

PROGRAMME

September 8, 2016

8:00 – 8:30 AM	Registration
8:30 – 9:00 AM	OPENING CEREMONIES Engineering Theater
	MESSAGES
9:00 – 9:10 AM	Prof. Dr. Rizalinda L. de Leon Dean, UP Diliman College of Engineering
9:10 – 9:20 AM	Prof. Dr. Benito M. Pacheco Vice Chancellor for Academic Affairs University of the Philippines Diliman
9:20 – 9:40 AM	KEYNOTE MESSAGE Atty. Juan Miguel Cuna Assistant Secretary for the Environment Department of Environment and Natural Resources
9:40 – 9:50 AM	Photo Session
9:50 – 10:15 AM	Coffee Break
	KEYNOTE LECTURES
10:15 – 10:40 AM	<i>Reconciliation or Diversification? - Some Preliminary Thoughts on Future Directions of Waste Related Research in SDGs Era</i> Assoc. Prof. Dr. Naoya Abe Department of Transdisciplinary Science and Engineering Tokyo Institute of Technology
10:40 – 11:05 AM	<i>Mottainai-Wasteful- In the Field of Concrete</i> Prof. Dr. Nobuaki Otsuki Emeritus Professor, Tokyo Institute of Technology
11:05 – 11:20 AM	Promotional Talk Tokyo Institute of Technology
11:20 – 11:35 AM	Company Talk Chiyoda Philippines

11:35 AM – 12:30 PM

LUNCH

2nd Floor Lobby

1:00 – 4:15 PM

TECHNICAL SESSION

Breakout Rooms

4:30 – 5:30 PM

CLOSING CEREMONIES

Engineering Theater

Synthesis of Sessions

Session Chairs

Closing Remarks

Dr. William Hong

President, Association of Tokyo Tech Alumni and Research
Scholars

6:30 – 9:00 PM

FELLOWSHIP DINNER

Institute of Civil Engineering Main Building Lobby

Dr. Maria SheilahG. Napalang and Asst. Prof. Christian R. Orozco
Master of Ceremonies

Technical Session Schedule

Time	Session	Venue
1:00 – 2:30 PM	A: Sustainable Concrete Engineering I	Engineering Theater
	B: Waste Utilization I	MH 501 (5 th Floor)
	C: Waste Characterization	Beta Epsilon AVR
2:30 – 2:45 PM Break		
2:45 – 4:15 PM	D: Sustainable Concrete Engineering II and Waste Utilization II	Engineering Theater
	E: Waste-to-Energy	Beta Epsilon AVR
	F: Waste Management	MH 501 (5 th Floor)

SESSION A

Sustainable Concrete Engineering I

Venue: Engineering Theater
Session Chairs: Melito A. Baccay and Marish S. Madlangbayan

Paper ID	Time	Presentation
A1	1:00 PM	<p>Influence of Cold Joints On the Corrosion of Steel in Concrete Mixed with Seawater Under Varying Fly Ash Ratios <i>Christian HuyDalangin, Jayson Marco Gonzales, John Christopher Ilagan, John Christopher Yu, Cheryl LyneRoxas</i> <i>De La Salle University, Manila, Philippines</i></p>
A2	1:15 PM	<p>Investigation On the Compressive Strength of Concrete Containing Acid-Treated Rice Hull Ash Cement Replacement <i>Nimfa Maren S. Tabucal, Ariel Miguel M. Aragoncillo, Crisaulo M. Reynoso, Marish S. Madlangbayan, Emmanuel C. Macatula</i> <i>University of the Philippines, Los Baños, Laguna, Philippines</i></p>
A3	1:30 PM	<p>Analysis of The Effect of Fly Ash On the Strength and Cost of Recycled Aggregate Concrete <i>Aloysius KristofferAlipio, John Carlo P. Raquiño, Ma. Brida Lea D. Diola and Demi Mae P. Daliyong</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
A4	1:45 PM	<p>Effect of Corn Cob Ash as Supplementary Cementitious Material On the Mechanical Properties of Concrete Melito A. Baccay¹ and Orlando R. Bagcal² <i>¹Technological University of the Philippines, Manila, Philippines</i> <i>²Tarrant County College, Fort Worth, Texas USA</i></p>
A5	2:00 PM	<p>Influence of Coconut Shell as Partial Fine Aggregate Replacement On the Mechanical Properties of Concrete <i>Teodinis P. Garcia and Melito A. Baccay</i> <i>Technological University of the Philippines, Manila, Philippines</i></p>
A6	2:15 PM	<p>Characteristics of Seawater-Mixed Concrete Made Of Cement With Various Replacement Ratio Of Fly Ash <i>Hikaru Tanaka¹, Keisuke Matsukawa², Cheng Yi³, Winarto Kurniawan¹, Nobuaki Otsuki¹, Hirofumi Hinode¹</i> <i>¹Tokyo Institute of Technology, Tokyo, Japan</i> <i>²Chiyoda Corporation, Japan</i> <i>³Tokyo Gas Co., Ltd., Tokyo, Japan</i></p>

2:30 – 2:45 PM **Coffee Break**

SESSION B

Waste Utilization I

Venue: MH 501 (5th Floor)
Session Chairs: Eligia Clemente and Teodinis Garcia

Paper ID	Time	Presentation
B1	1:00 PM	<p>Application of Hydrus-1D in Predicting Useful Life of Cocopeatin A Filter Bed Treating Wastewater with Heavy Metals <i>Jessie O. Samaniego and Maria Antonia N. Tanchuling</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
B2	1:15 PM	<p>Use of Waste Materials as Filter Media of Vertical Subsurface Flow Constructed Wetlands Planted for Pig Farm Effluent Treatment of University Farm, UPLB <i>Perlie Velasco, Marloe Sund, Victor Mikael De Padua, Sharmaine Remos, Toni Janssen Monserrat, Shery Gale Recamara</i> <i>University of the Philippines, Los Baños, Laguna, Philippines</i></p>
B3	1:30 PM	<p>Development of Pre-Cast Rice Husk Ash Geopolymer Mortar Based On an Empirical Mix Model and The Effects of Activator Concentration and Alumina Admixture On Early-Age Compressive Strength <i>Nimfa Maren S. Tabucal, Michael Vincent O. Laurio, Perlie P. Velasco, Dr. Richelle G. Zafra, Marish S. Madlangbayan, Jhon Romie D. Zapanta</i> <i>University of the Philippines, Los Baños, Laguna, Philippines</i></p>
B4	1:45 PM	<p>Study of San Juan River Dredged Materials Blended with Recycled Concrete Aggregates as A Potential Road Base Course or Subbase Course <i>Ma. Jhubel S. Dela Cruz, Ar Filip D. Ilagan, and Lestelle V. Torio-Kaimo</i> <i>University of the Philippines Diliman, Philippines</i></p>
B5	2:00 PM	<p>Effects of Fire On the Compressive Strength Of Concrete Hollow Blocks Mixed With Plastic Waste Aggregates <i>Jason Alcantara, Patrisha Ayala, Veya Santos, Eunice Yao, and Bernardo Lejano</i> <i>De La Salle University, Manila, Philippines</i></p>
B6	2:15 PM	<p>Sustainable Utilization of Small-Scale Copper Mine Tailings as Geopolymer Bricks <i>Aljon L. Dimalanta, David Angelo Q. Santos, Christian R. Orozco</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>

2:30 – 2:45 PM **Coffee Break**

SESSION C

Waste Characterization

Venue: Beta Epsilon AVR
Session Chairs: William Hong and Jonathan Dungca

Paper ID	Time	Presentation
C1	1:00 PM	<p>Copper (II) And Zinc (II) Adsorption On Hydroxyapatite Pellets Extracted from Porcine Bones <i>John Kenneth A. Cruz, Candice A. Alon, and Rodney E. Estrada</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
C2	1:15 PM	<p>Zetapotential Characterization of Natural Hydroxyapatite from Porcine Bones and Its Subsequent Electrophoretic Deposition On Fiberglass for Biomedical Application <i>Jade Katherine Emily P. Castro, Lilibeth Klarysse D. Domingo, Angelo Jacob O. Samaniego and John Kenneth A. Cruz</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
C3	1:30 PM	<p>Impact of Solid Waste On River Water Quality for The Estero De Paco <i>Eligia D. Clemente and Maria Antonia N. Tanchuling</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
C4	1:45 PM	<p>Characterization of The Leachates from Major City Landfills in Asean Countries <i>Phetyasone Xaypanya¹, Rajiv Eldon Abdullah¹, Jiro. Takemura¹, Chart Chiemchaisri², Hull Seingheng³, Maria Antonia N. Tanchuling⁴</i> <i>¹Tokyo Institute of Technology, Tokyo, Japan</i> <i>²Kasetsart University, Ladyaow Chatuchak, Thailand</i> <i>³Institute of Technology of Cambodia, Phnom Penh, Cambodia</i> <i>⁴University of the Philippines, Diliman, Quezon City, Philippines</i></p>
C5	2:00 PM	<p>Chemical and Toxicity Characterization of Coal Ash from Coal Dust Fired Gravity Circulation Boiler <i>Denvert Pangayao, Susan Gallardo, Michael Angelo Promentilla, Derrick Ethelberth Yu, Roy Alvin Malenab, Jonathan Dungca</i> <i>De La Salle University, Manila, Philippines</i></p>
C6	2:15 PM	<p>Synthesis of Zeolite a From Corn cob Ash <i>Norway Pangan^{1,2}, Susan Gallardo¹, Pag-asa Gaspillo¹, Winarto Kurniawan³, Hirofumi Hinode³</i> <i>¹De La Salle University, Manila, Philippines</i> <i>²Technological University of the Philippines, Manila, Philippines</i> <i>³Tokyo Institute of Technology, Tokyo, Japan</i></p>

2:30 – 2:45 PM **Coffee Break**

SESSION D

Sustainable Concrete Engineering II & Waste Utilization II

Venue: Engineering Theater
Session Chairs: Melito A. Baccay and Marish S. Madlangbayan

Paper ID	Time	Presentation
D1	2:45 PM	<p>Effects of Plastic Wastes as Partial Aggregate Substitute to Concrete Hollow Blocks <i>Maejann E. Cuartero, Nikko Paolo P. Villanueva, and Andres W.C. Oreta</i> <i>De La Salle University - Manila, Philippines</i></p>
D2	3:00 PM	<p>Strength Performance of Concrete Made Using Wastewater from The UP Lagoon <i>Gene Euclid T. dela Cruz, Karla Fatima Gonzales, Christian R. Orozco</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
D3	3:15 PM	<p>Magnetite Recovery of Gold from Electronic Wastes Leached with Thiosulfate Solution <i>Karlo Leandro D. Baladad, Jamie Jane Apolonio, Geliah Anne Brilata, Myrhh Jade Divinagracia¹</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
D4	3:30 PM	<p>Electrophoretic Deposition of Porcine Bone Derived Hydroxyapatite On Stainless Steel for Biomedical Application <i>Joshua Kevin Uy, Nelly Karen Victoria Rosales, Michael Siemens Uy, Allen Vincent Catapang, John Kenneth A. Cruz</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
D5	3:45 PM	<p>Compressive Strength Analysis of Concrete with Waste Ceramic Tiles as Substitute to Aggregates <i>Jay Laurence M. Ong, Angela O. Rieta, Levin G. Lizardo, Sherwin Cheng, and Ronaldo S. Gallardo</i> <i>De La Salle University, Manila, Philippines</i></p>
D6	4:00 PM	<p>Investigation of Strength and Durability of Paving Blocks Made of Non-Biodegradable Household Waste as Partial Substitute for Fine Aggregates <i>Richard De Jesus, Martin Benedicto, Marisue Eusebio, Jude Granada, Darwin Tuazon</i> <i>De La Salle University, Manila, Philippines</i></p>

4:30 PM Closing Ceremony (Engineering Theater)

SESSION E

Waste-to-Energy

Venue: Beta Epsilon AVR
 Session Chairs: William Hong and Jonathan Dungca

Paper ID	Time	Presentation
E1	2:45 PM	Comparative Analysis of Utilizing Plastic Wastes Through Waste-To-Energy and Plastic-To-Fuel Utilization Approaches for Lucena City, Quezon <i>Marloe Sundo, Raymart Steven Resuello, Perlie Velasco, Marish Madlangbayan</i> <i>University of the Philippines, Los Baños, Laguna, Philippines</i>
E2	3:00 PM	Effect of Pre-Treatment By-Product On Biomethane Production from Aquatic Macrophytes <i>Mitsuhiko Koyama¹, Keiko Watanabe², Norio Kurosawa², Shuichi Yamamoto², Kanako Ishikawa³, Syuhei Ban⁴, Tatsuki Toda²</i> <i>¹Tokyo Institute of Technology, Tokyo, Japan</i> <i>²Soka University, Tokyo, Japan</i> <i>³Lake Biwa Environmental Research Institute, Shiga, Japan</i> <i>⁴University of Shiga Prefecture, Shiga, Japan</i>
E3	3:15 PM	Composting by Inoculating Acid Degrading Thermophilic Bacteria <i>Hapsari Puspitaloka, Quyen Ngoc Minh Tran, Mitsuhiko Koyama, Kiyohiko Nakasaki</i> <i>Tokyo Institute of Technology, Tokyo, Japan</i>
E4	3:30 PM	Torrefaction of Rice Husk for Biofuel Production <i>Ma. Theresa A. Banta, Wilfredo I. Jose, Rizalinda L. De Leon</i> <i>University of the Philippines - Diliman, Philippines</i>
E5	3:45 PM	Utilization of Sugarcane Bagasse for Extraction of Fermentable Sugars <i>Kyaw Wunna¹, Kiyohiko Nakasaki², Joseph Auresenia¹, Leonila Abella¹, Pagasa Gaspillo¹</i> <i>¹De La Salle University, Manila, Philippines</i> <i>²Tokyo Institute of Technology, Tokyo, Japan</i>

4:30 PM Closing Ceremony (Engineering Theater)

SESSION F

Waste Management

Venue: P&G Room (5th Floor)
 Session Chairs: Eligia Clemente and Teodinis Garcia

Paper ID	Time	Presentation
F1	2:45 PM	<p>Assessing The Environmental Impacts of Manufacturing Styro-Plastic Bricks, Concrete-Plastic Bricks and Clay Bricks Using Life Cycle Assessment <i>John Harvie delos Reyes and Ma. Brida Lea D. Diola</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
F2	3:00 PM	<p>E-Waste Recycling and Its Impact On Health: Investigation On E-Waste Informal Recycling Situations in The Philippines <i>Aya Yoshida¹, Tetsuro Agusa², Florencio C. Ballesteros Jr.³</i> ¹<i>National Institute for Environmental Studies, Japan</i> ²<i>Prefectural University of Kumamoto, Japan</i> ³<i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
F3	3:15 PM	<p>Assessment of Food Waste Management in UP Diliman <i>Monica Ledesma, Marvin Danielle Sierra, Maria Antonia N. Tanchuling and Ma. Brida Lea D. Diola</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
F4	3:30 PM	<p>Assessment of Garden Waste Management Strategies in Up Diliman <i>Annamaria V. Hinolan, Ma. Brida Lea D. Diola and Maria Antonia N. Tanchuling</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>
F5	3:45 PM	<p>Prospects for Better Implementation of the Solid Waste Management Act <i>Dennis G. dela Torre</i> <i>University of the Philippines, Diliman, Quezon City, Philippines</i></p>

4:30 PM Closing Ceremony (Engineering Theater)
