewable Energy and Fisheries Engineering”	
18:30 -	Banquet at Luke Plaza Hotel (Shuttle bus will be operated)	

#### Tuesday, 24<sup>th</sup> September

Excursion (optional): Meeting at Nagasaki Port Terminal at 08:20.

Check <http://nagasaki-terminal.jp/english/> for meeting point.

## Oral Presentations

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Saturday, 21<sup>st</sup> September

### Plenary session (Main Hall)

<b>Time</b>	<b>ID</b>	<b>Title</b>	<b>Presenter</b>
<b>13:00 – 13:15</b>		Welcome speech	Shinya Otake Shigeru Kohno
<b>13:15 – 14:00</b>	K001	Keynote: Fisheries Engineering, today and tomorrow, for robust fisheries	Nobuo Kimura

### Room 1 (Main Hall) for Fishing ground development research

<b>Time</b>	<b>ID</b>	<b>Title</b>	<b>Presenter</b>
<b>14:10 – 14:55</b>	S101	Keynote: Past, Present and Near Future on Artificial Reef Research	Ilana R. Zalmon
<b>15:20 – 15:40</b>	S102	Design of Creating Fishing Ground by Artificial Reefs in Japan	Shinya Otake
<b>15:40 – 16:00</b>	S103	Artificial reef in France: state of the art and last innovative projects	David de Monbrison
<b>16:00 – 16:20</b>	S104	Development status and future trend of Marine ranching in China	Jun Lin
<b>16:20 – 16:40</b>	S105	The diversity of artificial reefs in Southeast Asia and the way forward	Jarina Mohd Jani
<b>16:40 – 17:00</b>	S106	Development and Utilization of Artificial Reefs in Korea	MoonOck Lee
<b>17:00 – 17:20</b>	S107	The “Frontier Fishing Ground Enhancement and Development Project” in the EEZ of Japan	Masashi Yamazaki

Saturday, 21<sup>st</sup> September

Room 2 for Fishing boat and gear research

<b>Time</b>	<b>ID</b>	<b>Title</b>	<b>Presenter</b>
<b>14:10 – 14:55</b>	S201	Keynote: Biomass Estimation of Krill in the Antarctic Sea using Hydro-acoustics	Kyounghoon Lee
<b>15:20 – 15:40</b>	S202	Monitoring fishing operations of crab gill-net fishery along the coast of Laem Phak Bia, Phetchaburi province, Thailand	Keigo Ebata
<b>15:40 – 16:00</b>	S203	Changes in net shape of two survey trawl nets by different depths in the East China Sea	Jungmo Jung*
<b>16:00 – 16:20</b>	S204	3D simulation of the set net fishing capture process using a boids model	Yuki Takahashi
<b>16:20 – 16:40</b>	S205	Diseases among Fishmen during the six years and program for improving health of Fishmen	Shuji Hisatsune
<b>16:40 – 17:00</b>	S206	Promoting Efficient Energy Use in Fishing Vessels: Improvement of hauling devices and freezing system. a case study in Pattani Province, Thailand	Thaweesak Thimkrap
<b>17:00 – 17:20</b>	S207	Simulation of carbon dioxide emissions in Japan by the construction prediction of the electric and fuel-cell vessels in aquaculture	Ryuzo Takahashi

\*, presentation by student.

Sunday, 22<sup>nd</sup> September

Room 1 (Main Hall) for Researches on Fishing port, communities and fishing ground development

Time	ID	Title	Presenter
09:00 – 09:20	S301	Methods and Problems with Creation of Evacuation Rules for Fishing Boats in the Event of a Tsunami	Kouki Abe*
09:20 – 09:40	S302	Effective Operation of Work Vessels in Fishing Port Construction Using ICT	Shimpei Nagano
09:40 – 10:00	S303	Formation factors of kelp bed on boulder bottom and application to fishing ports design	Yuhi Hayakawa
10:00 – 10:20	S304	Release of sea cucumber <i>Apostichopus japonicas</i> Juveniles into artificial reefs of scallop shells installed in fishing port	Takashi Kamo
10:40 – 11:00	S305	Quantitative Analysis of Computerization for Operations of the Fish Market - Case Analysis of Ofunato Fish Market -	Masamitsu Nakaizumi
11:00 – 11:20	S306	Cultural Role of Fishery Villages at the World Heritage Fishery Ground and a Trial of Seafood Traceability in Munakata, Fukuoka, Japan	Satoquo Seino
11:20 – 11:40	S307	Building a Portal Site for Effective Fishing Village Information Transmission	Akira Nagano
11:40 – 12:00	S308	Business continuity plan for the production and distribution of marine products obtained from fishery areas	Takuji Goto
12:00 – 12:20	S309	Case Analyses in Start-up and Expansion of Homestay Tourism in Fishing Villages.	Masamitsu Nakaizumi
14:00 – 14:20	S310	The Effects of Marine Protected Area on Resource of Snow Crab <i>Chionoecetes Opilio</i>	Hiroshi Miura
14:20 – 14:40	S311	Estimation of artificial reef effect range on resource density of Japanese butterflyfish <i>Hyperoglyphe japonica</i> and red seabream <i>Pagrus major</i> in the waters of Iki Islands, Nagasaki, Japan	Nariaki Inoue
14:40 – 15:00	S312	Understanding feeding behavior of <i>Sebastes thompsoni</i> via biotelemetry	Shinsuke Tosha
15:00 – 15:20	S313	Integration of various techniques to determine fish attraction performance around anchored Fish Aggregating Devices (aFADs) in Goto Islands, Japan	Khyria Swaleh Karama*
15:20 – 15:40	S314	Installation of Fish Enhancing Devices in Southeast Asian Waters: Case study in the coastal areas of Thailand	Nopporn Manajit

<b>15:40 – 16:00</b>	S315	Development of fisheries grounds overlaid with broken stones for recovery of Asari clam resources in coastal regions	Ryogen Nambu
<b>16:20 – 16:40</b>	S316	Persistent macroalgal beds in the warming waters of southwest Japan: a trophic cascade in a marine protected area with artificial reefs	Shigeru Kawamata
<b>16:40 – 17:00</b>	S317	The present situation of seaweed beds and development of fishing ground in shallow waters of Nagasaki Prefecture	Kenjiro Ura
<b>17:00 – 17:20</b>	S318	An experimental study on wave force acting on high-rise artificial reefs	Akiyoshi Nakayama
<b>17:20 – 17:40</b>	S319	Analysis on the moving behavior of Sea urchin according to stimulus	Geunchang Park*

\*, presentation by student.

Sunday, 22<sup>nd</sup> September

Room 2 for Fisheries instrumentation and others

<b>Time</b>	<b>ID</b>	<b>Title</b>	<b>Presenter</b>
09:00 – 09:20	S401	Effects on the WIB OSHMS program of Fishmen	Shuji Hisatsune
09:20 – 09:40	S402	Introduce to the Chonnam National University Training ship Sae Dong Baek -Specializing in acoustic equipment, report of EK80 noise test and sampling gear-	Doojing Hwang
09:40 – 10:00	S403	Electronic System of ASEAN Catch Documentation Scheme: an Effective Fisheries Management Tool	Namfon Imsamrarn
10:00 – 10:20	S404	Distribution of fish in the Antarctic Ross Sea	Wooseok Oh*
10:40 – 11:00	S405	Noise removal for species identification of fish and plankton	Byeongjo Kang*
11:00 – 11:20	S406	Comparison of Density Estimates between Scientific echosounder and Acoustic camera system for Moon Jellyfish ( <i>Aurelia coerulea</i> )	Inwoo Han*
11:20 – 11:40	S407	A new monitoring methodology for counting bluefin tuna in net pens -I	Akira Hamano
11:40 – 12:00	S408	A new monitoring methodology for counting bluefin tuna in net pens II	Ikuo Matsuo
14:00 – 14:20	S409	Introduction of feeding adjustment model and general-purpose aquaculture management web site	Kaito Hattori*
14:20 – 14:40	S410	Comparison of feature-based classifier and CNN-based deep learning for fish monitoring in complex environment	Yi Jun Ling*
14:40 – 15:00	S411	Fishery Resources Survey in the Gulf of Thailand with preliminary finding on marine debris	Pontipa Luadnakrob
15:00 – 15:20	S412	Studies by TUMSAT on marine plastic debris, including micro-plastics	Tadashi Tokai
15:20 – 15:40	S413	Detecting microplastics from marine sediments via staining	Toshiro Hata
15:40 – 16:00	S414	A Study on Fish Aggregation Device for Bycatch Reduction and Fish Shoal Behavior Using Flow Visualization Analysis	Kyounghoon Lee
16:00 – 16:20	S415	Visualization of rotational swimming patterns in oblate jellyfish	Pyeon Yongbeom*

\*, presentation by student.

## Posters

Poster presenters should stay beside their posters to discuss with participants in following times.

Date	Odd poster ID numbers	Even poster ID numbers
Saturday, 21 <sup>st</sup> September	18:00 – 18:30	18:30 – 19:00
Sunday, 22 <sup>nd</sup> September	12:00 – 12:50	13:00 – 13:50

ID	Title	Presenter
P01	The distributed characteristics of fish schools on the Marine Ranching Area around the Ulleung-do	Sara Lee*
P02	Occurrence of barnacle larvae around the marine renewable energy test fields in Nagasaki, Japan	Shigenobu Takeda
P03	Trial Operation of Fishery Environmental Monitoring utilizing Off-grid Renewable Energy Generation System	Takeshi Kubota
P04	Example of fishing ground development using anchored FADs in Japan	Kenta Suda
P05	Different seasons at fish aggregating devices (FADs) in Goto Islands	Chiyo Takahashi*
P06	Isoyake Recovery Technique using artificial substrata in Japan	Akira Watanuki
P07	Optimal deployment of marine forest reefs considering a marine algae spore release and flow in real seas	Jongkyu Kim
P08	Capacity building at an elementary school on Tsushima Island for adaptation to marine environmental changes	Hidefumi Hatashima
P09	Collaborative Research of ISOYAKE ecosystem degradation in Coastal Protected Areas in Tsushima, Nagasaki, Japan	Satoquo Seino
P10	Utilization Measure of Unused Fish Based on the Logistic Theory ~ Case of Product Development Used with Mottled Spinefoot in Jogashima Island~	Kiyotaka Yuguchi
P11	Why do Japanese fishermen not wear life jackets? -considerations based on interviews of fishermen who tried them on-	Hideyuki Takahashi
P12	Hook gape and width selectivity for demersal fish in bottom longline fishing	Ryunosuke Nakabe*
P13	Use of short branch lines for saving labor in a Japanese large-distant-water type tuna longline fishery	Kosuke Yokota
P14	The hydrodynamic performance and flow field visualization of biplane-type otter board	Zhiqiang Liu*
P15	Comparison of Ship-board Noise Level of Diesel Propulsion System with Electric Propulsion System around 1000GT Training Ship	Kenichi Shimizu
P16	Promotion of Energy Conservation in Fishing Boat on Remote Islands	Hiyoyasu Mizoguchi

P17	Digitization and classification of fishing hooks by image analysis	Takahito Kojima
P18	Fishing catch effect and energy saving effect by introduction of LED fishing lamps to coastal squid fisheries	Yoritake Kajikawa
P19	Development of a scallop aquaculture monitoring system using a mobile phone network and an ultrasonic telemetry	Yoshinori Miyamoto
P20	Artificial Intelligence for Automatic Feeding of Aquaculture Fish	Motonori Saeki*
P21	Identification of Antarctic Krill ( <i>Euphausia superba</i> ) and lanternfish ( <i>Electrona carlsbergi</i> ) Using Frequency Difference method	GeunNi Lee*
P22	Novel method for estimating body mass of reared red sea bream using stereo imaging	Tatsuya Tanaka*
P23	Squid meat as biomaterial electrodes to detect fish electrocardiographic signals without human handling.	Kisuke Ikegami*
P24	Relationship between underwater spectral irradiance and limit of photography under non-illumination condition	Kazuhiko Anraku
P25	Temporal and spatial variability of bottom water temperature in the deep ocean	Mitsuharu Yagi
P26	Visual survey results of floating marine debris in the offshore area around Japan	Mao Kuroda*
P27	Flow Analysis in Circular Aquarium of Aquaculture algae spore release and flow in real seas	Koichi Tsubogo
P28	Culturing the only-one pearl: Developing identification and nucleus dropout prevention techniques for new aquaculture	Yoshiki Matsushita

\*, presentation by student.



## Symposium (Monday, 23<sup>rd</sup> September)

Time	Presentation title	Presenter
9:30	Opening remark	Shigenobu Takeda Director, Organization for Marine Science and Technology, Nagasaki University, Japan
9:45	Keynote: Habitat-creation potential is a key issue of the sustainable development of marine renewable energy	Hideaki Nakata Emeritus professor, Nagasaki University, Japan,
10:30	Marine Spatial Planning for Offshore Wind	Jan Matthiesen Director, Policy and Innovation, The Carbon Trust, UK
11:00	How to keep the balance between supporting fisheries and developing offshore wind energy: A preliminary study in Taiwan	Hsin-Ming Yeh Division Chief, Marine Fisheries Division, Fisheries Research Institute, Taiwan
11:30	Collision risk assessment of marine organisms to the tidal energy facilities	Daisuke Kitazawa Professor, Institute of Industrial Science, The University of Tokyo, Japan
12:00	Lunch break	
13:30	Interaction of MRE and marine organisms: Active acoustic assessment	Benjamin Williamson Lead Scientist, Environmental Research Institute University of the Highlands and Islands, UK
14:00	Interaction of MRE and marine organisms: Can fish cam monitor the environment?	Itsumi Nakamura Assistant professor, Organization for Marine Science and Technology, Nagasaki University, Japan
14:30	Offshore wind energy and the fishing industry in NE USA	Michael Pol Senior Marine Fisheries Biologist, Massachusetts Division of Marine Fisheries, US
15:15	Voices of fishers for Offshore Wind Farm development	Shinji Kirihara Professor, Institute of Regional Innovation, Hirosaki University, Japan
15:45	Hydrogen fuel cell-powered fishing vessel: utilization of MRE for fisheries	Jun Miyoshi Principal researcher, National Research Institute of Fisheries Engineering, Japan
16:15	Wrap-up	