



Scientific Program

3rd World Congress on

RECYCLING & WASTE MANAGEMENT

April 13-15, 2026 | **Singapore**



Hosting Organization: Inovine Meetings LLC, 2C Pecan Hill Drive Clinton
Mississippi, 39056 USA | Phone: +1-408-648-2233

Day 1

Scientific Program

09:00–09:15: Registrations

09:15–09:30: Opening Ceremony

April 13, 2026 | Singapore

Meeting Hall: Quartz I

Keynote Presentations



09:30 – 10:10

Title: Designing Field-Deployable, Smartphone-Based Diagnostics for Scalable Global Detection

Melinda B. Chu

Ecotera Home, Inc., USA



10:10 – 10:50

Title: To Prepare Ecological Facades to Enhance Carbon Capture and Net Primary Productivity with the Integration of Bioluminescent Genes

Bhupendra Kumar

Aeiforia Constructions Pvt Ltd, India

Group Photo | Networking & Refreshments 10:50-11:10 @Foyer

Session Introduction

Session Chair: Melinda B. Chu, Ecotera Home, Inc., USA

Session Co-Chair: Sitpayeva Gulnara, Institute of Botany and Phytointroduction, Kazakhstan

Tracks

Environmental Sustainability and Development | Climate Change and Health | Environmental Pollution and Ecotoxicology | AI for Environmental Monitoring and Prediction | Climate Change Challenges & Sustainability | Environmental Risk Assessment Sustainable community planning | Food Waste Recycling & Prevention

Exhibitor Demo

11:10–11:40

Title: Simplify and Automate Discrete Gas Sample Analysis

Sohom Roy, Naresh Kumar

Picarro Inc., USA

Special Workshop Session

11:40–12:40

Title: Transforming Business: Redefining Profit-Driven Business Models for Sustainable Impact

Adina-Iuliana Deacu

Tianmei World Academy, China / Research Institute for Sustainability at GFZ (RIFS), Germany

Lunch Break 12:40-13:40 @Foyer

Oral Presentations

13:40–14:10

Title: Conservation of Endemic, Rare and Endangered Species of Kazakhstan Flora

Sitpayeva Gulnara, Vesselova Polina

Institute of Botany and Phytointroduction, Kazakhstan

14:10–14:40

Title: The Australian Example of Biofuels and Dealing with Problematic Tyre Waste

Kim Glassborow

G&B Lawyers, Australia

14:40–15:10

Title: The Social Return on Investment (SROI) of Container Deposit Schemes

Bronwen Dalton

University of Technology Sydney, Australia

Refreshment | Coffee Break 15:10-15:30 @Foyer

Poster Presentations

15:30–16:00

Title: Genus Tamarix L. in the flora of Kazakhstan

Urazalina Alina

Institute of Botany and Phytointroduction, Kazakhstan

16:00–16:30

Title: Application of Barley Shochu Lees to Mushroom Cultivation

Masahito Yamauchi

National Institute of Technology, Kagoshima College, Japan

Panel Discussion & Certificate Felicitation

Day –1 Ends

Day 2

Scientific Program

09:00–09:15: Registrations

09:15–09:30: Opening Ceremony

April 14, 2026 | Singapore

Meeting Hall: Quartz I

Session Introduction

Session Chair: Melinda B. Chu, Ecotera Home, Inc., USA

Session Co-Chair: Sitpayeva Gulnara, Institute of Botany and Phytointroduction, Kazakhstan

Tracks

**Environmental Pollution and Ecotoxicology | Plant Science and Biotechnology | Climate Change Challenges & Sustainability | Bioenergy, Biofuels and Biorefineries | Climate Change Challenges & Sustainability | Environmental Risk Assessment
Sustainable community planning**

Oral Presentations

09:30–10:00

Title: A Portable Smartphone-Based Microplastics Global Screening Platform for Saltwater and Coastal Environments

Melinda B. Chu

Ecotera Home, Inc., USA

10:00–10:30

Title: Transforming Business: Redefining Profit-Driven Business Models for Sustainable Impact

Adina-Iuliana Deacu

Tianmei World Academy, China / Research Institute for Sustainability at GFZ (RIFS), Germany

Group Photo | Networking & Refreshments 10:30-10:50 @Foyer

10:50–11:20

Title: Climatic Traumas and Affects on Tribal People of Tripura: Challenges and Mitigation

Queen Sharma

Indo German Creflat Project Tripura, India

11:20–11:50

Title: Ammonia Monitoring: Meeting regional air quality directives with Picarro CRDS Ammonia Analyzers and LNI Permacal System

Sohom Roy

Picarro Technologies Private Ltd., Bengaluru, India

11:50–12:20

Title: Analysis of Household Inorganic Waste Management Based on Circular Economy to Maintain a Healthy Environment as a Climate Change Mitigation Action
R. Azizah
Universitas Airlangga, Indonesia

Lunch Break 12:20-13:30 @Foyer

Poster Presentations

13:30–14:00

Title: Tropical and Subtropical Plants in the Introduction Program of the Main Botanical Garden of Kazakhstan
Massalimova Sholpan
Institute of Botany and Phytointroduction, Kazakhstan

14:00–14:30

Title: Assessment of Spatial Variability of Polycyclic Aromatic Hydrocarbons (PAHs) in Urban Soils and Fungal Disease Status of Trees Grown in Hong Kong Areas
Sung Ka Chun, Jacky
Hong Kong Baptist University, HKSAR, Hong Kong

Networking & Refreshments

Panel Discussion & Certificate Felicitation
Day -2 Ends

Day 3

Scientific Program

**Virtual Mode Zoom Meeting
(GMT+8) Time in Singapore**

April 15, 2026 | Virtual

Virtual Presentations

09:00–09:20	Title: Consumer Food Waste Recycling in Multi-Unit Dwellings: Enablers and Barriers Jayanath Ananda CQ University, Australia
09:20–09:40	Title: Sustainable Recovery of High-Purity V2O5 from Sulfuric Acid Manufacturing Spent Catalysts via Mild Hydrometallurgical Processing Nityanand Singha Korea Institute of Geo-Science and Mineral Resources, South Korea
09:40–10:00	Title: Bio-Receptive Concrete. Design and Development of Bio-Receptive Concrete Incorporating Recycled and Lightweight Materials for Sustainable Structural Applications Kusuma Putri Wahyu Abadi Universitas Brawijaya, Indonesia
10:00–10:20	Title: Use of Piper Betle L. Extract for the Treatment of Catfish (<i>Clarias gariepinus</i>) Infected with <i>Aeromonas Hydrophila</i> Annisa Bheta Berliana Ferdinandus Sriwijaya University, Indonesia
10:20–10:40	Title: Quantifying Carbon Sequestration Losses from Mangrove Decline in the Philippines: Modeling Climate Costs and Recovery Pathways Michaela Agtarap Philippine Center for Advanced Maritime Simulation and Training, Inc., Philippines
10:40–11:00	Title: Effect of Imposed Drought on Carbon Storage and Soil Respiration of Moso Bamboo Stand in Southeast China Benzhi Zhou Research Institute of Subtropical Forestry, Chinese Academy of Forestry, China
11:00–11:20	Title: The Evaluation of Catalytic Performance, Electron Transfer Property Among Active Metals, and Investigation of Preferred Intermediates of Fe-Based Catalysts under the Function of Cu and K Metals During Low-Temperature Reverse Water-Gas Shift Reaction Mohammad Mehrizi Renewable Resources and Energies, China
11:20–11:40	Title: From Obligation to Collaboration: Integrating Voluntary Environmental Agreements (VEAs) to Enhance Bangladesh's EPR Framework for Plastic Waste Management Jayawardhana UNIDO, Sri Lanka

11:40–12:00	<p>Title: Implementing Plastic Neutrality in Dialysis Care: A 'Waste to Wellness' Model using Plastroconcrete Exchange to Fund Patient Anemia Treatment</p> <p>Palani Ravichandran Sri Venkateswaraa Medical College, India</p>
12:00–12:20	<p>Title: Design of a low cost arsenic removal filter</p> <p>Pranab Jyoti Barman Golaghat Engineering College, India</p>
12:20–12:40	<p>Title: Sustainable Biofuel Production using CaO-Sulphated Alumina Catalyst</p> <p>Amal Salim Al Rahbi University of Technology and Applied Sciences, Oman</p>
12:40–13:00	<p>Title: Spent Claus Catalyst In Manufacturing High Alumina Refractory Materials</p> <p>Fatimah Edhaim Saudi Aramco, Saudi Arabia</p>
13:00–13:20	<p>Title: Biochar derived from agricultural wastes for remediation of salt-affected soils in Sultanate of Oman</p> <p>Amira Al Zadjali University of Technology and Applied sciences, Oman</p>
13:20–13:40	<p>Title: Crossroad of All Environmental Crises: Behavioral Change</p> <p>Meric Sinan Merias Association for Community Awareness, Turkey</p>
13:40–14:00	<p>Title: Individual and Combined Effects of Atrazine and Glyphosate on Mussel Physiology: An Ecotoxicological Assessment</p> <p>Davide Di Paola University of Messina, Italy</p>
14:00–14:20	<p>Title: Enhancing Phosphorus Bioavailability in Black Soldier Fly Larval Frass through the Bioconversion of Bone Char</p> <p>Maher E. Saleh Alexandria University, Egypt</p>
14:20–14:40	<p>Title: Creating Circular Industrial Symbiosis for End-of-Life Wind Turbine Blades from Wind Power and Construction Value Chains</p> <p>Ana T Lima Technical University of Denmark, Denmark</p>
14:40–15:00	<p>Title: Textile waste recycling: A Study on Finishing, Evaluation and Removal</p> <p>Alessia patrucco Italian National Research Council, Italy</p>
15:00–15:20	<p>Title: Illegal Dumping of Solid Waste: A Challenge Towards Sustainable Practices</p> <p>Mpinane Flory Senekane University of Johannesburg, South Africa</p>
15:20–15:40	<p>Title: Households' Willingness to Pay for an Improved Solid Waste Management Plan, Case of Asmara City, Eritrea</p> <p>Natnael Aregawi College of Business and Social Sciences, Eritrea</p>

15:40–16:00

Title: From Bottles to Bales: Operational Leadership and Innovation in Beverage and Paper Recycling
Andrew Kirkland
International Paper, United States

16:00–16:20

Title: Digitizing the Waste Frontier: How Fintech and AI Are Transforming Waste Management
Michael Marmo
CurbWaste, United States

16:20–16:40

Title: SCWO-Destroying Biosolids from the Inside Out using Supercritical Water Oxidation
Naomi Lynn Senehi
374Water, United States

16:40–17:00

Title: Destruction of fluorine-based Aqueous Film Forming Foams (AFFF) with Supercritical Water Oxidation
David Garb
374Water, United States

17:00–17:20

Title: E-Waste Recycling Technologies and the Opportunity in Meeting Critical Materials Supply of Copper Through Recycling
Abhishekh Parmar
Clareo Partners, United States

Panel Discussion
