SEVENTH INTERNATIONAL SYMPOSIUM ON GIS/SPATIAL ANALYSES IN FISHERY AND AQUATIC SCIENCES

HAKODATE, HOKKAIDO, JAPAN AUGUST 21 (MON) - 25(FRI), 2017

PROGRAM^(*) AND ABSTRACT PROCEEDINGS



Spectacular view from Mt Hakodate: One of three major night-views of the world http://www.hakodate.travel/en



[Conveners]

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[Local Co-organizer]

Hakodate Research Center for Fisheries and Oceans

(*) As of Aug 19, 2017. The latest version is available in our home page at http://www.esl.co.jp/Sympo/7th/program.pdf

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PROGRAM

PAGE 001-038

[OUTLINE]

		21	22	2	3	24		25	
	August	Monday	Tuesday	Wedn	esday	Thursday	August	Friday	
	08:00-08:30		Japan Railway	Chartered bus some station ==> Ver	ue). Bus will le	eave exactly at	08:00-08:30	Excursions (**) See below	
	09:00-09:30		Software (1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Mariculture (1)	09:00-09:30		
	09:30-10:00		Remote	Habitat Modeling (3)	Posters kept in the entrance hall	Artificial reef (1)	09:30-10:00		
АМ	10:00-10:30		sensing (2)		for viewers	Fisheries management (1)	10:00-10:30	Course 1 Hakodate City Tour	
	10:30-11:00	Preparations (Secretariat)		Health	brakes	_/	10:30-11:00	3 hours (09:00-12:00)	
	11:00-11:30				Posters kept		11:00-11:30		
	11:30-12:00		Habitats (3)	Environment /Ecosystem (3)	in the entrance hall	Fisheries managements (3)	11:30-12:00		
	12:00-12:30				for viewers		12:00-12:30		
	12:30-13:00		Poster+ PC demo set up	Group	Photo		12:30-13:00		
	13:00-13:30	Shuttle bus (1PM)(*) see below		Lur	nch		13:00-13:30	Course 2	
	13:30-14:00	Registration					13:30-14:00	Visit to the local fishing villages (suburb of	
	14:00-14:30	(13:00-14:45)		Resource	Posters kept		14:00-14:30	Hakodate city) 4 hours (12:00-16:00)	
	14:30-15:00	Openings	Habitats (3)	analyses /Predictions (3)	in the entrance hall for viewers	Warp-up Session	14:30-15:00		
PM	15:00-15:30	(14:45-15:30)		(3)	Tot viewers		15:00-15:30		
	15:30-16:00		Health brakes		Poster dismantle	Health brakes	15:30-16:00		
	16:00-16:30	System	Poster and PC demo Session	Marine		Closing	16:00-16:30		
	16:30-17:00	(data process) (3)	(at 17:30 clean up PC demo	Spatial Planning(3)		Cleaning	16:30-17:00	Course 3 Visit, interaction and	
	17:00-17:30		equipment)			Shuttle bus (17:00)	17:00-17:30	Receptions (Dr Tojo's Lab, Faculty of Fisheries, Hokkaido	
	18:00	Shuttle bu	ıs (17:45)	Dia (car			17:30-18:00	University) 4 hours	
	18:00-19:00			Oinner (Mt (see page 9	Hakodate) for details)		18:00-19:00	(16:00-20:00)	
	19:00-20:00						19:00-20:00		

(*)Shuttle bus service (Chartered bus stop: see page 29, Hakodate Japan Railway Station ==> Venue).

Bus will leave exactly at 13:00 (1PM). If you miss the bus, please use a taxi.

^{(**) (}You are invited) You can choose any of 3 Courses, i.e., you can choose all of three (11 hours which may be too much but if you like), just one of three, Course 1 and 3 etc. Bus starts and comes back: #4 bus stop, Hakodate Japan Railway Station at 9:00, 12:00, 16:00 and 20:00 for get-in or get off. Please manage your lunch yourself. In Course 3, there is a reception (typical university students-like party).

DAILY PROGRAM (DAY 1) (Aug. 21)

	Day 1: August 21(Monday)							
				Photographer : KIMURA (43)				
				Time Keeper: LOULAD (55)				
			N	Aicrophone distributor: CHEN (22)				
Time	Type of presentation	Subject	Moderator	Title	Presenter	Country	Reg. no	Abstract page #
08:00 -13:00				Preparations (Secretariat)				
13:00			·	ered bus stop : see page 29, Hakodate Japar Bus will leave exactly at 13:00 (1PM). a a taxi (show the Japanese direction to the	·			
13:30-14:45			Registra	ation (Reception desk) PLEASE DO your registra	ition FIRST			
44.45.45.20	0		AUGUIDA (44)	Welcome speech	ITOH (Convener)	Japan	41	
14:45-15:30	Openi	ngs	NISHIDA (41)	Outline of the Symposium and Remarks	NISHIDA (Convener)	Japan	44	
15:30-16:00				Health breaks				V
16:00-16:30				Fishing vessel data mining based on Beidou satellite navigation system	ZHANG	China	7	42
16:30-17:00	Oral presentation	System (data process) (3)	DEVILLERS (Canada) (11)	Crowdsourcing fisheries information: The Information System on Small-Scale Fisheries (ISSF)	DEVILLERS	Canada	11	43-44
17:00-17:30		(-)		Filtering Regions of Interest via Crowdsourcing of Voyage Data Recorder Trajectories	HSU	Taiwan	10	45-46
17:45			17:45 Shuttle bus service (Venue==>Hakodate Japan Railway Station)					

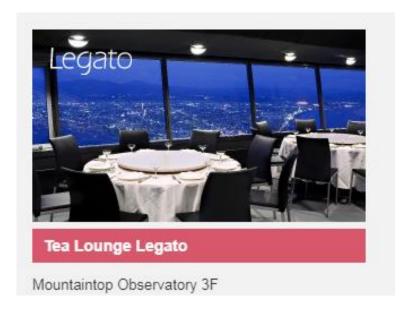
DAILY PROGRAM (DAY 2) (Aug. 22)

			D	ay 2: August 22 (Tuesday)				
			Pł	notographer : KIMURA (43)				
				Time Keeper : WEI (22)				
			Micro	phone distributor: LOULAD (55)				
Time	Type of presentation	Subject	Moderator	Title	Presenter	Country	Reg. no	Abstract page #
08:00	Shu			I bus stop: see page 29, Hakodate Japan R exactly at 8AM. If you miss the bus, please	-	on ==> Ve	enue)	
09:00-09:30		Software (1)		Marine GIS (Marine Explorer) software: 20 years' developments, and recent applications	ІТОН	Japan	41	48-49
09:30-10:00	Oral presentation	Remote	O'Conner (USA) (1)	Mapping and Analysis of Coral Reef Injury in the Hawaiian Islands with Unmanned Aerial Systems	O'CONNER	USA	1	50
10:00-10:30		Sensing (2)		Identification Algorithm for Light- fishing Vessels using NPP/VIIRS Nighttime Light Data	CHENG	China	17	51
10:30-11:00				Health breaks				
11:00-11:30				Analysis of dependence of Flying squid (Ommastrephes bartrami) on marine environmental conditions in the Northwestern Pacific	LIU	China	26	52
11:30-12:00	Oral presentation	Habitats (3)	HSU (Taiwan) (10)	Spatial associations between juvenile sand lances and environmental factors in Sendai Bay, Japan	OGAWA	Japan	29	53
12:00-12:30				Analysis on spatial non-stationary relationships between Ommastrephes bartramii distribution and environmental factors in North-West Pacific Ocean	CUI	China	16	54-55
12:30-14:00			(for Poster	Lunch and PC demo presenters. Please set-up o	luring the lu	nch time)		
14:00-14:30		/		Reconstructing migration route of Electrona carlsbergi based on otolith microchemistry analysis	WEI	China	18	56
14:30-15:00	Oral presentation	Habitats (3)	ZHU (China) (23)	Spatial distribution of fishing ground for Antarctic krill fishery in the northern South Shetland Islands based on GWR model	CHEN	China	22	57
15:00-15:30				Study of habitat suitability index for fishing ground of Pacific saury (Cololabis saira) based on Yield Density model and weight analysis	HUA	China	20	60
15:30-16:00				Health breaks				
16:00-17:30	Poster and PC demo	Poste		ance hall) and PC demo (2) (Plenary room is should be at-site for explanations/dem			& tea	a)
17:45			Shuttle bus s	ervice (Venue==>Hakodate Japan Railway	y Station)			

PROGRAM (DAY 3) (Aug. 23)

	Day 3: August 23 (Wednesday)								
				Photographer : NAGONOBU (15)					
				Time Keeper: CHEN (22)					
			,	Microphone distributor: WEI (18)					
Time	Type of presentation	Subject	Moderator	Title	Presenter	Country	Reg. no	Abstract page #	
08:00				ered bus stop see page 29, Hakodate Japan Railw exactly at 8AM. If you miss the bus, please		Venue)			
09:00-09:30				Spatial analysis in distribution of krill swarm and krill fishery	ZHU	China	23	58	
09:30-10:00	Oral presentation	Habitat (modeling) (3)	SONG (China) (46)	Modelling of Black Sea bream Habitat Using Remote Sensing, GIS and Fishery Dynamic in the Coastal Waters of Taiwan	TENG	Taiwan	38	61-62	
10:00-10:30				An integrated habitat index for albacore tuna (Thunnus alalunga) in waters near the Cook Islands based on the support vector machine method	SONG	China	46	63	
10:30-11:00				Health breaks					
11:00-11:30				Dynamic changes of coastal ecosystems in Sanriku Coast after the hit of huge tsunami in 2011	KOMATSU	Japan	37	64-65	Posters kept in the
11:30-12:00	Oral presentation	Ecosystem /Environment	KOMATSU (Japan) (37)	Characterization and spatial distribution of the sea floor debris in the Moroccan marine environment	LOULAD	Morocco	55	66-67	entrance hall for
12:00-12:30	•			Integrated Approach on Environmental Ecosystem of Fisheries in the Ecuadorian Sea using Marine GIS (1) Introduction of Marine Explorer GIS for Small Pelagic Fishery	NAGANOBU	Ecuador	15	68-69	viewers
12:30-14:00				Group Photo==>Lunch					
14:00-14:30				Detection and analysis of fishery resources based on DIDSON	CHEN	China	40	70	
14:30-15:00	Oral presentation	Resource analyses / Predictions	TAYLOR (USA) (32)	Recent projects using the HABCAM V3 towed instrument for scallop (Placopecten Magellanicus) stock assessment and ecosystem description within the Northeast Region of the U.S. east coast	TAYLOR	USA	32	71-72	
15:00-15:30				Predicting the impact of climate change on anchovy (Engraulis ringens) off central-south Chile	SILVA	Chile	8	73	
15:30-16:00				Health breaks					Poster dismantle
16:00-16:30				A marine spatial plan for the Near Eastern Gulf waters	MEADEN	UK	2	74	
16:30-17:00	Oral	Marine Spatial	YAMANAKA	Use of the GIS and Species distribution modelling after the 3.11 earthquake Tohoku, Japan	YAMAKITA	Japan	13	75	
17:00-17:30	presentation	Planning(3)	(Canada) (35)	Yelloweye (Sebastes ruberrimus) and Quillback Rockfish (S. maliger) presence and abundance in association with benthic habitat parameters in the Strait of Georgia, British Columbia, Canada	YAMANAKA	Canada	35	76	
17:45-21:00			S	ymposium Dinner at Mt Hakodate (\ See next page for detail:		ed)			

[SYMPOSIUM DINNER AT THE TOP OF MT HAKODATE (YOU ARE INVITED)]



SCHEDULE AND DINNER INFORMATION

- 17:45 Free Shuttle Bus (LEAVE THE MEETING VENUE)
- **18:15** Arrive at the Legato Restaurant
- **18:30** START DINNER

MENU (AVAILABLE IN ENGLISH) (YOU CAN DRINK AND EAT ALL YOU WANT)

SOFT DRINKS

ALCOHOL (WINE, LOCAL BEER, SPIRITS AND OTHERS) (UNLIMITED!)
BUFFET STYLE (HALAL)

HORS D'OEUVRE, APPETIZER, VEGETABLES AND OTHERS

MAIN (VEGETARIAN FOODS, PASTA, SEA FOODS, BEEF, RICE AND OTHERS)

DESERTS

COFFEE, GREEN + BLACK TEA,

- 20:30 END OF DINNER
- LEAVE FOR HAKODATE JR (JAPAN RAILWAY) STATION
- 21:00 ARRIVE AT HAKODATE JR STATION

PROGRAM (DAY 4) (Aug. 24)

	Day 4: August 24 (Thursday)							
				Photographer : NAGONOBU (15)				
	Time Keeper: LOULAD (55)							
				Microphone distributor: CHEN (2)				
Time	Type of presentation	Subject	Moderator	Title	Presenter	Country	Reg. no	Abstract page #
08:00		Shuttle b		rtered bus stop: see page 29, Hakodate Japan Raih ve exactly at 8AM. If you miss the bus, pleaso		Venue)		
09:00-09:30		Mariculture (1)		Restocking the cobia, Rachycentron canadum, on the coast of Rio Grande do Norte in northeast Brazil	NOBREGA	Brazil	54	78
09:30-10:00	Oral presentation	Artificial reef (1)	WILKINSON (South Africa)	Spatial analysis of artificial reefs	SHEN	China	52	79
10:00-10:30		Fisheries management (1)	Ameay	The potential impacts of South Africa's demersal hake trawl fishery on benthic habitats: spatial analyses and potential management actions	WILKINSON	South Africa	12	80
10:30-11:00				Coffee breaks				
11:00-11:30				Impacts of mapmaking decisions on marine habitat maps and their implications for fisheries management	DEVILLERS	Canada	11	81-82
11:30-12:00	Oral presentation	Fisheries Management (3)	MONTES (USA) (30)	Operating characteristics of the Taiwanese seine fishery in waters off northeastern Taiwan as inferred from Voyage Data Recorder	u	Taiwan	14	83-84
12:00-12:30				Distribution and overlap of right whales and recreational vessel in the southeastern United States	Montes	USA	30	85
12:30-14:00								
				Lulicii				
		Ch	air	Sessions to review	Ra	apporteur		
	Wrap-up session Chair(s) will review	Ch SONG (46) + ZHU (23)	air China		O'CONNER	usa USA	1	
	Chair(s) will review relevant papers in assigned Sessions, make a summary and present by PowerPoint for 15	SONG (46) +		Sessions to review Habitat (modelling) (Oral :9+Poster: 2+			1 32	
14:00-15:30	Chair(s) will review relevant papers in assigned Sessions, make a summary and present by	SONG (46) + ZHU (23) KOMATSU	China	Sessions to review Habitat (modelling) (Oral :9+Poster: 2+ Oral/Poster:1) (Total 12 papers) Environment/Ecosystem(Oral:3+ Poster: 2)(5) and Resources analyses/Prediction (Oral:2+Poster: 1+Oral/PC demo:1)(4)	O'CONNER	USA		
14:00-15:30	Chair(s) will review relevant papers in assigned Sessions, make a summary and present by PowerPoint for 15 minutes and discuss with participants for 10 minutes. Please submit the abstract to the Secretary by September 1.	SONG (46) + ZHU (23) KOMATSU (37)	China Japan	Sessions to review Habitat (modelling) (Oral :9+Poster: 2+Oral/Poster:1) (Total 12 papers) Environment/Ecosystem(Oral:3+ Poster: 2)(5) and Resources analyses/Prediction (Oral:2+Poster: 1+Oral/PC demo:1)(4) (Total 9 papers) Remote Sensing (Oral/Poster:2+Poster:1)(3)+Marine Spatial Planning (Oral :2+ Oral/Poster:1) (3)+Mariculture (Oral:1) (1)+Artificial reef (Oral:1) + Aquaculture (Poster:1) (1)	O'CONNER TAYLOR	USA	32	
14:00-15:30	Chair(s) will review relevant papers in assigned Sessions, make a summary and present by PowerPoint for 15 minutes and discuss with participants for10 minutes. Please submit the abstract to the Secretary by September 1. Rapporteur make notes on discussion and submit to Secretariat by September 1, which will be included in the	SONG (46) + ZHU (23) KOMATSU (37) MEADEN (2)	China Japan UK	Sessions to review Habitat (modelling) (Oral :9+Poster: 2+Oral/Poster:1) (Total 12 papers) Environment/Ecosystem(Oral:3+ Poster: 2)(5) and Resources analyses/Prediction (Oral:2+Poster: 1+Oral/PC demo:1)(4) (Total 9 papers) Remote Sensing (Oral/Poster:2+Poster:1)(3)+Marine Spatial Planning (Oral :2+ Oral/Poster:1) (3)+Mariculture (Oral:1) (1)+Artificial reef (Oral:1)+Aquaculture (Poster:1) (1) (Total 9 papers) Fishers management (Oral:4+ Poster: 2) (6) +System(data process)(Oral:3)(3) + Software(Oral/PC demo:1) (1)	O'CONNER TAYLOR YAMANAKA	USA USA Canada	32	
	Chair(s) will review relevant papers in assigned Sessions, make a summary and present by PowerPoint for 15 minutes and discuss with participants for10 minutes. Please submit the abstract to the Secretary by September 1. Rapporteur make notes on discussion and submit to Secretariat by September 1, which will be included in the Proceedings.	SONG (46) + ZHU (23) KOMATSU (37) MEADEN (2)	China Japan UK	Sessions to review Habitat (modelling) (Oral :9+Poster: 2+Oral/Poster:1) (Total 12 papers) Environment/Ecosystem(Oral:3+ Poster: 2)(5) and Resources analyses/Prediction (Oral:2+Poster: 1+Oral/PC demo:1)(4) (Total 9 papers) Remote Sensing (Oral/Poster:2+Poster:1)(3)+Marine Spatial Planning (Oral :2+ Oral/Poster:1) (3)+Mariculture (Oral:1) (1)+Artificial reef (Oral:1)+Aquaculture (Poster:1) (1) (Total 9 papers) Fishers management (Oral:4+ Poster: 2) (6) +System(data process)(Oral:3)(3) + Software(Oral/PC demo:1) (1) (Total 10 papers)	O'CONNER TAYLOR YAMANAKA WIKINSON	USA USA Canada	32	
15:30-16:00	Chair(s) will review relevant papers in assigned Sessions, make a summary and present by PowerPoint for 15 minutes and discuss with participants for10 minutes. Please submit the abstract to the Secretary by September 1. Rapporteur make notes on discussion and submit to Secretariat by September 1, which will be included in the Proceedings.	SONG (46) + ZHU (23) KOMATSU (37) MEADEN (2) DEVILLERS (11)	China Japan UK	Sessions to review Habitat (modelling) (Oral :9+Poster: 2+Oral/Poster:1) (Total 12 papers) Environment/Ecosystem(Oral:3+ Poster: 2)(5) and Resources analyses/Prediction (Oral:2+Poster: 1+Oral/PC demo:1)(4) (Total 9 papers) Remote Sensing (Oral/Poster:2+Poster:1)(3)+Marine Spatial Planning (Oral :2+ Oral/Poster:1) (3)+Mariculture (Oral:1) (1)+Artificial reef (Oral:1)+Aquaculture (Poster:1) (1) (Total 9 papers) Fishers management (Oral:4+ Poster: 2) (6) +System(data process)(Oral:3)(3) + Software(Oral/PC demo:1) (1) (Total 10 papers) Health breaks	O'CONNER TAYLOR YAMANAKA WIKINSON	USA USA Canada South	35	

[WRAP-UP SESSION]

CHAIR(S) WILL REVIEW RELEVANT PAPERS IN ASSIGNED SESSIONS, MAKE A SUMMARY AND PRESENT BY POWERPOINT FOR 15 MINUTES AND DISCUSS WITH PARTICIPANTS FOR 10 MINUTES.

CHAIRS ARE REQUESTED TO SUBMIT THE ABSTRACT TO THE SECRETARY BY SEPTEMBER 1.

RAPPORTEURS MAKE NOTES ON DISCUSSION AND ARE REQUESTED TO SUBMIT TO SECRETARIAT

BY SEPTEMBER 1. THEY WILL BE INCLUDED IN THE PROCEEDINGS.

Ch	air	Sessions to review	Ra	pporteur	
SONG (46) + ZHU (23)	China	Habitat (modelling) (Oral :9+Poster: 2+ Oral/Poster:1) (Total 12 papers)	O'CONNER	USA	1
KOMATSU (37)	Japan	Environment/Ecosystem(Oral:3+ Poster: 2)(5) and Resources analyses/Prediction (Oral:2+Poster: 1+Oral/PC demo:1)(4) (Total 9 papers)	TAYLOR	USA	32
MEADEN (2)	UK	Remote Sensing (Oral/Poster:2+Poster:1)(3)+ Marine Spatial Planning (Oral :2+ Oral/Poster:1) (3)+ Mariculture (Oral:1) (1)+ Artificial reef (Oral :1) + Aquaculture (Poster:1) (1) (Total 9 papers)	YAMANAKA	Canada	35
DEVILLERS (11)	Canada	Fishers management (Oral:4+ Poster: 2) (6) +System(data process)(Oral:3)(3) + Software(Oral/PC demo:1) (1) (Total 10 papers)	WIKINSON	South Africa	12

PROGRAM (Day 5) (Aug. 25) (Excursion) (YOU ARE INVITED)

25-Aug Friday

Course 1
Hakodate City Tour
3 hours
(09:00-12:00)

Course 2
Visit to the local fishing villages (suburb of Hakodate city)
4 hours
(12:00-16:00)

Course 3
Visit, interaction and Receptions (Dr Tojo's Lab, Faculty of Fisheries, Hokkaido University)
4 hours
(16:00-20:00)

Note of the Excursion (You are invited)

There are 3 Courses as shown left. You can choose any of 3 Courses, i.e., you can choose all of three (11 hours which may be too much, but OK if you like and if you have enough energy), just one of three, or Course 1 and 3, etc. (any combinations are fine).

Bus starts and comes back: chartered bus stop (see page 28), Hakodate Japan Railway (JR) Station at 9:00 (start course 1), 12:00 (end of course 1 and start course 2), 16:00 (end of course 2 and start course 3) and 20:00 (end of Course 3) for you to get-in and get off. Please manage your lunch yourself.

Please note that in Course 3, Dr Tojo (Faculty of Fisheries, Hokkaido University) invites us to his LAB. Dr Tojo has been the frequent participant in our past Symposia. For this time, he cannot attend the Symposium as he has the training program in his Lab. But he kindly invites us to show the Campus and provides the interaction with his trainees from various countries to discuss GIS, spatial analyses, fisheries managements and other relevant topics we are interesting.

He also invites to us a reception on Campus (typical university students-like party).

HAKODATE CITY TOUR (COURSE 1) (09:00-12:00, Aug., 25)

Courtesy by English Guide: Ms Keiko ICHINEI

Please note the itinerary below is tentative, so it can be changed depending on your preference and the traffic, weather and other conditions in August 25, 2017.

9:00 Meet at JR Hakodate Station (Chartered bus stop, see page 28).

9:15 Arrive at Goryokaku (The first Western style Fortress in Japan) & Tower







Goryoukaku Park

Hakodate Magistrate Office

- 10:15 Leave for Motomachi Area
- 10:35 Higashihonganji Temple ⇒Catholic Church ⇒Russian Orthodox Church ⇒Old Public Hall⇒Old British Consulate ⇒Commodore Mathew Perry's statue

★ Motomachi Area







Higashihonganji Temple

Russian Orthodox Church

The Old Public Hall





Old Branch Office of the Hokkaido Government Office

Hachimanzaka Slope

1:15 ★Bay Area

Music Box Shop; Cheese cake sampling; My chopsticks; goods made of squid ink







Kanemori Warehouse

View from the top of Mt. Hakodate

12:00 JR Hakodate Station

★ Popular Food & Souvenirs:







Lucky Pierott Hamburger

Ramen

Katsudon (rice topped with fried pork cutlet)







Ikameshi

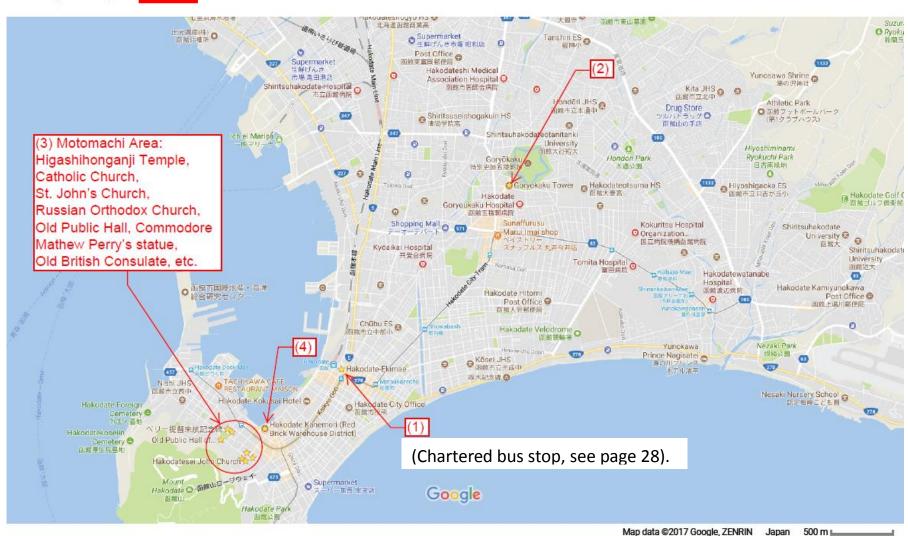
Shiroi Koibito

Marusei Butter Sand

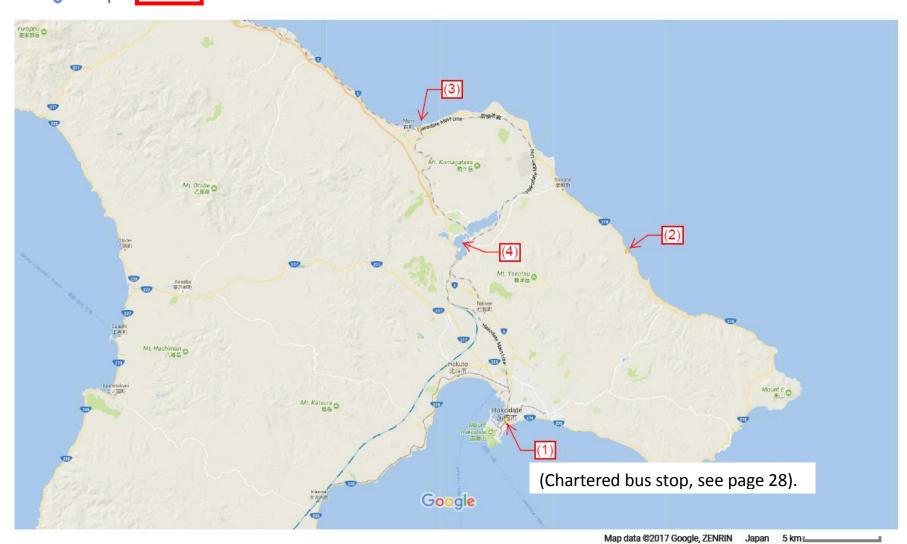
(squid stuffed with glutinous rice) (cookies with cream inside)

I put pictures so that you can take a glimpse of what you are supposed to see in Hakodate.

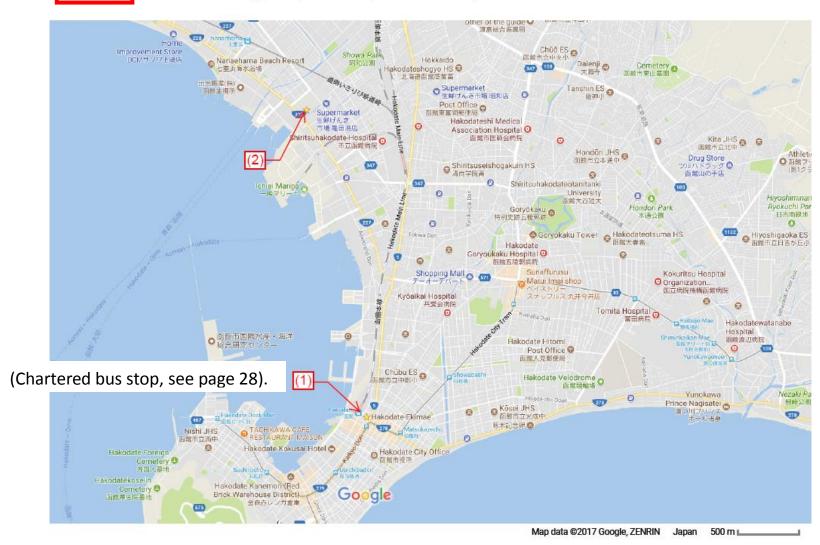
Google Maps Course 1 (1) JR Hakodate Station - (2) Goryokaku Park/Tower - (3) Motomachi Area - (4) Kanamori Red Brick Warehouse



Google Maps Course 2: (1) JR Hakodate Station - (2) Minami Kayabe Fishery Assoc., Oofuna Branch - (3) Mori Fishery Assoc. (4) Lake Onuma



Course 3: (1) IR Hakodate Station - (2) Faculty of Fisheries, Hokkaido University



PRESENTATION

[SUMMARY OF PRESENTATIONS]

		ary of present			
Registration No.	LAST name	country	Oral	Poster	PC Demo
1	O'CONNER	USA	1	1	
2	MEADEN	UK	1		
3	nwosu	Nigeria		2	
7	ZHANG	China	1		
8	SILVA	Chile	1		
9	YÁÑEZ	Chile		1	
10	HSU	Taiwan	1		
11	DEVILLERS	Canada	2		
12	WILKINSON	South Africa	1		
13	YAMAKITA	Japan	1		
14	LI	Taiwan	1		
15	NAGANOBU	Ecuador	1		
16	CUI	China	1	1	
17	CHENG	China	1	1	
18	WEI	China	1		
19	ZHANG	China		1	
20	HUA	China	1		
22	CHEN	China	1		
23	ZHU (Guo-ping)	China	1		
24	CHEN (Jintao)	China		1	
25	TOMIYASU	Japan		1	
26	LIU	China	1		
29	OGAWA	Japan	1		
30	MONTES	USA	1		
32	TAYLOR	USA	1		1
35	YAMANAKA	Canada	1	1	
37	KOMATSU	Japan	1		
38	TENG	Taiwan	1		
39	ZHU (Qingcheng)	China		1	
40	CHEN (Ming)	China	1		
41	ітон	Japan	1		1
46	SONG	China	1		
52	SHEN	China	1		
55	LOULAD	Morocco	1		
	1		_		
		TOTAL	29	11	2
	1	. OIAL		l **	_

LIST OF ORAL PRESENTATIONS

Subject	Title	Presenter	Country	Registration number	Sbstract page #
	Fishing vessel data mining based on Beidou satellite navigation system	Shengmao ZHANG	China	7	42
System (data processing)	Crowdsourcing fisheries information: The Information System on Small-Scale Fisheries (ISSF)	Rodolphe DEVILLERS	Canada	11	43-44
	Filtering Regions of Interest via Crowdsourcing of Voyage Data Recorder Trajectories	William W.Y. HSU	Taiwan	10	45-46
Software	Marine GIS (Marine Explorer) software: 20 years' developments, and recent applications	Kiyoshi ITOH	Japan	41	48-49
Remote sensing	Mapping and Analysis of Coral Reef Injury in the Hawaiian Islands with Unmanned Aerial Systems	Robert O'CONNER	USA	1	50
nemote sensing	Identification Algorithm for Light-fishing Vessels using NPP/VIIRS Nighttime Light Data	Tianfei CHENG	China	17	51
	Analysis of dependence of Flying squid (<i>Ommastrephes</i> bartrami) on marine environmental conditions in the Northwestern Pacific	Yu LIU	China	26	52
	Spatial associations between juvenile sand lances and environmental factors in Sendai Bay, Japan	Masahiro OGAWA	Japan	29	53
Habitat	Analysis on spatial non-stationary relationships between Ommastrephes bartramii distribution and environmental factors in North-West Pacific Ocean	Xuesen CUI	China	16	54-55
	Reconstructing migration route of Electrona carlsbergi based on otolith microchemistry analysis	Lian WEI	China	18	56
	Spatial distribution of fishing ground for Antarctic krill fishery in the northern South Shetland Islands based on GWR model	Lvfeng CHEN	China	22	57
	Spatial analysis in distribution of krill swarm and krill fishery	Guo-ping ZHU	China	23	58
	Study of habitat suitability index for fishing ground of Pacific saury (<i>Cololabis saira</i>) based on Yield Density model and weight analysis	Chuanxiang HUA	China	20	60
Habitat (modelling)	Modelling of Black Sea bream Habitat Using Remote Sensing, GIS and Fishery Dynamic in the Coastal Waters of Taiwan	Sheng-Yuan TENG	Taiwan	38	61-62
	An integrated habitat index for albacore tuna (<i>Thunnus</i> alalunga) in waters near the Cook Islands based on the support vector machine method	Liming SONG	China	46	63
	Dynamic changes of coastal ecosystems in Sanriku Coast after the hit of huge tsunami in 2011	Teruhisa KOMATSU	Japan	37	64-65
Ecosystem/Environment	Characterization and spatial distribution of the sea floor debris in the Moroccan marine environment	Safia LOULAD	Morocco	55	66-67
	Integrated Approach on Environmental Ecosystem of Fisheries in the Ecuadorian Sea using Marine GIS (1) Introduction of Marine Explorer GIS for Small Pelagic Fishery	Mikio NAGANOBU	Ecuador	15	68-69
	Detection and analysis of fishery resources based on DIDSON	Ming CHEN	China	40	70
Resource analyses (Predictions)	Recent projects using the HABCAM V3 towed instrument for scallop (<i>Placopecten Magellanicus</i>) stock assessment and ecosystem description within the Northeast Region of the U.S. east coast	Richard R. TAYLOR	USA	32	71-72
	Predicting the impact of climate change on anchovy (Engraulis ringens) off central-south Chile	Claudio SILVA	Chile	8	73
	A marine spatial plan for the Near Eastern Gulf waters	Geoff MEADEN	UK	2	74
Marine spatial planning	Use of the GIS and Species distribution modelling after the 3.11 earthquake Tohoku, Japan	Takehisa YAMAKITA	Japan	13	75
	Yelloweye (Sebastes ruberrimus) and Quillback Rockfish (S. maliger) presence and abundance in association with benthic habitat parameters in the Strait of Georgia, British Columbia, Canada	K. Lynne YAMANAKA	Canada	35	76
Mariculture	Restocking the cobia, Rachycentron canadum, on the coast of Rio Grande do Norte in northeast Brazil	Marcelo Francisco de NÓBREGA	Brazil	54	78
Artificial reef	Spatial analysis of artificial reefs	Wei SHEN	China	52	79
	The potential impacts of South Africa's demersal hake trawl fishery on benthic habitats: spatial analyses and potential management actions	Sarah WILKINSON	South Africa	12	80
	Impacts of mapmaking decisions on marine habitat maps and their implications for fisheries management	Rodolphe DEVILLERS	Canada	11	81-82
Fisheries management	Operating characteristics of the Taiwanese seine fishery in waters off northeastern Taiwan as inferred from Voyage Data Recorder	Yi-Jou Ll	Taiwan	14	83-84
	Distribution and overlap of right whales and recreational vessel in the southeastern United States	Nancy MONTES	USA	30	85

[LIST OF PC DEMO AND POSTER PRESENTATIONS]

Registration no	Presenter	Subject	Title	Country	Abstract page #
PC demos					
32	TAYLOR	Resource analyses	Recent projects using the HABCAM V3 towed instrument for scallop (Placopecten magellanicus) stock assessment and ecosystem description within the Northeast Region of the US east coast (same as Oral)	USA	89-90
41	ІТОН	Software	Marine GIS for the fishermen on small boats (same as Oral)	Japan	91-92
		P	osters		
17	CHENG		Identification Algorithm for Light-fishing Vessels using NPP/VIIRS Nighttime Light Data (same as Oral)	China	93
1	O'CONNER	Remote sensing	Mapping and Analysis of Coral Reef Injury in the Hawaiian Islands with Unmanned Aerial Systems (same as Oral)	USA	94
54	NOBREGA		Bathymetric mapping using data generated by echo sounders of boats of the artisanal fishing fleet on the continental shelf of Rio Grande do Norte, Northeast Brazil	Brazil	95-96
24	CHEN		Spatial-temporal variation on Antarctic krill fishing ground in the northern Antarctic Peninsula based on point patterns model	China	97-98
25	TOMIYASU	Habitat	3-dimensional migration dynamics of Pacific herring Clupea pallasii from pre- to post-spawning in a coastal spawning ground	Japan	99
16	CUI		Analysis on spatial non-stationary relationships between Ommastrephes bartramii distribution and environmental factors in North-West Pacific Ocean (same as Oral)	China	100-101
9	YÁÑEZ		Climate change and pelagic fisheries in Chile (CLIPESCA)	Chile	102
19	ZHANG	Environment/Ecosystem	The impact of oceanographic environment factors on the Pacific saury (Cololnbis saira) fishing ground in the high seas of northwestern Pacific Ocean in summer	China	103
39	ZHU	Resource analyses	Comparative analysis on CPUE standardization of Chinese Pacific saury (Cololabis saira) fishery based on GLM and GAM	China	104
35	YAMANAKA	Marine Spatial Planning	Yelloweye (Sebastes ruberrimus) and Quillback Rockfish (S. maliger) presence and abundance in association with benthic habitat parameters in the Strait of Georgia, British Columbia, Canada (same as Oral)	Canada	105
54	NOBREGA	Fisheries management	Use of global positioning system equipment to identify the areas of operation of the artisanal fishing fleet of Rio Grande do Norte, Northeast Brazil	Brazil	106-107
3	NWOSU		Socioeconomic and sociocultural considerations for the management of the artisanal fisheries of the cross River	Nigeria	108
3	NWOSII	Aquaculture	Status and spatial distribution of urban, peri-urban and rural aquaculture in Cross River State, Nigeria and the implications for artisanal fisheries	Nigeria	109

[NOTICE FOR ORAL PRESENTERS]

You have 30 minutes including your talk and Q&A. We suggest that you present for 20-25 minutes and save 5-10 minutes for Q&A. The total must be 30 minutes or less. Time keeper will make ONE RING in 20 minutes, TWO RINGS in 25 minutes and MANY RINGS in 30 minutes, then the Moderator will stop your presentation and Q&A.

Notice of time lapse

	ONE	20
	Ring	minutes
_\ = _ \ = _ \ =	TWO	25
	Rings	minutes
	MANY	30 minutes
	Rings	(STOP!)

We prepare one common laptop PC (Windows 7 and PowerPoint) at the podium for oral presentations. Please install your PowerPoint files in advance before the plenary starts, during coffee breaks or lunch time.

[NOTICE FOR PC DEMONSTRATORS]

- Set up: You need to set up your PC at the rear end of the plenary room (refer to page 14) during the lunch time (Aug 22, Tuesday). We will provide Tables, chairs and AC powers (100 V) with 50Hz (frequency).
- Only one PC demo Session will take place from 16:00-17:30, Aug 22 (Tuesday). You must be at your site for demonstration and Q&A. You need to clean up your PC and others after 17:30.

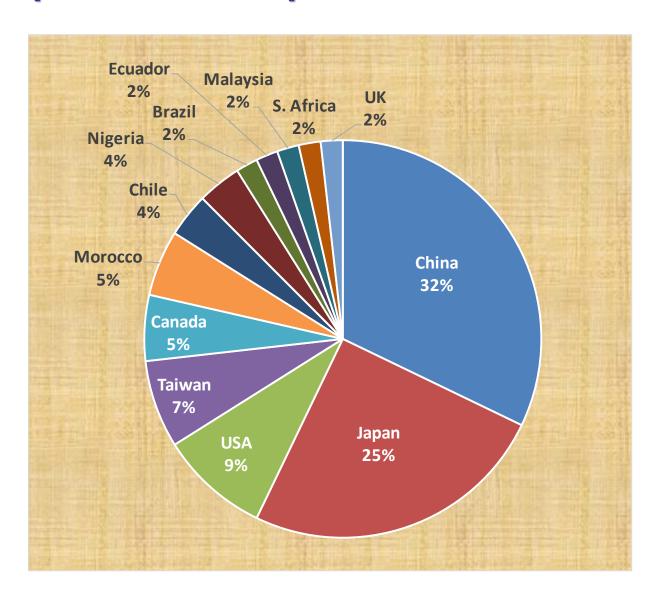
[NOTICE FOR POSTER PRESENTERS]

- Poster size is A0 (width 841 mm x height 1,189mm) (Portray)
- We will provide poster stands and sticking materials such as push-pins, tapes etc.
- Set up: You need to set up your poster at the Entrance hall (refer to pages 3 and 14) during the lunch time (Aug 22, Tuesday).
- The poster session will take place two times as follows:
 - ➤ 16:00-17:30, Aug 22 (Tuesday). You must be at your poster for explanations and Q&A.
 - > 09:00-15:30, Aug 23 (Wednesday) for viewers. You don't need to be at site of your poster.
- Dismantle: You need to dismantle your poster during the tea brake (15:30-16:00), Aug.
 23 (Wednesday).

[SET-UP AND DISMANTLE SCHEDULE FOR POSTER AND PC DEMO SESSIONS]

Set-up and Dismantle schedule for Poster and PC demo Sessions						
Aug 22	12:30-14:00 (lunch)	Poster + PC demo set up				
(Tue)	17:30	Dismantle PC demo equipment				
Aug 24 (Wed)	15:30-16:00 (tea break)	Dismantle Posters				

[PARTICIPANTS BY COUNTRY]



(Note) Nigerian colleague cancelled his participation.

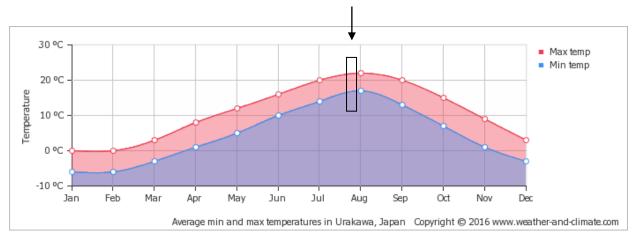
LOGISTICS

[WORKING STAFF]

(xx): Registration number

) Conveners	Receptionist and interpreter	Symposium assistant	Photographer	Helpers (Oral presentations) (Aug 21-24) and Guides (Excursion) (Aug 25)			
Date	(Aug)					Time keeper	Microphone distributor	Special Note	
21	Mon		(44) and SATO (45)	KIMURA (43)	KIMURA (43)	NISHIDA (44)	LOULAD (55)		
22	Tue	NISHIDA (44) and ITOH (41)				WEI (18)	LOULAD (55)	WEI (18) make an oral presentation (14:00-14:30). For this period, NISHIDA (44) will do the time keeper.	
23	Wed				NAGANOBU (15)	CHEN (22)	WEI (18)		
24	Thu					LOULAD (55)	CHEN (22)		
		Excursion (for details, see page 11-16)	Course 1: City tour		not available	Ms ICHINEI (Guide in English)			
25	Fri		Course 2: Visit to fishing villages		NAGANOBU (15)	NAKAO (57) + NISHIDA (44)+ SATO (45)			
			Course 3: Visit to Hokkaido University			TOJO (60) + NISHIDA (44)+ SATO (45)			

[AVERAGE TEMPERATURE DURING THE SYMPOSIUM]



PLEASE WELL NOTE THAT WE MAY EXPECT MUCH LOWER OR HIGHER TEMPERATURE.

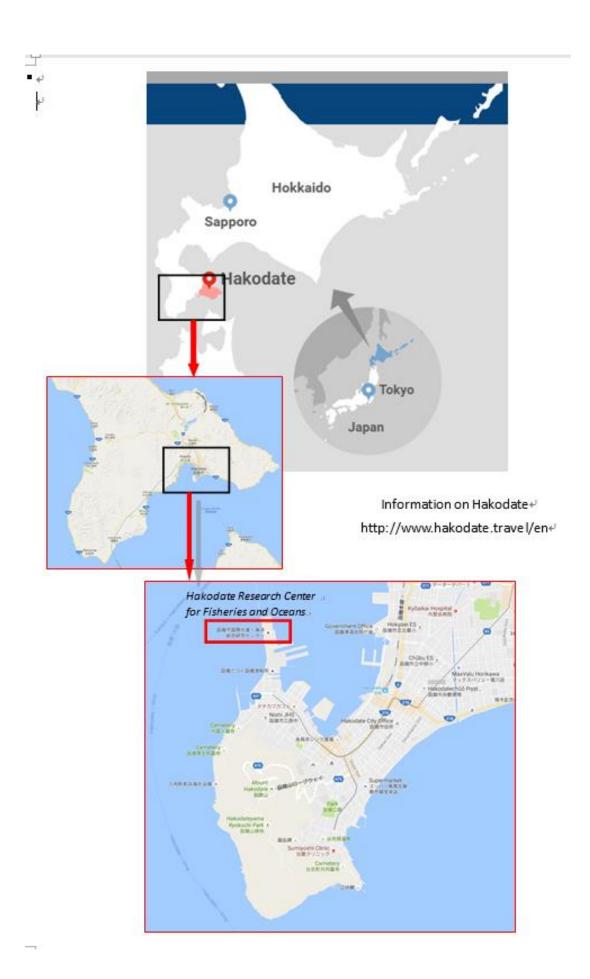
CHECK IT BEFORE YOU COME.

[MEETING VENUE]

HAKODATE RESEARCH CENTER FOR FISHERIES AND OCEANS





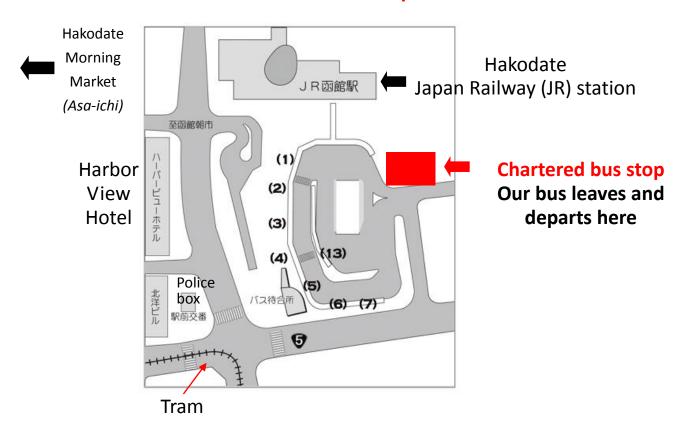


[How to get to the Meeting Venue: 2 ways]

(1) FREE SHUTTLE BUS SERVICE

Free shuttle bus service between chartered bus stop, Hakodate Japan Railway (JR) Station and the meeting venue (HAKODATE RESEARCH CENTER FOR FISHERIES AND OCEANS) and for dinner							
	August						
	21	22	23	24	25		
	Monday	Tuesday	Wednesday	Thursday	Friday		
Departure to the meeting venue: leave at chartered bus stop, Hakodate Japan Railway (JR) Station Bus will leave exactly 13:00 (Aug 21) and 08:00(Aug 22-24). If you miss the bus, please use a taxi.	13:00		Excursions (see pages 11-16 for details)				
Departure from the meeting venue to charterd bus stop, Hakodate Japan Railway (JR) Station	17:45			17:45==> 21:00 Shuttle bus will be provided for dinner (see page 8 for details)			

Chartered bus stop





Free shuttle bus route between Japan Railway (JR) Hakodate Station (Chartered bus stop) and the meeting venue (Hakodate Research Center for Fisheries and Oceans)

(2) TAXI

From Japan Railway (JR) Hakodate Station to Hakodate Research Center for Fisheries and Oceans

Average 1,600 yen (US\$ 15) depending on the traffic situation if you share with 4 persons, it will be 400 yen (US\$4)/person.

Please cut the message (below) for the taxi driver to get the meeting venue and then put it in your wallet (including the emergency call to our Secretary: Ms. Jun Sato)

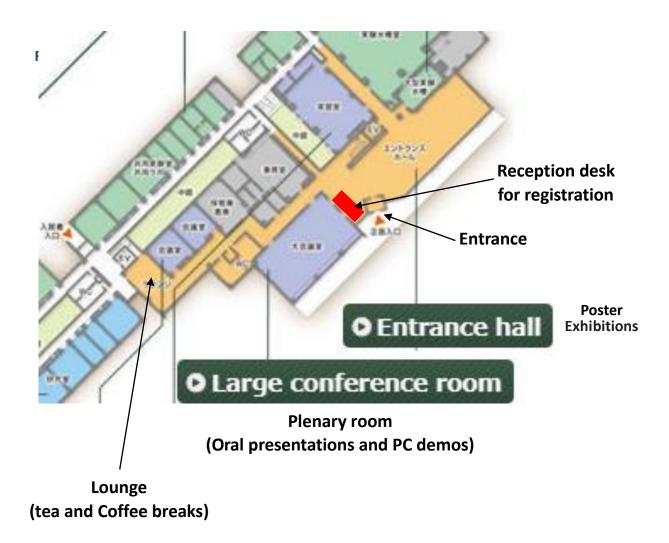


BLANK PAGE FOR CUT FOR TAXI DRIVER (PAGE 29)

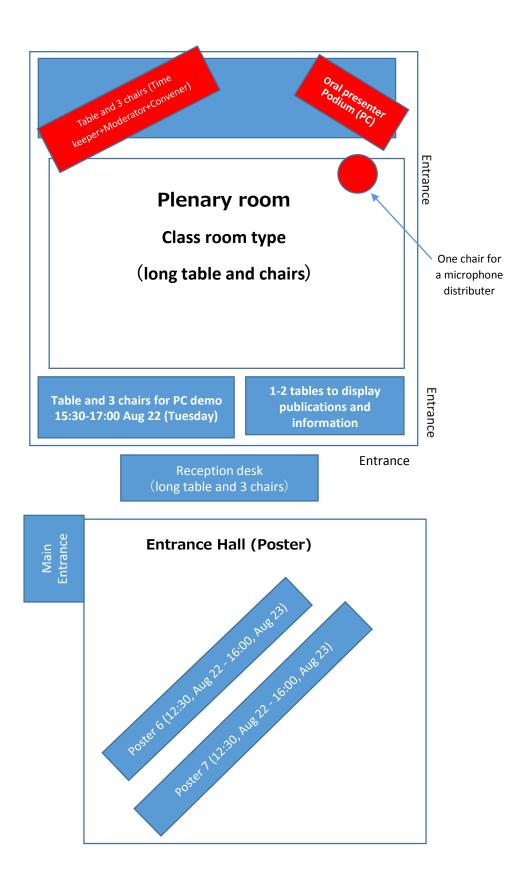
[REGISTRATION]

When you arrive at the meeting venue, <u>first please do your registration at the reception</u> <u>desk</u> (see below) (next to the meeting room and Ms. Jun Sato will help your registration). Follow steps below:

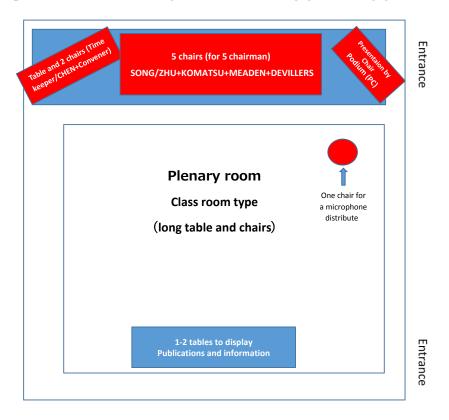
- Tell the receptionist (Ms Jun Sato) your last name and registration number;
- Pay the registration fee if you have not yet paid;
- We will check If you need free lunch, want to join dinner (Aug 23., Wed) (see page 8) and Excursion (see page 11-16 for details) and;
- Get one envelope including your nameplate, Abstract proceedings, Program and others.
- Please put your nameplate at all time (for ID and Security)



[Layout] Plenary room, Reception desk and Entrance Hall (Poster)



[LAYOUT] WRAP-UP SESSION (PLENARY ROOM) (AUG 24) (14:00-15:30)



[OFFICIAL LANGUAGE] ENGLISH

We use only English (Japanese, Chinese, American and any accent based English are OK) for communications, presentations, Q&A, Abstracts, formal papers and all the other matters relevant to the Symposium.

For Presenters and all participants (IMPORTANT)

Please speak slowly and clearly as 80% of participants are non-native English speakers

[DRESS CODE]

Smart casual: Not too formal, but not too casual (rough). Neckties and suites are not required unless you wish.

[AC POWER AND PLUG TYPE]

The voltage in Japan is 100 Volt and 50Hz (frequency), which is different from North America (120V), Central Europe (230V) and most other regions of the world. Japanese electrical plugs have two, non-polarized pins, as shown below (type A). They fit into North American outlets.



[FREE WI-FI]

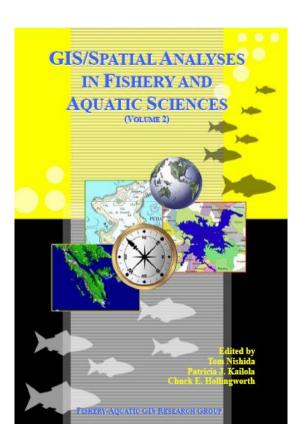
SSID: HRCFO (No Password). Please note that the internet café (extra PCs) are not available.

PUBLICATIONS

PUBLICATION OF PROCEEDINGS (CALL FOR FORMAL PAPER)

Those who make a presentation (oral, poster or PC demonstration) and who wish to submit a formal paper for the Symposium Proceedings, to be published by the International Fishery GIS Society as "GIS/SPATIAL ANALYSES IN FISHERY AND AQUATIC SCIENCES (VOLUME 7)", should send a full paper to the Secretariat of the International Fishery GIS Society at fish-gis@smile.odn.ne.jp by September 30, 2017.

Papers will be peer reviewed by two referees. If the paper is then accepted, it will be checked by professional editors before formal publication. The Proceedings will be published in 2018. "Guidelines" for the formal papers are available at http://www.esl.co.jp/Sympo/7th/Guideline_2017.pdf. If you are interested in the Proceedings of the past Symposia and other publication, please refer to the web site at http://www.esl.co.jp/Sympo/publication.pdf



SYMPOSIUM PROCEEDINGS
GIS/SPATIAL ANALYSES IN FISHERY AND AQUATIC SCIENCES (Vol. 2)
(SECOND SYMPOSIUM)

PUBLICATIONS FOR SALE:

HALF PRICE FROM THE NORMAL PRICE BELOW FOR 7TH SYMPOSIUM PARTICIPANTS (ORDER TO THE RECEPTIONIST: MS JUN SATO)

	(a)	(b)	(c)	(d)	(e) (special offer)	(f) (special offer)	
ltem	Abstract	Proceedings(*)	PowerPoints	Pictures	ALL:(a)-(d)	ALL :(a)-(d)	
iteiii	(Book)	(Book)	(DVD)	(DVD)	(Books + DVD)	(DVD)	
Drice (US¢ /item)	\$20	\$50	` '	•	\$80	\$80	
Price (US\$/item)			\$20	\$20	\$60	360	
(1) First Symposium	(1a)	(1b)		(1d)			
(National Marine Fisheries Service)							
(Seattle, USA) (1999)							
(2) Second Symposium	(2a)	(2b)	(2c)	(2d)	(2e)	(2f)	
(Canterbury Christ Church University)							
(Brighton, UK) (2002)							
(3) Third Symposium	(3a)	(3b)	(3c)	(3d)	(3e)	(3f)	
(Shanghai Fisheries University)							
(Shanghai, China) (2005)							
(4) Fourth Symposium	(4a)	(4b)	(4c)	(4d)	(4e)	(4f)	
(Universidade Santa Úrsula)	,		\ -7	(- /	(- /	, ,	
(Rio de Janeiro, Brazil) (2008)							
(5) Fifth Symposium	(5a)	(5b)	(5c)	(5d)	(5e)	(5f)	
(NIWA and SilverStripe)	(34)	(35)	(30)	(34)	(30)	(31)	
(Wellington, New Zealand) (2011)	(60)	(Ch)	(60)	(כא)	(60)	(Ct)	
(6) Sixth Symposium	(6a)	(6b)	(6c)	(6d)	(6e)	(6f)	
(University of Florida)							
(Tampa, Florida, USA) (2014)							
Special issue (2005)	(g) Application of GIS and Remote Sensing Technologies in Inland Fisheries Management and Planning in Asia (\$30)						

^(*) GIS/Spatial analyses in Fishery and Aquatic Sciences (Vol. 1-6)

- For surface/sea mail, it will take for 1-3 months to deliver and 1-2 weeks by air mail depending on the destination and the situations.
- For the contents of Abstracts and Proceedings, please refer to http://www.esl.co.jp/Sympo/cofpast/index.htm
- For book (Proceedings) reviews, please refer to http://www.esl.co.jp/Sympo/bookrev/index.htm

^{**)} For any purchase, the cost of Surface/Sea mail & handling fees is included.

^(***) For air mail (including the handling fee): add US\$ 20 for any amount the purchases.

JAPANESE DIRECTION TO THE MEETING VENUE TO A TAXI DRIVER (CUT AND KEEP IT IN YOUR WALLET)

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