

**PROGRAMME AND
BOOK OF ABSTRACTS**

2016



**"Addressing Coastal Resources Conservation
and Food Security thru Science-Based
Solutions and Innovations"**

**NOVEMBER 24-26, 2016
PATIO DE SAN JOSE, MALILIPOT, ALBAY**



RATIONALE OF THE SYMPOSIUM

Kuroshio Current has been referred to as Typhoon Alley because of the severe tropical storms that follow its warm-water energy path that strikes the coasts of the Philippines, Taiwan and Japan. For this reason, Kuroshio, together with the current broad scale phenomenon of global warming have tremendously influenced the way of life of the people living in coastal areas including the terrestrial and marine resources upon which their economy depend on. this conference was conceptualized to understand better the impacts of Kuroshio from ecological, environmental, economic and social perspectives in the countries involved. It is likewise expected to bring scientific information beneficial to all countries. Through this conference, meaningful solutions to common problems and further cooperation beyond borders will continue, particularly in the aspects of coastal resources conservation and food security.

The international symposium is now on its third cycle with Bicol University Tabaco Campus as the host Philippine institution. This year's symposium will feature topics on (1)Coastal Resources Conservation; (2)Fisheries Resources; (3)Biodiversity; and (4)Biological Oceanography. A lecture series featuring diverse aspects of marine protected areas will be held.

SYMPOSIUM ACTIVITIES			
DATE	TIME	ACTIVITY	
November 23, 2016	---	Arrival of Participants	
November 24, 2016	AM	DAY 1	
	8:30	Registration	Secretariat
	9:00	Opening Ceremony	
		Doxology	BUTC Students Performing Artists
		Philippine National Anthem	
		Welcome Address	Hon. Krisel L. Luistro City Mayor, Tabaco City
		Presentation of Participants and Symposium Overview	Prof. Maria Asuncion V. Oronan Dean, BU Tabaco Campus
		Keynote Addresses	Dr. Teruyuki Shinbo Professor, Graduate School of Kuroshio Science, Kochi University Japan
			Dr. Milagros Morales Regional Director Bureau of Fisheries and Aquatic Resources, Region 02
			Dr. Arnulfo M. Mascariñas SUC President IV, Bicol University
			Dr. Hsu-Sen CHEN College of Marine Sciences National Sun Yat-Sen University Kaohsiung, Taiwan
		Media Conference	
	12:00 – 1:00	LUNCH	
	PM	DAY 1	
	1:00 – 4:40	Lecture Series	
	4:40 – 5:00	Synthesis of Lecture Series	
	5:00 – 8:00	Welcome Dinner & Cultural Show	
November 25, 2016		DAY 2	
		CONCURRENT SESSIONS	
	8:00 – 8:15	Registration	
	8:15 – 5:00	Plenary Session	
		Conference Hall 1	Conference Hall 2
		Fisheries and Coastal Resources Management	Ecological Habitats and Coral Sciences
		Bioscience & Oceanography	Socio-Economics and Food Security
November 26, 2016		DAY 3	
	7:30 – 5:00	Fieldwork in Sagurong	
		Courtesy Call to Barangay Chairman	Dr. Plutomeo M. Nieves Prof. Antonino Mendoza, Jr. Mr. Renan Bobiles Mr. Christian Cabiles
		Interview of Stakeholders	
		Return to BUTC for discussion: <i>Towards Co-existence with the Ecosystem Conservation/ Preservation and the Development of Rural Residents' Lives</i>	Dr. Plutomeo M. Nieves (BU) Dr. Raul G. Bradecina (PSU)

SYMPOSIUM ACTIVITIES		
NOVEMBER 24, 2016		
TIME	LECTURE SERIES	
	Venue 1: Conference Hall 1	
	CROSS-BORDER EDUCATION SESSION: INTEGRATED MANAGEMENT OF COASTAL RESOURCES BY MARINE PROTECTED AREAS Lecture Series Chair: Dr. V. Soliman and Dr. Mina Hori	
1:00 – 1:20	Philippine MPAs: How Best Can They Be Managed?	Victor S. Soliman ¹ , Antonino B. Mendoza, Jr. ² , Ronnel R. Dioneda Sr. ³ ¹ Bicol University Graduate School, Legazpi City, ² Bicol University Tabaco Campus, Tabaco City, ³ Bicol University Research and Development Center, Legazpi City
1:20– 1:45	Western Danajon Bank: Networking of Ecology and Management	Wilfredo L. Campos ¹ , Samuel Gulayan ² , Liezel C. Paraboles ¹ , Pacifico D. Beldia ³ ¹ OceanBio Lab, University of the Philippines Visayas, Miag-ao, Iloilo, Philippines, ² Bohol Island State University, Candijay, Bohol, Philippines, ³ Malampaya Foundation, Inc., Alabang, Metro-Manila, Philippines
1:45 – 2:10	Marine Protected Areas and Integrated Management of Coastal and Ocean Resources	Hiroyuki Matsuda ^{1,2} , Darien D. Mizuta ² , Eirini I. Vlachopoulou ³ , Mitsutaku Makino ⁴ ¹ Kochi University, Japan, ² Yokohama National University, Japan, ³ University of the Aegean, Greece, ⁴ National Research Institute of Fisheries Sciences, Japan
2:10 – 2:30	Evaluating the Conservation Effectiveness of Partially Protected Marine Areas for Commercially Important Fishes in Bicol Region, Philippines	Renan U. Bobiles ^{1,2} , Yohei Nakamura ² ¹ Bicol University Tabaco Campus, Tabaco City, Philippines, ² Graduate School of Kuroshio Science, Kochi University, Japan
2:30 – 2:50	Ecological Management of MPA from the Perspective of Seaweed and Seagrass Ecology	Antonino B. Mendoza Bicol University Tabaco Campus, Tabaco City, Philippines
2:50 – 3:10	Opportunities and Challenges of Community-Based Marine Protected Area (CB-MPA) Programs in Cagayan Province, Philippines	Emma Legaspi Ballad ^{1,3} , Teruyuki Shinbo ¹ , Yoshinori Morooka ² , ¹ Laboratory of Environmental Change and Sustainable Society, Graduate School of Kuroshio Science, Kochi University, Japan, ² Professor Emeritus, Kochi University, Japan, ³ Department of Agriculture-Bureau of Fisheries and Aquatic Resources Regional Office 02, Tuguegarao City, Cagayan, Philippines
3:10 – 3:30	Balancing Fishery and Tourism, Case Study from Thailand	Mina Hori Graduate School of Kuroshio Science, Kochi University, Japan
3:30 – 3:45	Health break	
3:45 – 4:05	MPA Management and Rural Fisheries along Lagonoy Gulf	Raul G. Bradecina Partido State University, Goa, Camarines Sur, Philippines
4:05 – 4:25	Life and Natural Resource Use in the Communities lying behind the MPA: The San Miguel Island Case	Plutomeo M. Nieves Bicol University Tabaco Campus, Tabaco City Philippines
4:25 – 4:40	Open forum	
4:40 – 5:00	Synthesis of the Lecture Series	Antonino B. Mendoza, Jr. Bicol University Tabaco Campus

SYMPOSIUM ACTIVITIES		
NOVEMBER 25, 2016		
TIME	CONCURRENT SESSIONS	
	Venue: Conference Hall 1	Venue: Conference Hall 2
	FISHERIES AND COASTAL RESOURCES MANAGEMENT Session Chairs: Dr. Plutomeo M. Nieves and Dr. Milagros Morales	ECOLOGICAL HABITATS AND CORAL SCIENCES Session Chairs: Dr. Takashiro Taguchi and Prof. Ronnel R. Dioneda
8:20 – 8:40	Evaluation of Lying-in Hatchery Concept as Resource Management Strategy Plutomeo M. Nieves Bicol University Tabaco Campus, Tabaco City, Philippines	Recent Advance of Molecular Cytogenetic Studies on Scleractinian Corals (Stony Corals) Takahiro Taguchi ^{1,2} , Satoshi Kubota ^{1,2} , Takuma Mezaki ¹ , Erika Tagami ² , Satoko Sekida ⁴ , Kazuo Okuda ⁴ , Akira Tominaga ^{1,2} ¹ Laboratory of Human Health and Medical Science, Graduate School of Kuroshio Science, Kochi University, Japan, ² Department of Molecular and Cellular Biology, Kochi Medical School, Kochi University, Japan, ³ Kuroshio Biological Research Foundation, Hata County, Kochi, Japan, ⁴ Laboratory of Cell Structure and Function, Division of Marine Bioresources, Graduate School of Kuroshio Science, Kochi University, Japan
8:40 – 9:00	Simultaneous Occurrence of Larvae and Juveniles of <i>Acanthopagrus latus</i> and <i>A. Schlegelii</i> (Sparidae) in the Estuary of Northern Vietnam Thanh Trung Tran ¹ , Izumi Kinoshita ¹ , Hau Duc Tran ² , ¹ Uda Institute of Marine Biology, Kochi University, Japan, ² Hanoi National University of Education, Hanoi, Vietnam	Breeding and Culture Morphology of Tropical Green Algae Alvin Monotilla, Masanori Hiraoka Graduate School of Kuroshio Science, Kochi University, Japan
9:00 – 9:20	Molluscicidal Activity of Poison vine <i>Derris elliptica</i> in Non-Target Organism: The Philippine Freshwater Trumpet Snail <i>Jagora asperata</i> Kristian O. Aldea ¹ , Jimmy T. Masagca ² ¹ Catanduanes State University (Panganiban Campus), Panganiban, Catanduanes Island, Philippines, ² Catanduanes State University (Virac, Campus), Virac, Catanduanes Island	Morphology and Life History of Cosmopolitan Green Macroalgae, <i>Ulva prolifera</i> (Ulvothlyceae, Chlorophyta) Jianjun Cui ¹ , Alvin Monotilla ¹ , Masanori Hiraoka ¹ ¹ Graduate School of Kuroshio Science, Kochi University, Japan
9:20 – 9:40	The State of Atulayan Fish Sanctuary and Fishers Behavior on the Protection of Marine Protected Area (MPA) through Social Marketing in Municipality of Saga, Camarines Sur Joel B. Balasta Partido State University, Nato, Sagnay, Camarines Sur	Ecological Impact of Tsunami: A Ten-year Field Study of Intertidal Mud Snails Exposed to the 2011 Tohoku Earthquake Tsunami Osamu Miura ¹ , Gen Kanaya ² , Shizuko Nakai ³ , Hajime Itoh ⁴ ¹ Graduate School of Kuroshio Science, Kochi University, Japan, ² National Institute for Environmental Studies, Onogawa, Tsukuba, Ibaraki, Japan, ³ Department of Marine Science and Resources, College of Bioresource Sciences Nihon University, Kanagawa, Japan, ⁴ Atmosphere and Ocean Research Institute, The University of Tokyo, Chiba, Japan
9:40 – 10:00	Rapid Mobulid Assessment Survey in Camarines Sur, Philippines Redentor L. Buetre ¹ , Maureen F. Postrado ² , Primo G. Barja ² , Almira C. Valencia ² , Patricia M. Candelaria ¹ , Irene C. Consulta ¹ ¹ Partido State University-Sagnay Campus, Sagnay, Camarines Sur, Philippines, ² Partido State University- Caramoan, Campus, Caramoan, Camarines Sur, Philippines	The climate effect on the shrimp assemblages in the waters off the Gaoping (Kaoping) River mouth, southwestern Taiwan— An eight-year observation Chen Hsu-Sen ^{1,2} , Wen, Ta-Chieh ³ , Chen, Chieh-Young ⁴ , Chen, Meng-Hsien ^{1,2} ¹ Department of Oceanography, National Sun Yat-sen University, Kaohsiung, Taiwan, ² Asia-Pacific Ocean Research Center, National Sun Yat-sen University, Kaohsiung, Taiwan, ³ R/V Ocean Research I, National Taiwan University, Taipei, Taiwan, ⁴ Department of Marine Environmental Engineering, National Kaohsiung Marine University, Kaohsiung, Taiwan
10:00 – 10:15	Health Break	

TIME	Venue: Conference Hall 1	Venue: Conference Hall 2
10:15 – 10:35	Diversity and Species Composition of Marine Fish Fauna in Isabela Waters, Philippines <u>Angel B. Encarnacion</u> , Milagros C. Morales, Evelyn C. Ame, Melanie C. Villarao DA-Bureau of Fisheries and Aquatic Resources, Regional Office No. 02, Tuguegarao City, Philippines	Low cost and low tech community based coral reef restoration: A pilot demonstration study in Tabaco City, Albay, Philippines Antonino B. Mendoza, Jr. Bicol University Tabaco Campus, Tabaco City, Philippines
10:35 – 10:55	Philippine Eel (Anguillidae) Conservation Initiatives Towards Sustainable Resource Management <u>Evelyn C. Ame</u> , Milagros A. Morales Bureau of Fisheries and Aquatic Resources, Tuguegarao City, Philippines	Coral Reef Assessment in Selected Marine Protected Areas in Albay, Philippines <u>Christian D. Cabiles</u> ¹ , Antonino B. Mendoza Jr. ¹ Ronnel R. Dioneda Sr. ² , Victor S. Soliman ³ ¹ Bicol University Tabaco Campus, Tabaco City, ² Bicol University Research and Development Center, Legazpi City, ³ Bicol University Graduate School, Legazpi City
10:55 – 11:15	Reproductive Biology and Population Dynamics of FRigate Tuna (<i>Auxis thazard</i>) and Bullet Tuna (<i>Auxis rochei</i>) from Babuyan Channel, Philippines <u>Melanie C. Villarao</u> , Milagros C. Morales, Evelyn C. Ame, Angel B. Encarnacion, Erickson Gumiran DA-Bureau of Fisheries and Aquatic Resources, Regional Office No. 02, Tuguegarao City, Philippines	Assessment of Seaweeds Species along Uyugan, Batanes, Philippines Eleandro A. Obar ¹ , Quirino G. Pascua ² , <u>Milagros C. Morales</u> ³ ¹ University of the Philippines in the Visayas, Miag-ao, Iloilo Philippines, ² Bureau of Fisheries and Aquatic Resources Region 02, Tuguegarao City, Philippines
11:15 – 11:35	Stock Assessment of Spider Conch (<i>Lambis lambis</i>) in Guinanan Island, Rapu-Rapu, Albay <u>Skorzeny C de Jesus</u> , Romeo B. Asejo Jr., Arian S. Bandola Bicol University Tabaco Campus, Tabaco City, Philippines	
11:35 – 11:55	Community Structure and Reproductive Biology of Spider Conch Genus <i>Lambis</i> Anne Retuerma-Dioneda Bicol University College of Science, Legazpi City, Philippines	
12:00 – 1:00	LUNCH	
	BIOSCIENCES AND OCEANOGRAPHY Session Chairs: Dr. Wilfredo L. Campos and Dr. Osamu Miura	SOCIO-ECONOMICS AND FOOD SECURITY Session Chairs: Dr. Raul Bradecina and Dr. Teruyuki Shinbo
1:00 – 1:20	Otolith microstructure and early life of seagrass siganid <i>Siganus canaliculatus</i> (Park 1797) with implications to marine reserve management Victor S. Soliman ¹ , Hideaki Yamada ² , <u>Renan U. Bobiles</u> ¹ Kosaku Yamaoka ³ ¹ Bicol University Tabaco Campus, Tabaco City, Philippines, ² Ishigaki Tropical Station, Seikai National Fisheries Research Institute, Fisheries Research Agency, Ishigaki, Okinawa, Japan, ³ Graduate School of Kuroshio Science, Kochi University, Kochi, Japan	Local Residents' Valuation on Marine Protected Areas (MPAs) in Northern Luzon, Philippines: Application of Willingness to Pay (WTP) and Willingness to Work (WTW) Approach <u>Emma Legaspi Ballad</u> ^{1,3} , Teruyuki Shinbo ¹ , Yoshinori Morooka ² ¹ Laboratory of Environmental Change and Sustainable Society Graduate School of Kuroshio Science, Kochi University, Japan, ² Professor Emeritus, Kochi University, Japan, ³ Department of Agriculture-Bureau of Fisheries and Aquatic Resources Regional Office 02, Tuguegarao City, Philippines
1:20 – 1:40	The <i>nifH</i> gene abundances of unicellular heterotrophic diazotrophs (α-, γ-proteobacteria) in the Kuroshio <u>Tien-Yi Chen</u> ¹ , Yuh-ling Lee Chen ¹ ¹ Department of Oceanography, National Sun Yat-sen University, Kaohsiung, Taiwan	Physico-chemical properties of dried <i>Porphyra acanthophora</i> in the Philippines <u>Ritchie A. Rivera</u> ¹ , Ye-JooKim ² , Yang-Bong Lee ² , Angel B. Encarnacion ¹ ¹ Department of Agriculture-Bureau of Fisheries and Aquatic Resources Regional Office No. 02, Regional Government Center, Tuguegarao City, Philippines, ² Department of Food Science and Technology, Pukyong National University, Busan, Korea

Continuation...

TIME	Venue: Conference Hall 1	Venue: Conference Hall 2
1:40 – 2:00	Density Distribution of Blue Crab (<i>Portunus pelagicus</i>) Larvae with Implications to the Lying-in Concept of Stock Enhancement <u>Aldrin Mel B. Macale</u> ^{1,2} , Simon G. Alcantara ³ , Plutomeo M. Nieves ² ¹ Camarines Norte State College, Institute of Fisheries and Marine Sciences, Mercedes, Camarines Norte, Philippines, ² Bicol University Tabaco Campus, Tayhi, Tabaco City, Philippines, ³ Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines	The Significance of Indigenous Knowledge System of Fishers in the Management of Peculiar Species: the Case of <i>Siganids</i> in Lagonoy Gulf, Philippines Ninfa R. Pelea, Leonila B. Barbacena, Maria Luisa U. Tango, <u>Glenda A. Abejuela</u> , Raffy B. Bilangel, Christian D. Cabiles Bicol University Tabaco Campus, Tabaco City, Philippines
2:00 – 2:20	Morphometric, Sexual Dimorphism and Fecundity of Endemic Freshwater Shrimp <i>Caridina buhi</i> (Crustacea: Decapoda: Caridea) from Lake Manapao Sandy Rey B. Bradecina Bicol University Tabaco Campus, Tabaco City, Philippines	Related Issues and Problems to Safety of Dried and Smoked Fish in Bicol Region (Philippines) Ninfa R. Pelea, Milard P. Subagan, Herminia Bondad, Jamella Ivy R. Nieves, Maria Josefa Pelea Bicol University Tabaco Campus, Tabaco City, Philippines
2:20 – 2:40	Surfactants in the Environment Katrina L. Canon Bicol University Graduate School, Legazpi City, Philippines	The Economic Value of the Capture Fisheries and Coastal Habitats in Representative Municipalities West and East Coast of Albay, Philippines Erwin E. Torres, <u>Rommel R. Dioneda, Sr.</u> , Joan R. Nace, Mariz B. Bermillo Bicol University, Legazpi City, Philippines
2:40 – 3:00		Socio-Economic Assessment of the Gleaners of Spider Conch in Prieto Diaz, Sorsogon Ma. Teresa Abalon-Mirandilla Bicol University College of Science, Legazpi City, Philippines
VIEWING OF POSTERS		
	Reproductive Biology and Population Dynamics of Flyingfish (<i>Cheilopogon Unicolor</i>) from Batanes Waters Evelyn C. Ame, Jessica Retamal, Milagros C. Morales Bureau of Fisheries and Aquatic Resources, Regional Office 02 Tuguegarao City, Philippines	
	Evaluation of Lying-in Hatchery Concept as Resource Management Strategy Plutomeo M. Nieves Bicol University Tabaco Campus, Tabaco City, Philippines	
3:00	Closing Program	
	Impressions	
	Synthesis of Symposium Proceedings	Ninfa R. Pelea Bicol University Tabaco Campus
	Awarding of Certificates	Maria Asuncion V. Oronan Dean, BU Tabaco Campus
	Closing Remarks	Rommel R. Dioneda Director, BU Research and Development Center