



16TH INTERNATIONAL KUROSHIO SCIENCE SYMPOSIUM

*"Towards Resilient and Sustainable Ecosystems and
Communities along Kuroshio Sphere of Influence"*

16-17 December 2023	Villa Caseres Hotel Naga City, Camarines Sur, Philippines
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高知大学
Kochi University



General Information

Kuroshio, (Japanese: "Black Current") also called Japan Current, is a strong surface oceanic current of the Pacific Ocean, the northeasterly flowing continuation of the Pacific North Equatorial Current between Luzon of the Philippines and the east coast of Japan (Rafferty, 2011).

Kuroshio Current is one of the greatest currents in the world, which influences very much on culture of people, climate, natural resources, and the community structures of plants and animals in most of Southeast Asian countries. For this reason, the Kochi University in Japan established an intelligent and excellent ground for research and education, the Graduate School of Kuroshio Science (presently "Kuroshio Science Program"), for studying on the natural and social science of Kuroshio Current area. They do not only concentrate on Kuroshio expansion, but also have many areas for researches. They aim to contribute to society through analyses of the targets from literature and science viewpoints for creation a new learning field and are advancing the research that aims at harmonious coexistence of people with nature. (Kochi University, n.d.)

Partido State University is one of the strong partners of Kochi University in the Kuroshio Science Program. This partnership enabled both Universities to engage in collaborative activities in academic areas of mutual interest, such as exchange of faculty, researchers and other research and administrative staff, student exchange, conduct of collaborative research projects, conduct of lectures, conferences/symposia, exchange of academic information and materials, and to promote other academic cooperation as mutually agreed upon by two parties.

The 16TH INTERNATIONAL KUROSHIO SCIENCE CONFERENCE is one of the activities that has been mutually planned by Partido State University and Kochi University, and also one of the offshoots of the visit of the Partido State University President to Kochi University in Japan last March 2023. The theme for this conference is, "Towards Resilient and Sustainable Ecosystems and Communities along Kuroshio Sphere of Influence". The selected topics for the parallel sessions are on: restoration, conservation, rehabilitation of natural resources, fisheries management and oceanography, adaptive capacity and resiliency, food security and processing technology, indigenous knowledge, culture, and history, health and education, socioeconomics, ecosystem services marine pollution, marine plastics, and ecotoxicology, protected areas and coastal resource management, biodiversity, habitat and ecology, and biotechnology and OMICS.

The conduct of international conference is one of the pillars of internationalization since it provides venue to enhance institutional reputation and competitive position, enhance the research agenda, and strengthen engagement that promotes the application of knowledge (Brillantes, 2017)



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DAY 1 – December 16, 2023				
7:00-8:30	Registration			
8:30-9:00	Opening Ceremony Interfaith Prayer Philippine National Anthem Welcome Remarks and Introduction of the Keynote Speaker RAUL G. BRADECINA, PH.D. SUC President III Partido State University			
9:00-10:30	Plenary Session A			
9:00-9:45	Keynote Address <i>Internationalization of Philippines HEIs and Expanding Kuroshio Science network in the Philippines with CHED</i> ALDRIN A. DARILAG, PH.D. Commissioner Commission on Higher Education C.P. Garcia Avenue, Diliman, Quezon City, Philippines			
9:45-10:30	Plenary Lecture 1 <i>A Story of the Terminus of the Kuroshio Current: Understanding the Physical Environmental Characteristics of Kelp Harvest Grounds</i> SAYAKA ITO, PH.D. Deputy Chief, Aquaculture Department Southeast Asian Fisheries Development Center Buyu-an, Tigbauan 5021 Iloilo, Philippines			
10:30-12:00	Breakout Session A (Onsite) <i>Theme 1: Habitat, Ecology, Biodiversity (Cont'd)</i>	Breakout Session B (Onsite) <i>Theme 2: Fisheries Management and Aquaculture</i>	Breakout Session C (Onsite) <i>Theme 3: Oceanography Climate Change Impact and Mitigation, Socioeconomics and Ecosystem Services Valuation</i>	Breakout Session D (Online via Zoom)
Session Chair	Dr. Anabelle Campos UP-Visayas	Dr. Emma Ballard PhilJapKus Member	Dr. Divina Gracia Galang CBSUA	Dr. Kristian Aldea PhilJapKus Member
10:30-10:45	Function of the maxillipeds and 1st oostegites in crustacean parasites: Inferred from behavioral observations of the bopyrid isopod	Design of an LGU-Implemented Comprehensive Fisheries Catch and Effort Monitoring Schemes	A Phenomenological Study on the Struggles of Farming and Fishing Folks in Pasacao Divina Gracia R. Galang.	Georeferencing The Protected Areas in Bicol Region, Philippines Based on Their Legal Status Using Quantum Geographic Information System (QGIS)

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	<p><i>Bopyrus crangorum</i> infesting the caridean shrimp <i>Palaemon serrifer</i></p> <p>Lorelie A. Burgos and Gyo Itani Kochi University, Japan</p>	<p>Wilfredo L. Campos and Donna M. Guarte. University of the Philippines Visayas, Miagao; Visayas State University, Leyte, Philippines</p>	<p>Central Bicol State University of Agriculture, Philippines</p>	<p>Jim Carl Jefe Primo De La Salle University- Dasmariñas, Dasmariñas City, Cavite, Philippines</p>
10:45-11:00	<p>Community Structure Analysis of Green Tide Blooming <i>Ulva</i> Spp. in Mabini and Calatagan, Batangas, Philippines</p> <p>Johanna Maye Mance, Erin Mark C. Marcial, Christine Joy C. Atajar, Ashley Jae H. Miranda, Jayvee Abaña Saco Batangas State University, Philippines</p>	<p>Maritime Order in The Kuroshio Current Region - A Comparative Study of China's Gray Zone Actions in The East China Sea, Taiwan Strait, And South China Sea</p> <p>Wei-Chung Chen, Ming-Hao Yang. National Taiwan Ocean University, Keelung, Taiwan</p>	<p>Biomass, Carbon Stocks and Carbon Sequestration Potential of Mangroves in Western Dinagat Island.</p> <p>Jonalyn B. Galorio, Ronaldo R. Orbita, and Maria Luisa S. Orbita. Mindanao State University- Iligan Institute of Technology, Philippines</p>	<p>Microplastic Pollution in the Sediments of Cabugao Bay and Its River Tributaries</p> <p>Karmela I. Del Rosario, Ma. Cecilia Tiu-Arcilla. Codon National High School, Catanduanes State University, Philippines</p>
11:00-11:15	<p>Unveiling Host Specificity Among Cryptic Species of Trematodes in Two Cogeneric <i>Batillaria</i> Snails</p> <p>Sandy Rey B. Bradecina and Osamu Miura. Kochi University, Japan</p>	<p>Metamorphosis Timing and Growth Rate: Mechanisms for Segregative Larval Migration and Recruitment in <i>Anguilla japonica</i> and <i>A. Marmorata</i> in the Western North Pacific?</p> <p>Nico Jose S. Leander and Wann-Nian Tzeng. Bureau of Fisheries and Aquatic Resources 3. Pampanga. National Taiwan University, Taipei, Taiwan</p>	<p>Review of Participatory GIS To Evaluate Stakeholders' Preferences for Tourism Management</p> <p>Yasukazu Satake Kochi University, Japan</p>	<p>Survey On Plastic Litters and Knowledge, Attitude and Practices: Basis for Enhanced Management for Plastic Pollution in Cañas River, Cavite, Philippines</p> <p>Marish O. Cuenca, Airill L. Mercurio. De La Salle University-Dasmariñas Cavite, Philippines</p>
11:15-11:30	<p>Community Structure of Seaweeds in Lagonoy Gulf, Bicol Region, The Philippines</p> <p>Antonino B. Mendoza Jr., Alex P. Camaya, Michael C. Borejon, Jerome C. Borlagdan, Kristine C. Borlagdan. Bicol University</p>	<p>Applying EAFM in the Protection and Conservation of the Northern Pacific Seaboard Fisheries Management Area, Philippines</p> <p>Emma L. Ballad and Angel B. Encarnacion. DA-Bureau of Fisheries and Aquatic Resources</p>		<p>Ecosystem-Based Disaster Risk Reduction (Eco-DRR) Assessment Tool for Mangrove Ecosystem Services</p> <p>Randy A. Quitain and Phares P. Parayno.</p>

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	Tabaco, Catanduanes State University, Philippines	Region, Tuguegarao City, 3500 Cagayan, Philippines		Mindoro State University, Oriental Mindoro, Philippines, Miriam College, Quezon City, Philippines
11:30-11:45	Biology, Ecology, and Socio-Economics of the Mangrove Snapping Shrimp (<i>Alpheus Euprosyne</i> De Man, 1897) Fishery in Alabat Island, Quezon Province, Philippines Babilonia, D. R., Florece, L. M. Southern Luzon State University, University of the Philippines Los Banos, Philippines			Preliminary Assessment of The Spiny Lobster (<i>Panulirus</i> spp) Fishery in Northern Catanduanes, Philippines Arcilla, Ma. Cecilia T. Vargas, Maricon G. Arcilla, Ricardo Jr. V., Bonto, Janine T., Fernandez, Riza K., San Juan, Kimberly, and Vicente, Jenny V. Catanduanes State University, Philippines
12:00-1:00	Lunch Break			
1:00-2:30	Plenary Session B			
1:00-1:45	Plenary Lecture 2 <i>The Kuroshio Current's Impact on Spanish Maritime Policies in the Philippines and Their Expansionist Agenda in Asia (1521-1898)</i> DANILO M. GERONA, PH.D. Professor Director, Magellan-Elcano Studies Center, and Center for Partido Studies, Partido State University, Philippines			
1:45-2:30	Plenary Lecture 3 <i>Approaches to Coral Reef Restoration: Resiliency and Sustainability of Ecosystems</i> WILFREDO L. CAMPOS, Dr. rer. nat. Professor Division of Biological Sciences, College of Arts and Sciences University of the Philippines Visayas			
2:30-4:45	Breakout Session E (Onsite) <i>Theme 1: Habitat, Ecology, Biodiversity (Cont'd)</i>	Breakout Session F (Onsite) <i>Theme 2: Fisheries Management and Aquaculture (Cont'd)</i>	Breakout Session G (Onsite) <i>Theme 4: Food Security/ Processing Technology, Adaptive Capacity and Resilience</i>	Breakout Session H (Online via Zoom)
Session Chair	Dr. Alex Camaya PhilJapKus Member	Dr. Teresa Avila ParSU	Dr. Jonel Corral PhilJapKus Member	Dr. Michael A. Clores ParSU

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2:30-2:45	<p>Microsatellite-Based Population Genetics of <i>Trichiurus japonicus</i> In the Northwest Pacific</p> <p>Yu-Hong Guo, Lorenzo C. Halasan, Hui-Yu Wang, Hsiu-Chin Lin. National Sun Yat-sen University, Kaohsiung, Taiwan; National Taiwan University, Taipei, Taiwan, Academia Sinica, Taipei, Taiwan</p>	<p>Shark Finning in a Tuna Marine Stewardship Certified Fishing Ground in Lagonoy Gulf, Philippines</p> <p>Plutomeo M. Nieves, Marietta V. Calacal, and Raisa Pandan, University of Sto. Tomas (UST) – Legazpi City; Worldwide Fund for Nature, Philippines</p>	<p>Assessment of Traditional Post-Harvest Processing of Sea Cucumbers in Calatagan, Batangas</p> <p>Maria Luisa A. Valdez, Miguel Enrique Ma. A. Azcuna, Jonel M. Corral, and Kenneth H. Mercado Batangas State University, Philippines</p>	<p>Ecosystem Services and Vulnerability Assessment of Seagrass Meadows in Brgy. Balite, Virac, Catanduanes: A Preliminary Study</p> <p>Aljon Francis Koji Elegado, Mylene Sabeniano, Maricon Vargas, Ma. Cecilia Arcilla. Catanduanes State University, Virac, Catanduanes, Philippines</p>
2:45-3:00	<p>Current Record of Macrophyte Species in Lagonoy Gulf, Bicol Region, The Philippines</p> <p>Alex P. Camaya, Michael C. Borejon, Jerome C. Borlagdan, Kristine C. Borlagdan. Bicol University Tabaco, Catanduanes State University, Philippines</p>	<p>Diet Composition of Fringescale Sardinella (<i>Sardinella fimbriata</i>) Found in Malampaya Sound, Palawan, Philippines: A Preliminary Study on The Feeding Habits</p> <p>Jesunito A. Vicente and Herminie P. Palla. Western Philippines University, Puerto Princesa City, Philippines</p>	<p>Reinvigorating the Philippine Seaweed Industry Through the Application of an Improved Drying Technology</p> <p>Ronel S. Pangan University of the Philippines Los Baños, Philippines</p>	<p>Photosystem II fluorescence Among Life Stages of <i>Asparagopsis taxiformis</i></p> <p>Luigi P. Villalobos, Kathrina Joy D. De Austria, Najee Arabelle M. Rula, and Jayvee Abila Saco Batangas State University, Philippines</p>
3:00-3:15	<p>Otolith Morphology and Shape Analysis of the Decapod (Pisces: Carangidae) From Panay Island, Philippines</p> <p>Philine Joyce L. Luda, Christian James C. Morales. University of the Philippines Visayas, Miagao, Philippines</p>	<p>Variation of Trace Elements in the Statolith of the Indian squid, <i>Uroteuthis duvaucelii</i> off Visayan Sea Philippines</p> <p>Jessica Legaspi and Tomoyo Okumura. Kochi University, Kochi, Japan</p>	<p>The Vetiver Seawalls of San Miguel Island, Tabaco City: An Emerging Case of Coastal Community Resilience Against the Onslaught of Typhoons</p> <p>Marco Stefan B. Lagman Central Bicol State University of Agriculture - Pili Campus, Philippines</p>	<p>Status of Mangrove Crab Industry in Catanduanes Island: Implications for Sustainable Resource Management</p> <p>Arcilla, Ricardo Jr., Arcilla, Ma. Cecilia, Morales, Minerva, Catanduanes State University, Philippines</p>
3:15-3:30	<p>Assessment of Seagrass Community in an Industrialized Area in Batangas City</p>	<p>Strengthening Taiwan-Philippines Ties: Forging a Fisheries Cooperation in Shared Waters under the WCPEC Framework</p>	<p>Spatial Distribution of Marine Macroalgae in Resort Dominated Sites in Mabini, Batangas, Philippines</p>	<p>Catch Metrics and Reproductive Condition of Three-Spotted Crab (<i>Portunus sanguinolentus</i>, Herbst</p>

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	<p>Frank Joyce B. Hernandez , Kristel Joy A. Bauyon , Josh Ian A. Gonzales, Jayvee Ablaña Saco. BS Biology Program, College of Arts and Sciences, Batangas State University - The National Engineering University, Pablo Borbon Campus, Rizal Avenue, Batangas City, 4200, Batangas, Philippines, College of Agriculture and Forestry, Batangas State University- Lobo, Masaguitsit, Lobo, 4229, Batangas, Philippines, Verde Island Passage Center for Oceanographic Research and Aquatic Life Sciences (VIP CORALS - Lobo), Masaguitsit, Lobo, 4229, Batangas, Philippines</p>	<p>Wen-Hong Liu, Johonsan A. Fabilane, and Wen-Kai Hsu. National Kaohsiung University of Science and Technology, Taiwan</p>	<p>Joy S. Elias, Era May M. Guerifia, Adrian M. Martija, Jayvee Ablaña Saco. College of Arts and Sciences, Batangas State University – The National Engineering University Pablo Borbon Campus, Rizal Ave., Batangas City, Batangas 4200 Philippines, Verde Island Passage Center for Oceanographic Research and Aquatic Life Sciences (VIP CORALS) Batangas State University – The National Engineering University Lobo Campus, Masuinguitsit, Lobo, Batangas 4229 Philippines, College of Agriculture and Forestry, Batangas State University – The National Engineering University, Lobo Campus, Masuinguitsit, Lobo, Batangas 4229 Philippines</p>	<p>1783) from Northwestern San Miguel Bay, Camarines Norte, Philippines</p> <p>John Christopher C. Nolia and Rhomia Mae A. Ancheta. Camarines Norte State College- Mercedes Campus, Mercedes, Camarines Norte, Philippines</p>
3:30-3:45	<p>Exploring Antagonistic and Amylolytic Activity of Endophytic Bacteria Isolated from Narra (<i>Pterocarpus indicus</i> Willd.) And Alagaw (<i>Premna Odorata</i> Blanco) Found in Mt. Isarog.</p> <p>Liezel DC. Atole. Partido State University, Philippines</p>	<p>Enhancing Coral Reef Assessment and Management Capability in Caramoan, Camarines Sur: A Municipal-Wide Initiative Towards the National Coral Assessment Program</p> <p>Raul B. Burce, Ronnel R. Dioneda, Sr., Joel B. Balasta, Ronnel A. Dioneda, Jr., Sandy Rey B. Bradecina, Caryl A. Dioneda Partido State University, Bicol University, Central Bicol State University of Agriculture, Philippines</p>		<p>Variation In Zooplankton Community Structure During Spring and Autumn Along the Kuroshio Current, East Taiwan</p> <p>Megan G. Juliano, Carl Bryle M. Rosal, and Cristy S. Acabado University of the Philippines Visayas, Miagao, Iloilo, Philippines</p>

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4:00-5:00	Breakout Session I (Onsite) <i>Theme 1: Habitat, Ecology, Biodiversity (Cont'd)</i>	Breakout Session J (Onsite) <i>Theme 2: Fisheries Management and Aquaculture (Cont'd)</i>	Breakout Session K (Onsite) <i>Theme 5: Protected Areas and Coastal Resource Management, Conservation, Restoration, and Rehabilitation</i>	Breakout Session L (Online Zoom)
Session Chair	Dr. Anabelle A. Espadero <i>PhilJapKus Member</i>	Dr. Donna Guarte <i>PhilJapKus Member</i>	Dr. Emma Ballard <i>PhilJapKus Member</i>	Dr. Katrina Canon <i>PhilJapKus Member</i>
4:00-4:15	Genetic Diversity and Population Structure of Native Angelwing Clams (<i>Pholas orientalis</i>) in the Western Visayas, Philippines Beverly T. Jaspe. Kochi University, Japan	Stock Assessment of Exploited Engraulid Population (<i>Encrasicholina punctifer</i> , Fowler 1938) in Babuyan Channel, Philippines, and Its Implication to Fisheries Management Melanie C. Villarao, Rea Mae O. Casco and Angel B. Encarnacion. Department of Agriculture-Bureau of Fisheries and Aquatic Resources – Region 02. Cagayan, Philippines	Does Social Capital Matter in Marine Protected Area Management? Joela Mizchelle A. dela Vega, Teruyuki Shinbo, Raul G. Bradecina, Emma L. Ballard and Yoshinori Morooka Kochi University, Japan, 2Partido State University, Goa, Philippines, Department of Agriculture-Bureau of Fisheries and Aquatic Resources Region 2, Tuguegarao City, Cagayan, Philippines	Coastal Resources Governar Catanduanes Island, Philipp Sonia R. Vargas-Sapico, Pat Alain T. Azanza, Kristian Q. A Catanduanes State Univer: Philippines
4:15-4:30	Exploring Temporal and Spatial Variations in Reef Fish Communities in Claver, Surigao del Norte Anabelle Dece A. Espadero, Eugene P. Moleñoa, Ed Vince A. Ruiza, Daniza Mae C. Ocoa and Renoir A. Abreaa, Mindanao State University Naawan, Philippines	Growth Performance of Transplanted Green Mussel (<i>Perna viridis</i>) Using Modified Long Line Method Jofren R. Moreno, Sherrlyn U. Magdame, Bhejay R. Montenegro and Vincent D. Majan. Southern Luzon State University - Judge Guillermo Eleazar Tagkawayan Campus, Quezon, Philippines	Insights and Lessons Learned from Lagonoy Gulf MPA: Exploring Variables Shaping Reef Resilience Antonino B. Mendoza, Jr. Bicol University Tabaco Tabaco City, Albay, Philippines	Modeling the Suitable Area <i>Parashorea malaanonan</i> (Bl Merr. in Mount Makiling Fo Reserve Using Maxent Cortes, JM; Tinio, C, Dida University of the Philippine Banos, Philippines

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	<p>Growth Rate Variations in a Japanese Precious Coral <i>Corallium japonicum</i></p> <p>Ma. Marivic C. Pepino, Tomoyo Okumura, And Asahi Katsuno Kochi University, Japan</p>	<p>Reproductive Insights for Sustainable Small Pelagic Fisheries in the Visayan Sea</p> <p>Karen A. Villarta-Lane, Jeric Prince M. Ladores, Alexanra B. Regalado and Wilfredo L. Campos University of the Philippines Visayas, Miagao, Iloilo, Philippines</p>	<p>Photosynthesis and Growth Response of Green-Tide Blooming <i>Ulva</i> spp. from Batangas, Philippines</p> <p>Jayvee Ablaña Saco, Najeen Arabelle M. Rula, Jovy Ann P. Valera, Luigi P. Vilalobos, Glenn Brian Aguila. Batangas State University Batangas, Philippines</p>	<p>Towards Successful Conservation in Protected Area Management: The Case of Mt. Isarog National Park</p> <p>Marshal Q. Murillo, Federico Jose T. Lagdameo, Frances Michelle C. Nubla, And Joward B. Bautista Ateneo De Naga University, Philippines</p>
5:00-6:30	<p>Special Meeting</p> <p>Philippines-Japan Association for the Kuroshio Science Promotion, Inc.</p>			
7:00-8:00	<p>Fellowship Dinner Guest of Honor</p> <p>CONG. ARNULF BRYAN B. FUENTEBELLA Representative, 4th District of Camarines Sur</p>			

DAY 2 – December 17, 2023				
8:00-9:00	Registration			
9:00-10:30	Plenary Session C			
9:00-9:45	<p>Plenary Lecture 4</p> <p><i>Kuroshio Current as a major force in the northward dispersal of terrestrial vertebrates</i></p> <p>RAFE M. BROWN, PH.D. Curator in Charge, Herpetology Division, KU Biodiversity Institute Professor Department of Ecology and Evolutionary Biology University of Kansas Lawrence KS 66045, USA</p>			
9:45-10:30	<p>Plenary Lecture 5</p> <p><i>Climate change and water resources in the Kuroshio Sphere of Influence and Beyond: Impacts, Resilience, and Adaptation</i></p> <p>DANIEL M. NOVER, PH.D. School of Engineering, University of California—Merced 5200 Lake Rd, Merced, CA 95343, USA</p>			
10:30-12:00	<p>Breakout Session M (Onsite)</p> <p><i>Theme 1: Habitat, Ecology, Biodiversity (Cont'd), Fisheries Management and Aquaculture</i></p>	<p>Breakout Session N (Onsite)</p> <p><i>Theme 3: Marine Plastics, Marine Pollution, Ecotoxicology</i></p>	<p>Breakout Session O (Onsite)</p> <p><i>Theme 6: Biotechnology / OMICS Indigenous Knowledge and History</i></p>	<p>Breakout Session P (Online via Zoom)</p>
Session Chair	Dr. Evelyn Ame DA-BFAR 2	Dr. Kristian Aldea PhilJapKus Member	Dr. Aliyn Hinogian PhilJapKus Member	Dr. Alex Camaya PhilJapKus Member

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10:30-10:45	<p>The amphibians and reptiles of Luzon Island, Philippines, IX Herpetofauna of the Caramoan Peninsula, Bicol Region</p> <p>Michael A. Clores, Michael A. Cuesta, Justin M. Bernstein, Joward B. Bautista, Jason B. Fernandez, Sarah May M. Querubin, Francis Xavier D. Verdadero, Anelyn B. Bare and Rafe M. Brown Partido State University, Ateneo de Naga University, Philippines; Kansas University, USA</p>	<p>The Great Pacific Garbage Patch and Kuroshio Current Region Countries: Existing Regulations and Prospects</p> <p>Bo-Shian, WU, Pei-Lun, Tsai, Ming-Hao, Yang. National Taiwan Ocean University; Taiwan.</p>	<p>Reconciling Variations in Gene Expression For HIF-1α and Its Target Genes in Temperate <i>Acropora hyacinthus</i>: A QPCR Study Using Ramping Heat Stress</p> <p>Sam Edward Manalili, Yuji Namura, Sakura Takaki, Hiroumi Saito, Masaya Uwai, Takuma Mezaki, Satoshi Kubota Kochi University, Japan</p>	<p>Analysis of Deterministic Dengue Model With Vector Control</p> <p>Ronica M. de Leon Don Mariano Marcos Memorial State University, Philippines</p>
10:45-11:00	<p>Examining the Competitive Interaction Over Habitat Between Native and Tropical Vagrant Fish in Tropicalized Temperate Reefs, Western Japan</p> <p>Mary Ann Cielo L. Malingin, Ryoga Seiwa, Kenta Nagatani and Yohei Nakamura Kochi University, Japan</p>	<p>Occurrence of Microplastics in the Gastrointestinal Tract of Selected Pelagic Fishes Sold in the Wet Market of Tabaco City, Albay, Philippines</p> <p>Erica C. Biron, Hanelyn S. Boqueo, Trishia B. Buella, and Benyl John A. Arevalo* Bicol University Tabaco, Tabaco City, Albay Philippines</p>	<p>Morphological and Molecular Identification of "Padas" (<i>Siganus</i> spp.) In Northwestern Luzon, Philippines</p> <p>Christian C. Molina, and Victoria N. Malaya. Ilocos Sur Polytechnic State College, Don Mariano Marcos Memorial State University, Philippines</p>	<p>Formulation, Physicochemical Evaluation, and Microbiological Analysis of Herbal Ointment From Dried Leaves of <i>Piper Betle</i> (L.) (Buyo)</p> <p>Tribiana, E. and Tapas, W. Catanduanes State University, Philippines</p>
11:00-11:15	<p>Performance Evaluation of Red Tilapia (<i>Oreochromis</i> sp.) in Ponds and Cages in Cagayan Valley Region</p> <p>Evelyn C. Ame, Riza I Undiana and Florence Reboroso. DA-Bureau of Fisheries and Aquatic</p>	<p>Dietary Vitamin C and Lipid Feed Supplementations Influence the Expression of Immune-Related Genes in <i>Litopenaeus vannamei</i> (Boone, 1931) Subjected to Thermal Stress</p> <p>Eljenmer L. Sindo, Angel Queenee D. Dequito, Rex</p>	<p>Semiotics In Street Dances: A Reflection on the Roles of Power, Gender, and Modernization</p> <p>Sheila E. Amoroso, Ma. Sol Conchita P. Atole. College of Education, Partido State University</p>	<p>Assessment of <i>Vibrio</i> sp. In Galunggong (<i>Decapterus macarellus</i>) from Camarines Sur Ports: Implications for Seafood Safety and Public Health</p> <p>Liesel DC. Atole, Monica B. Romero, & Arabel Mindy M.</p>

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	Resources Region, Tuguegarao City, 3500 Cagayan, Philippines	Ferdinand M. Traifalgar, Partido State University – Caramoan Campus, University of the Philippines Visayas, National Yang Ming Chiao University, Hsinchu, Taiwan		Gonzales. Partido State University, Goa, Camarines Sur, Philippines
12:00-1:00	Lunch Break			
1:00-2:30	Plenary Session D			
1:00-1:45	Plenary Lecture 6 <i>Case Applications of Otolith Shape Analysis and Morphometry Discriminating Stocks in the Philippines</i> RICARDO P. BABARAN, PH.D. Professor, University of the Philippines Visayas Miagao, Iloilo, Philippines			
1:45-2:30	Plenary Lecture 7 <i>The Integrative Power of Archeology in Climate Research</i> STEPHEN ACABADO, PH.D. Professor Department of Anthropology University of California, Los Angeles			
2:30-3:15	Breakout Session M (Onsite) <i>Theme 1: Habitat, Ecology, Biodiversity (Cont'd)</i>	Breakout Session N (Onsite) <i>Theme 3: Marine Plastics, Marine Pollution, Ecotoxicology (Cont'd)</i>	Breakout Session O (Onsite) <i>Theme 6: Biotechnology / OMICS Indigenous Knowledge and History (Cont'd)</i>	Breakout Session P (Online via Zoom)
Session Chair	Dr. Allyn Hinoguin <i>PhilJapKus Member</i>	Dr. Anabelle A. Espadero <i>PhilJapKus Member</i>	Dr. Richard Dumilag <i>SorsSU</i>	Dr. Jayvee Saco <i>PhilJapKus Member</i>
2:30-2:45	Spatial Assemblages of Finfishes in A Fringe Mangrove Area of Agojo, San Andres Catanduanes, Philippines Renan U. Bobiles, Julius Patrick D. Bobier, Antonino B. Mendoza, Jr., Bicol University Tabaco, Tabaco City, Philippines	Microplastics Occurrence in the Mangrove Ecosystem of Brgy. Gimaloto, Sorsogon City, Philippines Helen Gail P. Embudo, Ian Harold N. Milano, Welaiza P. Santua, Jeffrey D. Peregrino, Ivane N. Malaluan, Raymond S. Regalia, Charmaine A. Malonzo.	Genetic diversity of <i>Kappaphycus malesianus</i> (Solieriaceae, Rhodophyta) from the Philippines Richard V. Dumilag, Bea A. Crisostomo, Zae-Zae A. Aguinaldo, Arturo O. Lluisma, Claire M.M. Gachon, Michael Y. Roleda, School of Graduate Studies, Sorsogon State University Sorsogon City Campus,	Powdered Turmeric (<i>Curcuma longa</i>) As A Feed Supplement for Broilers: Its Effect on Growth Parameters and Meat Acceptability Medelyn A. Aglipay, Cynthia M. Rodriguez, Lydia P. Libunao2, Pepito V. Hufalar, Eufemio O. Sagun. Don Mariano Marcos

Symposium Programme

16TH INTERNATIONAL KUROSHIO SCIENCE SYMPOSIUM

		Bicol University; Regional Center for Food Safety and Quality Assurance, Philippines	Magsaysay St., Sorsogon City 4700 Philippines, Fisheries Department, Sorsogon State University Magallanes Campus, Aguada Norte, Magallanes, Sorsogon 4705 Philippines, The Marine Science Institute, College of Science, University of the Philippines, Diliman, Quezon City, 1101, Philippines, Scottish Association for Marine Science, Scottish Marine Institute, Oban, United Kingdom, UMR 7245 - Molécules de Communication et Adaptation des Micro-organismes, Muséum National d'Histoire Naturelle, CNRS, Paris, France	Memorial State University-North La Union Campus, La Union, Philippines
2:45-3:00	<p>The Role and Challenges of Species Distribution Modeling for Species Conservation in Protected Areas</p> <p>Jioie Muriel A. dela Vega, and Motoki Higa, Kochi University, Japan</p>	<p>Abundance and Characteristics of Microplastic Among Commercially Important Pelagic Fish in Zamboanga Peninsula and Agusan Del Norte, Philippines</p> <p>Mary Dorothy Anne Y. Seno, Annielyn D. Tampus, Ronaldo R. Orbita, Maria Luisa S. Orbita, and Maria Lourdes Dorothy G. Lacuna. Mindanao State University- Iligan Institute of Technology, Philippines</p>	<p>Seaweed Fish Baits in Bulusan, Sorsogon, Philippines</p> <p>Richard V. Dumilag, Mark Ariel D. Malto, Mabelle R. Longavela, Elden G. Orgela, Franklin P. Calaminos, Ferlyn G. Legarde, Teresa Haide R. Belgica, Aileen D. Malto, John Peter A. Himor, Mae H. San Pablo, Jinky D. Bailon, Ruby D. Olipany, Caesar Franz C. Ruiz, Cynthia B. Mintu, Benilda O. Laza, And Lynn C. Mendoza. Sorsogon State University-Magallanes Campus, Sorsogon; Far Eastern University, Nicanor Reyes Sr. St., Sampaloc, Manila, Philippines</p>	<p>Study on the Utilization and Assessment of Marang Fruit (<i>Artocarpus odoratissimus</i> Blanco) Production in Mindanao</p> <p>Roy B. Gacus and Norma U. Gomez. University of Southern Mindanao Kabacan, Cotabato, Philippines</p>
3:00-3:15	<p>Faunal Biodiversity Research in the Philippine Mangrove Ecosystems: Status, Extent and Implications to eDNA Metabarcoding</p>	<p>Accumulation of Plastics in Sandfish, <i>Holothuria scabra</i> (Jaeger, 1833), Sediments, and Surface Water in Laguindingan, Misamis Oriental, Philippines</p>	<p>Community Perceptions of Herpetofauna Biodiversity Along the Caramoan R2R Megatransect: An Ethnoherpetology</p>	<p>Reproductive Biology of Spiny Lobster <i>Panulirus penicillatus</i> in Eastern Visayas, Philippines</p> <p>Ma. Theresa M. Salamida, Nonita S. Cabacaba, Cristan Joy M.</p>

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	<p>Venus E. Leopardas, Erwin Jones A. Tucong, Allyn Duvin P. Hinoguin, Nonillon M. Aspe, Abner C. Evasco Jr., Ruby C. Gonzales, Bernadeth Grace S. Pananganan, Roger G. Dolorosa. College of Marine and Allied Sciences, Mindanao State University at Naawan, Poblacion, Marine Invertebrates Laboratory, Mindanao State University at Naawan, Iriomote Station, Tropical Biosphere Research Center, University of the Ryukyus, College of Fisheries and Aquatic Sciences, Western Philippines University - Puerto Princesa Campus</p>	<p>Charmjill Y. Bacsarpa, Rey Y. Capangpangan, Wilfredo H. Uy, Venus E. Leopardas, and Anabelle Dece A. Espadero Mindanao State University at Naawan, Misamis Oriental, Philippines</p>	<p>Michael A. Clores, Raul G. Bradecina, Rafe M. Brown, Patricia M. Candelaria, Luisa M. Lanciso, Diana Rose R. Pesimo, Bryan Barillo, John Paul Obias, Marjorie Sabra, Amy B. Esmeralda Partido State University – Caramoan Campus, Kansas University, Partido State University – Goa Campus, Philippines</p>	<p>Campo, Ed-Marie B. Boiser, Kimberly A. Badocdoc. Eastern Visayas State University – Carigara Campus, Carigara Leyte National Fisheries Research and Development Institute – National Marine Fisheries Research and Development Center (NFRDI- MFRDC), Brgy. Sto Nino, Guiuan Eastern Samar, 6809</p>
3:15-4:00	<p>Plenary Lecture 8 <i>Succession and Emergence of Corals in High-Latitude (Temperate) Areas of Eastern Asia and role of Local Adaptation and Plasticity</i> DR. SHASHANK KESHAVMURTHY Biodiversity Research Centre Academia Sinica, Taiwan</p>			
4:00-4:30	<p>Presentation <i>Guidance of "Kuroshio Science Program" and the Scholarship Program</i> SATOSHI KUBOTA, PH.D. Department of Marine Resource Science & Head of Kuroshio Science Program (PhD course), Kochi University Kohasu, Oko-cho, Nankoku, 783-8505, Japan</p>			
4:30-5:00	<p>Closing Program Closing Remarks ARNEL B. ZARCEDO, EDEL Incoming SUC President III Partido State University</p>			
5:00-5:30	Distribution of Certificates			