

presentation

SCHEDULE

DAY 1 : PHYSICAL SESSION 1 (10:40 AM - 11:40 PM)

Session Chair: Prof Joel Sena Sales Junior

Session Co-Chair: Dr Fadhilah binti Abdul Razak

10:40 - 10:55

IOS2025-005 (Heat Exchanger Optimization)

Title: Optimization of Sea Water Air Conditioning Systems through Experimental Analysis of Chilled-Water Temperature Regimes

Authors: **Jean-François Martin**, Kanhan Sanjiv, , Kévin Fontaine, Olivier Marc, Franck Lucas

10:55 - 11:10

IOS2025-032 (Heat Exchanger Optimization)

Title: Research on Performance Evaluation of Evaporator-Condenser for Hybrid OTEC

Authors : **Hiroki Ito**, Shuji Miyazono, Shodai Tanaka, Takafumi Morisaki, Yasuyuki Ikegami

11:10 - 11:25

IOS2025-002 (Oceanography & Seawater)

Title: High-resolution global dataset on deep ocean water accessibility for SWAC applications

Authors: **Kanhan Sanjiv**, Paul-Emmanuel Edeline, Marania Hopuare, Anthony Jamelot, Perceval Raybaud, Olivier Marc, Franck Lucas

11:25 - 11:40

IOS2025-006 (Multiple Use of Seawater Business Models)

Title: OTEC and Exchange of CO₂ in the Ocean.

Authors: **Lars Golmen**, and Haugan

presentation

SCHEDULE

DAY 1 : PHYSICAL SESSION 2 (11:45 AM - 12:45 PM)

Session Chair: Prof Lars Golmen

Session Co-Chair: En Azrin bin Ariffin

11:45 - 12:00

IOS2025-023 (OTEC Projects and Systems)
 Title : Optimizing Double-Stage Hybrid Cycle Ocean Thermal Energy Conversion Designs for Power and Desalinated Water Generation
 Authors: **Ahmad Aiman Azmi**, Takafumi Morisaki, Kevin Fontaine, Tsutomu Nakaoka, Sathiabama T. Thirugnana, Abu Bakar Jaafar, Yasuyuki Ikegami

12:00 - 12:15

IOS2025-015 (OTEC Projects and Systems)
 Title : Demonstration of 3 kW Hybrid Ocean Thermal Energy Conversion System in UPM UTM OTEC Centre
 Authors: **Shodai Tanaka**, Sathiabama T. Thirugnana, Ahmad Aiman Azmi, Takafumi Morisaki, Tsutomu Nakaoka, Abu Bakar Jaafar, Yasuyuki Ikegami

12:15 - 12:30

IOS2025-019 (OTEC Projects and Systems)
 Title : Theoretical Study of OTEC Plant Optimization: Reuse of Indonesian Post-Operation Offshore Oil/Gas Pipelines as a Cold-Water Pipe
 Authors : Evann Ponsonnaille—Poyelle, Mukhtasor, **Arfie Ikhsan Firmansyah**, Ary Bachtiar Krishna Putra

12:30- 12:45

IOS2025-004 (OTEC Projects and Systems)
 Title : Identification of site location for OTEC and SWAC in Reunion Island based on GIS data analysis
 Authors : **Kevin Fontaine**, Olivier Marca

presentation

SCHEDULE

DAY 1 : VIRTUAL SESSION 3 (14:00 PM - 15:15 PM)

Session Chair: PM Ir Dr Shamsul Sarip

Session Co-Chair: Dr Mohd Nabil bin Muhtazaruddin

14:00 - 14:15

IOS2025-011 (Heat Exchanger Optimization)

Title: Heat Exchangers Optimization In Ocean Thermal Energy Conversion (OTEC) System Using Response Surface Methodology and TRNSYS Simulation
Authors: **Deddy Supriyatna**, Dedy Triawan Suprayogi

14:15 - 14:30

IOS2025-009 (Multiple Use of Seawater Business Models)

Title: KOREA SDGs Activities through Ocean Thermal Energy Conversion and Discharged Ocean Water Application
Authors: **Hyeon-Ju Kim**, Ho-Saeng Lee, Seung-Taek Lima, Jung-Hyun Moona

14:30 - 14:45

IOS2025-017 (Multiple Use of Seawater Business Models)

Title: Green H2 Harvesting from seawater
Authors: **K.Rajendran**, R.Vignesh

14:45 - 15:00

IOS2025-025 (Oceanography & Seawater)

Title: Comparative Assessment of Water Quality Between Seagrass and Non-Seagrass Coastal Sites
Authors: **Melinda Jaffirin Lapongan**, Nurul Shamimy Filza Fadzli, Sharmila Muhammad Ajeet

15:00 - 15:15

IOS2025-026 (Oceanography & Seawater)

Title : Comparative Assessment of Marine Carbonate Parameters in Seagrass and Non-Seagrass Habitats of Port Dickson Indicating the Buffering Role of Seagrass Meadows
Authors : **Nurul Shamimy Filza Fadzli**, Melinda Jaffirin Lapongan, Sharmila Muhammad Ajeet

presentation

SCHEDULE

DAY 1 : PHYSICAL SESSION 4 (15:30 PM - 16:45 PM)

Session Chair: Dr Kevin

Session Co-Chair: Dr Ahmad Aiman bin Azmi

15:30 - 15:45

IOS2025-003 (OTEC Projects and Systems)

Title : Design of a OTEC Laboratory for Offshore Applications

Authors : **Joel Sena Sales Junior**, Alexandre Teixeira Pinho Alho, Robson Dias, Wilson Roberto Franchi Junior, Roberto Valente de Souza

15:45 - 16:00

IOS2025-029 (OTEC Business Models)

Title : OTEC in Context: A Strategic Comparison with Geothermal and Microreactors

Authors : **Bret Stroger**

16:00 - 16:15

IOS2025-020 (Policy and Sustainability)

Title : Evaluation of Hybrid OTEC Implementation on Fernando de Noronha Archipelago Through Brazil-Japan Cooperation

Authors : **Armando H. Shinohara**, Yasuyuki Ikegami, Luiz A. Magria, Moacyr C. Araújo Filho

16:15 - 16:30

IOS2025-016 (OTEC Business Models)

Title : Applying Circularity Concepts in offshore OTEC Applications

Authors : **Thomas Noll** and Bernhard Puttke

16:30 - 16:45

IOS2025-021 (OTEC Business Models)

Title : Site Suitability and Resource Demand Assessment for 10 MW Hybrid OTEC Systems in Sabah, Malaysia

Authors : Mas Omar, **Fitri Yakub**, Rahayu Tasnim, Fikri Akmal Khodzori, Razak Mohd Ali Lee, Sathiabama T Thirugnana, A Bakar Jaafar

presentation

SCHEDULE

DAY 2 : VIRTUAL SESSION 5 (08:45 AM - 10:00 AM)

Session Chair: Ir Ts Dr Nurul Huda Ahmad

Session Co-Chair: Puan Suhailah binti Surani

08:45 - 09:00	IOS2025-013 (OTEC Project and Systems) Title: Annual Performance Analysis of a Mid-Scale OTEC System under Constant and Daily Optimized Flow-Rate Scenarios Authors: Mahsan Sadoughipoura , Patrick Grandelli PE, Andrew Wong, James VanZwieten
09:00 - 09:15	IOS2025-007 (OTEC Project and Systems) Title: Opportunities and Challenges of Developing OTEC and SWAC for a Pacific Island Authors : Andrea Copping , Hayley Farr, Charles Gunzel, and Fleur de Peralta
09:15 - 09:30	IOS2025-012 (OTEC Project and Systems) Title: Site selection of Ocean Thermal Energy Conversion (OTEC) plants for Barbados Authors: Kashawn Hall , Solange Kelly, Legena Henry
09:30 - 09:45	IOS2025-014 (OTEC Project and Systems) Title: Comparing a “20” Megawatt Ocean Thermal Energy Model for Two Locations Authors: Patrick Grandelli , Andrew Wong,
09:45 - 10:00	IOS2025-008 (OTEC Business Models) Title: Use of cold-water agriculture (ColdAg) technology for the growth of cabbage (<i>Brassica oleracea</i> var. <i>capitata</i> L.) Authors: García-Huante, Alejandro , Gómez-Merino, Fernando Carlos, Trejo-Téllez, Libia Iris & López-Herrera, Amelia

presentation

SCHEDULE

DAY 2 : VIRTUAL SESSION 6 (10:15 AM - 11:15 AM)

Session Chair: Dr Fitri Yakub

Session Co-Chair: Puan Siti 'Aisyah binti Abdul Wahid

10:15 - 10:30	IOS2025-001 (Oceanography and Seawater Quality) Title : Assessment of Thermal Resources and Site Selection for Ocean Thermal Energy Conversion (OTEC) Plants in the Caribbean Sea Authors: Erika Paola Garduño-Ruiz , Jesús Florido, Yandy Rodríguez-Cueto & Rodolfo Silva-Casarín
10:30 - 10:45	IOS2025-018 (OTEC Projects and Systems) Title: Prospective Utilization of Machine Learning for OTEC System Enhancement: Learning from Researches on Other Ocean Renewables and Typical Thermal-Based Power Generation Authors: Bondan Fiqi Riyalda , Ristiyanto Adiputra, Adian Fatchur Rochim
10:45 - 11:00	IOS2025-036 (OTEC Projects and Systems) Title: Ocean Thermal Energy Can Be Economical Today Authors : James H Anderson Jr.
11:00 - 11:15	IOS2025-022 (Multiple Use of Seawater Business Models) Title : Integrated Assessment Techniques for OTEC-Based Multi-Use Systems with DSWA Authors: Mei Kokubo , Takafumi Morisaki, Yasuyuki Ikegami

presentation

SCHEDULE

DAY 2 : VIRTUAL SESSION 7 (11:15 AM - 12:15 PM)

Session Chair: PM Ts Dr Norzanah binti Rosmin

Session Co-Chair: Puan Nur Fatimah binti Azmi

11:15 - 11:30

IOS2025-028 (Policy and Sustainability)

Title : Laboratory Evaluation of Cold-Water Discharge Strategies for Sustainable H-OTEC Operation Under Wave-Driven Mixing

Authors: :**Leng Qingxue**, Ferdaus Mohamat Yusuff

11:30 - 11:45

IOS2025-027 (Oceanography & Seawater)

Title: Assessment of Seawater Quality Variation Before and After H-OTEC Surface Water Extraction Based on the Malaysian Marine Water Quality Index (MMWQI)

Authors : **Movynediran Gopal**, Ferdaus Mohamat-Yusuff, Nur Amiera Kamarudin, Yao Guangzhi

11:45 - 12:00

IOS2025-024 (OTEC Projects and Systems)

Title : Building Data Servers for Ocean Thermal Energy Resource Assessment
Name: **Borges Posterari Jessica**, Waseda Takuji, Tsubasa Kodairaki, Sathiabama Thirugnana, A. Bakar Jaafar, Morisaki Takafumi, Ikegami Yasuyuki

12:00 - 12:15

IOS2025-031 (OTEC Projects and Systems)

Title : A Nobel Approach For Predicting Performance of Open Cycle OTEC Using Long Term Measurements From Deep Sea Moored Buoy
Name: **Biren Pattanaik**, Ashwani Vishwanatha, V Samson Packiaraj Raphaela, Srinivas Pattapua, G Venkatasan, Balaji Ramakrishnana

presentation

SCHEDULE

DAY 2 : PHYSICAL SESSION 8 (14:00 PM - 15:15 PM)

Session Chair: Dr Razak Mohd Ali Lee

Session Co-Chair: Dr Siti Maherah binti Hussin

14:00 - 14:15

IOS2025-039 (Heat Exchanger Optimization)

Title: Chlorine Dosing Optimisation for Biofouling Mitigation in Closed-Cycle OTEC Warm-Seawater Intakes

Authors : Saiyidatul Saadah Ahmad Nizam, Noor Irza Mohd Zaki, Nurul 'Azizah Mukhlas, Mohd Syafiq Mohd Suri, Mohd Khairi Abu Husain

14:15 - 14:30

IOS2025-033 (OTEC Projects and Systems)

Title : Optimization-Driven Feasibility Analysis of Standalone Hybrid Renewable Energy Systems for Remote Communities in Sabah

Name: Shamsul Sarip, A Bakar Jaafar, Mohd Nabil Muhtazaruddin, Ferdaus Mohamat Yusuf, Rozaimi Che Hasan

14:30 - 14:45

IOS2025-040 (OTEC Project and Systems)

Title : Engineering Evaluation of Fixed Jacket Platforms for Ocean Thermal Energy Conversion in Malaysian Waters

Authors : **Aidil Danish Nor Azam** , Mohd Khairi Abu Husain , Noor Irza Mohd Zaki

14:45 - 15:00

IOS2025-035 (OTEC Business Models)

Title : Accelerating OTEC Commercialization: Lessons from Fragmented Efforts and a Roadmap to 2030

Authors: C. B. Panchal, **Bret Stroger**, and Vishal Panchala

15:00 - 15:15

IOS2025-030 (OTEC Project and Systems)

Title: From Analysis to Engineering: Decades of Progress Toward Deploying OTEC at Kwajalein

Authors: **Bret Stroger**, C. B. Panchal, Vishal Panchal

presentation

SCHEDULE

DAY 2 : VIRTUAL & PHYSICAL SESSION 9 (15:30 PM - 16:30 PM)

Session Chair: Dr Takafumi Morisaki

Session Co-Chair: En Abdul Shukur bin Mohamad

15:30 - 15:45 **IOS2025-010 (Oceanography & Seawater)**
Title : Exploring OTEC Opportunities in Australia's Maritime Domain
Author : **Philip Marsh**

15:45 - 16:00 **IOS2025-034 (OTEC Projects and Systems)**
Title : Status of OTEC in the Philippines and Way Forward
Authors: :**Carmelo O. Dilao**

16:00 - 16:15 **IOS2025-037 (OTEC Projects and Systems)**
Title : Cooling Data Centre Servers using Cold Deep Seawater Discharged from OTEC Condensers
Authors: **Fadhilah Abdul Razak** , Abu Bakar Jaafar, Sathiabama T. Thirughana, Nurul Huda Ahmad, Ahmad Aiman Azmi, Azrin Ariffin

16:15 - 16:30 **IOS2025-038 (Oceanography & Seawater)**
Title : Estimating Tropical Upper-Ocean Heat Storage from Satellite-Derived SST
Authors: **Razak Mohd Ali Lee**, Ceasareo Sualin