



PROGRAM

“THE 6th INTERNATIONAL SYMPOSIUM ON CONSERVATION AND MANAGEMENT OF TROPICAL LAKES”

In Conjunction with

“THE 3rd INTERNATIONAL CONFERENCE ON TROPICAL LIMNOLOGY” (TROPLIMNO III)

MAIN THEME:

“ENVIRONMENTAL CONSERVATION PLATFORM FOR TROPICAL INLAND WATERS: SCIENCE, POLICY AND IMPACT”

Phnom Penh, Cambodia

November 25-26, 2021

Venue: Online

Organized By

1. Platform for Aquatic Ecosystem Research (PAER)
2. Institute of Technology of Cambodia (ITC)
3. Institute for Global Environmental Strategies (IGES)
4. Tokyo Institute of Technology (Tokyo Tech)
5. Yamagata University (YU)
6. Southeast Asian Limnological Network (SEALNet)
7. Research Center for Limnology – National Research and Innovation Agency of Indonesia (RCL-BRIN)

In Collaboration With

1. Ministry of Environment, Cambodia
2. Tonle Sap Authority, Cambodia
3. Ministry of Water Resources and Meteorology, Cambodia
4. Universiti Sains Malaysia (School of Biological Sciences), Malaysia
5. International Lake Environment Committee Foundation, Japan

Sponsored By



Japan International Cooperation Agency



Japan Science and Technology Agency



AGENDA

MC: Mrs. Monychot Tepy Chanto

Day 1, Zoom link:

<https://us02web.zoom.us/j/86207836279?pwd=czFJcXVLRHdydzVmVkJhUUh3Z3pBdz09>

DAY 1: THURSDAY, NOVEMBER 25, 2021 [7:30-11:00, Cambodian Standard Time]

7:45 - 8:15	Online Registration and Connection with All Participants
8:15 - 8:30	Welcome Remarks By H.E. Dr. Romny Om , Director of ITC/ Cambodia
8:30 - 9:00	Opening Remarks By 1) Dr. Puy Lim , Deputy Director of Tonle Sap Authority 2) Ms. Haruko Kamei , JICA Representative

KEYNOTE ADDRESSES

30 mins/presentation: 20 mins. presentation, 10 mins. Q&A

Moderator **Ms. Adelina Santos-Borja**, Chairperson, SEALNet/Philippines;
Vice Chairperson, ILEC Scientific Committee

9:00 - 9:30	Mainstreaming of Lakes and Wetlands into the Global Water Agenda and Sustainable Development Goals. By Prof. Walter Rast , Chairperson of the ILEC Scientific Committee, Professor Emeritus and Director of the International Watershed Studies, The Meadows Center for Water and the Environment of Texas State University
9:30 - 10:00	Tropical Limnology: Is it a Frontier? By Assoc. Prof. Chihiro Yoshimura , Tokyo Tech/ Japan

PLENARY SESSIONS

30 mins/presentation: 20 mins. presentation, 10 mins. Q&A

Moderator **Dr. Kimleang Khoeurn**, PAER

10:00 - 10:30	Hydraulic Characteristics of the Mekong Flood Plain and TSL in Cambodia from ADCP Observation By Prof. Fujii Hideto , Yamagata University/ Japan
10:30 - 11:00	Building Synergy Among the Lakes of Southeast Asia By Ms. Adelina Santos-Borja , Chairperson, SEALNet/Philippines; Vice Chairperson, ILEC Scientific Committee

11:00 - 13:00 Lunch Break

DAY 1: THURSDAY, NOVEMBER 25, 2021 [13:00 – 16:00, Cambodian Standard Time]
PARALLEL SESSIONS

20 mins/presentation: 15 mins. presentation, 5 mins. Q&A

Day 1, Zoom link:

<https://us02web.zoom.us/j/86207836279?pwd=cZFJcXVLRHdydzVmVkFhUUh3Z3pBdz09>

Session 1: Ecosystem and Biodiversity of Tropical Inland Water

Chair/Co-chair: Prof. Dr. Wan Maznah Wan Omar and Dr. Luki Subehi

Facilitator: Ms. Denalis Rohaningsih

Break Room 1: Ecosystem

Time	Title and Speaker
13:00 - 13:20	1. Aquaculture Management Dynamics in Laguna Lake, Philippines Ms. Adelina C. Santos-Borja
13:20 - 13:40	2. Environmental Influences on the Reproductive Biology and Population Dynamics of <i>Sardinella tawilis</i> in Lake Taal, Philippines Ms. Maria Theresa M. Mutia
13:40 - 14:00	3. Freshwater Biomonitoring Using Macroinvertebrates In The Philippines Dr. Jacqueline E. Hilario
14:00 - 14:20	4. Proliferation of the Midas Cichlid <i>Amphilophus citrinellus</i> (Günther, 1864) in Lake Taal, Philippines Ms. Myla C. Muyot
14:20 - 14:30	Break
14:30 - 14:50	5. Length-Weight Relationship Study of Two Cyprinids in Lake Tempe, Indonesia Ms. Rahmi Dina
14:50 - 15:10	6. Improving Removal Efficiency of Natural Organic Matter from Drinking Water Treatment Plant by Powder Activated Carbon Injection in Coagulation Process Mr. Thaybona Or
15:10 - 15:30	7. Benthic Macroinvertebrates Community Structure In Menjer Lake, Indonesia Ms. Imroatushshoolikhah
15:30 - 15:50	8. The Distribution of <i>Tilapia</i> throughout a Tropical Lake of Malaysia with Special Reference to Temengor Reservoir, Perak Dr. Muzzalifah Abd Hamid
15:50 - 16:00	Wrap up by Chair/Co-chair

Session 2: Ecohydrology, Biochemical and Physical Processes in Tropical Aquatic Ecosystems (#1)

Chair/Co-chair: Dr. Sylvain Massuel and Dr. Khy Eam Eang

Facilitator: Mr. Sambo Lun

Break Room 2: Ecohydrology

Time	Title and Speaker
13:00 - 13:20	1. Temporal Dynamics and Drivers of Lake Ecosystem Metabolism Analysis Using High Resolution Observations in A Shallow, Tropical, Eutrophic Lake (Laguna Lake, Philippines) Dr. E. C. Herrera

13:20 - 13:40	2. Watershed Health Assessment using Geographic Information System and Analytic Hierarchy Process: Application in Stung Sen River Basin, Cambodia Ms. Ka Koemsreang
13:40 - 14:00	3. Assessing Space Varying over Uniform Wind Input on the Hydrodynamics of Laguna Lake, Philippines Mr. M.G. Dangin
14:00 - 14:20	4. Investigation of the Hydraulic Connectivity between Laguna Lake and Manila Bay through Pasig River Ms. L. D. Sumagaysay
14:20 - 14:30	Break
14:30 - 14:50	5. Hydrogeochemical Evolution and Groundwater Quality Evaluation in the Coastal Area of Sihanoukville Ms. Panha Sorn
14:50 - 15:10	6. Groundwater Quality Assessment in the Coastal Area at Sihanouk Ville Mr. Nheannavuth
15:10 - 15:30	7. Evaluation of Soil Property Along a Hydrological Gradient at Chhnuk Trou, Cambodia Mr. Mengheak Phol
15:30 - 15:50	8. Water Quality Analysis of Laguna de Bay Through Numerical Modeling Mr. Mark Edward Jolejole
15:50 - 16:00	9. Wrap up by Chair/Co-chair

Session 3: Ecohydrology, Biochemical and Physical Processes in Tropical Aquatic Ecosystems (#2)

Chair/Co-chair: Dr. Winarto Kurniawan and Dr. Reasmey Tan

Facilitator: Ms. Monychot Tepy Chanto

Break Room 3: Biochemical

Time	Title and Speaker
13:00 - 13:20	1. Permissible Phosphorous Load in a Tropical Shallow Lake in Relation to Seasonal Flood Pulse Ms. Kaing Vinhteang
13:20 - 13:40	2. Identifying River Nitrate Sources using Nitrate Stable Isotopes in Silang-Santa Rosa Sub-Watershed Mr. Osbert Leo A. Privaldos
13:40 - 14:00	3. Sediment Budget in the Confluences of the Mekong River Ms. Soklin Ith
14:00 - 14:20	4. Watershed health assessment using AHP approach considering Environmental and Topo-Hydrological Criteria Ms. Sotheanea Khe
14:20 - 14:30	Break
14:30 - 14:50	5. Present-Day Levels of Heavy Metals in Surface Waters of Laguna Lake, Philippines Prof. Maria Pythias Espino
14:50 - 15:10	6. Assessment of Pesticides Residues in the Farm Soils and Sediment from Chhnok Tru, Kampong Chhnang Ms. Sokha Yoeurm

15:10 - 15:30	7. Assessment of Pesticides Residue in Groundwater in Kampong Thom, Cambodia Ms. Leakkhina Meak
15:30 - 15:50	8. Assessment of Riverine Sediment and Nutrients in the Largest Tributary of Tonle Sap Great Lake Basin Ms. Sovatey Lim
15:50 - 16:00	Wrap up by Chair/Co-chair

Session 4: Ecohydrology, Biochemical and Physical Processes in Tropical Aquatic Ecosystems (#3)

Chair/Co-chair: Dr. Rattana Chhin and Dr. Phat Chanvorleak

Facilitator: Ms. Soukim Heng

Break Room 4: Physical Processes

Time	Title and Speaker
13:00 – 13:20	1. Seasonal Variability of Material Transport in Laguna de Bay through Numerical Modeling Mr. Gene Euclid T. Dela Cruz
13:20 - 13:40	2. Water Level Fluctuations and Distribution of Major Vegetation Types In the Tropical Floodplain of Tonle Sap Lake Mr. Ly Sophanna
13:40 - 14:00	3. Sediment Transport Model Integrating Wind and Vegetation Effects for a Lake Floodplain System Ms. Vouchlay Theng
14:00 - 14:20	4. Inland Water Use Efficiency and Growth Response of Four Rice Cultivars Under Full and Alternative Wet and Dry Irrigation Ms. Chan Arun Phoeurn
14:20 - 14:30	Break
14:30 - 14:50	5. The Study of Impact of Urbanization on Storm Water Flood Using PCSWMM at Dangkor District, Phnom Penh, Cambodia Mr. Kosorl Phy
14:50 - 15:10	6. The Study on Water Balance in Mlech Reservoir of Existing Water Treatment Plant of PPWSA Under Climate Change Effects, Kampot Province Mr. Ramy Lun
15:10 - 15:30	7. Air Emission Inventory of Factory Boiler and impact to human health. Case Study in Phnom Penh, Cambodia Ms. Leakhena Hang
15:30 - 15:50	8. The Impact of Flooding Events on Soil and Water Quality: Laboratory Experiment Observation Ms. Sochan Sao
15:50 - 16:00	Wrap up by Chair/Co-chair

DAY 2: FRIDAY, NOVEMBER 26, 2021 [7:00 – 11:30, Cambodian Standard Time]

Day 2, Zoom link:

<https://us02web.zoom.us/j/83325109989?pwd=Vk4wdkJVTEZDNGROdkV3S093MIZEZz09>**PARALLEL SESSIONS**

20 mins/presentation: 15 mins. presentation, 5 mins. Q&A

Session 5: Data Mining, Knowledge Management, Decision Support System for Integrated Lake Basin Management, Including Remote Sensing, GIS, And Related Tools

Chair/Co-chair: Prof. Fujii Hideto and Dr. Eden M. Andrews

Facilitator: Mr. Lengthong Kim

Break Room 5: Lake Basin Management

Time	Title and Speaker
7:30 - 7:50	1. Health Risk Assessment of a Floating Village Based on Three-Dimensional Hydraulic Simulation Assoc. Prof. T. Nakamura
7:50 - 8:10	2. The Seasonal Variation of Groundwater Modelling by Using GMS Software in Tonle Sap Basin, Cambodia Mr. Vaythouke Socheat
8:10 - 8:30	3. Design Storm Water Drainage System In Preah Sihanouk City Using Storm Water Management Model (SWMM) Mr. Sophorn Phoeuk
8:30 - 8:50	4. Impacts of Land Use Change on Hydrology of the Tonle Sap Lake Basin using SWAT Mr. Sakdanuphol Chan
8:50 - 9:00	Break
9:00 – 9:20	5. Developing of Water Level-Area-Volume Relationship of Tonle Sap Lake Using Hydraulic Model (LIE) Mr. Kim Lengthong
9:20 - 9:40	6. Assessing the Hydrologic Effects of Urbanization Through Numerical Modeling Using Swat: A Case Study of Laguna De Bay Basin Ms. Joy Marie M. Jamilla
9:40 - 10:00	7. Evaluating Hydrologic Model Performance of Global and Local Weather Data Inputs Dr. Jonathan S. Serrano
10:00 – 10:20	8. Estimation of Impact of Upstream Dams on Flow Regime in the lower Mekong River by Using a Distributed Hydrological Model Dr. Rattana Chhin
10:20 – 10:30	Wrap up by Chair/Co-chair

Session 6: Information Sharing and Stakeholder's Engagement, Social Impact Assessment, and Nature-Based Solutions (Nbs)

Chair/Co-chair: Ms. Adelina C. Santos-Borja and Dr. Pham Ngoc Bao

Facilitator: Mr. Ratboren Chan

Break Room 6: Information Sharing

Time	Title and Speaker
7:30 - 7:50	1. A Knowledge Synthesis System on the Limnology and Management of Tropical Lakes Prof. Masahisa Nakamura

7:50 - 8:10	2. Integrating Science In The Empowerment Of The Community Of Barangay Carmen In Silang Cavite, The Philippines Ms. Jocelyn F. Siapno
8:10 - 8:30	3. Multi-Pesticide Residues Analysis in Koh Thum District, Kandal Province using Solid-Phase Extraction coupled to Gas Chromatography-Mass Spectrometry Mr. Sombath Keo
8:30 - 8:50	4. Effect Of Iron Plate On Arsenic Removal From Groundwater Using ElectroChemical Arsenic Remediation (ECAR) Technology Ms. Sreyvich Sieng
8:50 - 9:00	Break
9:00 – 9:20	5. Assessment of Heavy Metal(loid) Accumulation and Sources in Six Edible Fish Species of Tonle Sap Lake, Cambodia Mr. Viet-Dung Pham
9:20 - 9:40	6. Performance of High-Rate Membrane Bioreactor in Treating Aquaculture Farm Effluent Contain Antibiotics Mr. Ratboren Chan
9:40 - 10:00	7. Groundwater Quality Analysis in Floodplain Area along the Tonle Sap Lake Ms. Sreyleang Ya
10:00 – 10:20	8. Risk Assessment Of Diarrheal Diseases Under The Climate And Socio-Economic Changes For Floating Villagers In Tonle Sap Lake Unsing Two-Dimensional Advection-Diffusion Model Mr. Ichiro Yoneda
10:20 – 10:30	Wrap up by Chair/Co-chair

10:30 - 10:50 Break	
AWARDING AND CLOSING CEREMONY	
10:50 - 11:00	Best Video and Photo Selection and Award <i>Moderated By</i> Ms. Mansson Delerce Johanna , Campus France
11:00 - 11:10	Student Best Presentation Award <i>Moderated By</i> Ms. Haruko Kamei , JICA Representative
11:10 - 11:25	Wrap Up of the Event <i>By</i> Dr. Chanthol Peng , PAER Representative
11:25 - 11:30	Closing Remarks <i>By</i> Dr. Hidayat , Director RCL - BRIN/ Indonesia

* The organizer reserves the right to make changes to the event program, if necessary

* Document and virtual background can be accessed from: https://itcedukh-my.sharepoint.com/:f:/g/personal/peng_itc_edu_kh/EhLRh-GrImdKs8BTelFx1nEB5V3NgyruQ0wdFY7vvQJmpQ?e=wbCzzv