# **Report for JSPS – FAPESP Joint Research Workshop FY2014**

Date April 15, 2015

# 1. Title of Workshop Biodiversity and Conservation of Continental Margin Ecosystems: from observation to management

URL

#### 2. Purpose of Workshop

Continental margin ecosystems (CMEs) are among the most diverse and rich ecosystems in the oceans. These areas are formed by many different habitats and are sustained by rich amounts of nutrients and food materials derived from both the land and the ocean. CMEs may be, on the other hand, quite stressed as a result of anthropogenic activities. We aim to study the mechanisms, indicators and the rich biodiversity of CMEs as well as develop observation and monitoring tools for these areas. Research results will be transferred from experts to young scientists through workshops in Japan and Brazil. During these, we plan to discuss basic theory and techniques on how to observe, monitor and compile marine biodiversity data for the sustainable management of marine biota.

#### 3. Period

From <u>March 25, 2015</u> through <u>March 27, 2015 (3 days)</u>

#### 4. Venue Shimoda Marine Research Center, University of Tsukuba, Shimoda City, Shizuoka Prefecture

#### 5. Organization

#### (1) Cosponsors

Japan Side	Japan Society for the Promotion of Science (JSPS)	
Japan Side	Japan Agency for Marine-Earth Science and Technology	
Brazil Side	São Paulo Research Foundation (FAPESP)	
DIAZII Slue	University of Sao Paulo	

#### (2) Coordinator

1) Japan side

Name in full Dr. Hiroshi Kitazato

 Affiliation and Position
 Director, Project Team for Analyses of Changes in East Japan

 Marine Ecosystems, JAMSTEC

 2) Brazil side

 Name in full
 Dr. Paulo Yukio Gomes Sumida

Affiliation and Position Associate Professor, Oceanographic Institute, University of São Paulo

# 6. Program: Agenda, Topics, Related Activities (e.g., Reception, Excursion) *Please append the agenda and the program to this report.*

# 7. Mentors and Participants

# 1) Number of Participants

	Lecturers	Participants	Total
Japan side	3	11	14
(Number who participated under program funding)	(3)	(9)	(12)
Brazil side	3	8	11
(Number who participated under program funding)	(3)	(7)	(10)
Other persons	0	0	0
(Number who participated under program funding)	(0)	(0)	(0)
Total	6	19	25
(Number who participated under program funding)	(6)	(16)	(22)

# 2) List

#### A: Mentors

Name in full	Position / Affiliation / Institution (Country of Affiliated Institution)	Specialty
-Japan side		
Katsunori Fujikura	Director, Japan Agency for Marine-Earth Science and Technology	Marine
		ecology
Kazuo Inaba	Director, Shimoda Marine Research Center, University of Tsukub	Cell
		biology
Koichi Ara	Associate Professor, Nihon University	Marine
		biology
-Brazil side		
Vivian H. Pellizari	Associate Professor, Oceanographic Institute, University of São	Marine
	Paulo	microbiology
Antonio C. Marques	Full Professor, Center for Marine Biology	Biodiversity
André C. Morandini	Associate Professor, Institute of Biosciences, University of São	Zoology
	Paulo	

**B**: Participants

Name in full	Position /Affiliation/ Institution (Country of Affiliated Institution)	Remarks		
-Japan side				
Yoshihiro Fujiwara	Deputy Director / Japan Agency for Marine-Earth Science and Technology			
Takashi Toyofuku	Senior Scientist / Japan Agency for Marine-Earth Science and Technology			
Takehisa Yamakita	Unit Leader / Japan Agency for Marine-Earth Science and Technology	*		
Ryota Nakajima	Postdoctoral Fellow / Japan Agency for Marine-Earth * Science and Technology			
Daisuke Shibata	<u>Researcher</u> / Shimoda Marine Research Center, * University of Tsukuba			
Sylvain Agostini	Assistant Professor/ Shimoda Marine Research Center, * University of Tsukuba			
Koetsu Kon	Assistant Professor/ Shimoda Marine Research Center, * University of Tsukuba			
Shigeki Wada	Assistant Professor/ Shimoda Marine Research Center, * University of Tsukuba			
Makiko Yorifuji	Lecturer / Tropical Biosphere Research Center, University of the Ryukyus	University *		
Yusuke Miyazaki	Postdoctoral Fellow / Kanagawa Prefectural Museum of * Natural History			
Shinpei Iwasaki	Lecturer / International College of Arts and Science, Fukuoka Women's University			
-Brazil side Adolpho Augustine	Professor/ CEPAC/PUCRS			
Karla Paresque	Paresque Postdoctoral Fellow / Biosciences Institute, Universit São Paulo			
Lucilia Miranda	lia Miranda PhD / Institute of Bioscience, University of São Paulo			
Marcelo Kitahara	Assistant Professor / Department of Marine Science, * Federal University of São Paulo			
Otto Oliveira	Professor / Federal University of ABC	*		
Paula Jimenez	Assistant Professor / Department of Marine Sciences - Federal University of São Paulo	*		
Paula Carpintero de Moraes	PhD/ Oceanographic Institute, University of São Paulo	*		
Sergio Stampar	Assistant Professor / Faculty of Sciences and Languages of Assis, São Paulo State University	*		
-Other Persons				

Place a check [\*] in the Remark Column for those who participated using JSPS and FAPESPs' workshop funding.

8. Please describe the achievements of the workshop.

The workshop was held both in the laboratory and also on board at Shimoda Marine research Center, University of Tsukuba. In the beginning, mentors and guest speakers from both countries gave lectures in terms of continental margin ecosystems of both countries from the points of views of marine biodiversity and ecosystems managements. All the participants had a good understanting of the background idea of the workshop. Then, we boarded on research boat "Tsukuba II" for collecting samples and bottom topographic data with Multi Narrow Beam Echo Sounder System. In addition to these field data, we added measurement tools of biodiversity with eukaryotes.

Using these biological and environmental dataset, participants learned and used marine GIS for habitat mapping. This provided a unique oportunity to young researchers from both countries to learn how to acquire and analyse in situ images and environmental data, to process and integrate ecological data to marine GIS for habitat mapping. During the habitat mapping practice, young scientists from both countries divided into four small groups, worked on mapping together and discussed how habitat mapping data may be used for ecosystem management. This procedure worked quite well for communicating each other. Last day, each group presented their own ideas on how habitat mapping may be used for marine biodiversity and marine management researches. All talks were unique. We, young scientists, mentors and co-ordinators had a lively discussion about this topic.

We managed to make a very successful workshop at Shimoda. We trust that all young scientists acquired fundamental knowledge on application techniques for sustainable management of continental margin ecosystems of the world oceans where diverse and rich marine resources are present. We are sure that all participants from both countries made an interesting collaborative network on marine biodiversity and ecosytem management researches. We hope that this workshop makes a tight and concrete bridge between both countries and promote new colaborations by young scientists.

We thank both agencies, FAPESP and JSPS, for giving us a chance to have this wonderful marine sciences workshop.

# JSPS-FAPESP Joint Research Workshop Questionnaire for the Participants

Workshop Title <u>Biodiversity and Conservation of Continental Margin Ecosystems;</u>

From observation to management"

### Part 1

Please let us know how you evaluate this workshop so that we can improve our workshops in the future. Circle the letter from A to E that matches closest your opinion.

The letters stand for the following:

- A = strongly agree
- B = agree

C = neutral

D = disagree

E = completely disagree

#### ■Organization of the workshop

-The time allotted to each part of the program was appropriate

A: 9 B: 5 C: 0	D: 0 E: 0
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#### -The lecture and laboratory components were effectively linked

A: 6 B: 4 C: 4	D: 0 E: 0
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-The size of the classes was optimal

A: 10 B: 4 C: 0 D: 0 E: 0
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## ■ Lectures

-Sufficient time was allocated for the lectures

A: 5 B: 8 C: 1 D: 0 E: 0
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-The lectures were useful in my research (interesting, stimulating and practical)

A:         11         B:         2         C:         1         D:         0         E:         0
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-The level of the lectures relative to my educational background and experience was optimal

A: 9 B: 3 C: 2 D:	0	E: 0
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#### ■ Discussions

-Sufficient time was allocated for the discussions

A :	7	B :	5	C :	2	D :	0	E :	0
-The d	iscussions we	re useful	in my resear	ch (intere	esting, stimul	ating and	l practical)		
A :	11	B :	3	C :	0	D :	0	E :	0
■Excu	rsion (if appli	cable)							
-The e	xcursion(s) wa	as well o	rganized						
A :	9	B :	2	C :	0	D :	0	E :	0

-The excursion(s) was educating and helpful for my research

A: 5 B: 3 C: 2 D: 0 E: 0
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#### ■Lecturers

-Lecturers gave equal treatment to all the participants

A: 12 B: 1 C: 0	D: 1 E: 0
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-Lecturers respected the ideas, opinions and comments of the participants

A:         12         B:         1         C:         1         D:         0         E:         0
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#### ■Overall

-I found my participation in the workshop to be meaningful

A: 13 B: 1 C:	0	D: 0	E: 0
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-I was able to create and expand working networks with other researchers

by participating in the workshop

A: 13 B: 1	C: 0	D: 0	E: 0
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#### Part 2

Please write your comments.

-The most successful aspect of this workshop:

- Could get good collaboration in future work
- Could get meaningful knowledge for my work to expand into another field
- We could share our researches, backgrounds and ways of scientific thinking
- Meet Japanese researchers and the possibility of collaboration
- The most successful aspect of this workshop was definitely the interaction with the other researchers and young investigators, both from Brazil and Japan, during the workshop hours and in informal opportunities. I find that moving away from the habitual way of working and thinking works up a scientist's creativity and the good ideas and insights come about.
- To interact with scientists from a different background and in other fields of study is very fruitful.
- The technique was obtained
- Data analysis and discussion
- The connection of the different stages of the research, from the field trip to the analysis of the data

-The least successful aspect of this workshop (if possible, suggestion for improvement):

- If possible, I would like to know how to cook row data for the analyses.
- It is important to apply the technique into my work
- The time allot for each speaker was not enough.
- Some I felt boring (too long)
- More "hand on" experience during research excursion
- Each participant could give a brief presentation of its research

#### -Other comments:

- Happy to have great opportunity, thank you all for organizer
- Thanks for nice snacks/coffee at the discussion room
- Congratulations for organizers
- Thank you so much for this opportunity! It was a great workshop! Congratulations!!

Part 3

Your personal information

Age: A. 20-24	B. 25-29	C. 30-34 D. 35-39	E. over	
A: 0	B: 0	C: 11	D : 1	E:1

Title: A. Ph.D. student B. Postdoctoral Researcher C. Research Associate D. Lecturer

E	. Research	rcher F. Associate Professor		rcher F. Associate Professor G. Other (		r ( )
A : 0	B:7	C : 0	D:1	E: 1	F:2	G: 2 (Assistant Professor)

**Research Field** 

Evolutionary ecology

Benthic microbiology

Benthos

Marine Biology

Marine Bioprospection

Reproductive biology

**Biodiversity** 

<u>Zoology</u>

Eco-physiology

Fish Conservation