

## TECHNICAL PROGRAM

### DAY 01 – THURSDAY 07<sup>TH</sup> MARCH 2019, HOTEL TAJ SAMUDRA, COLOMBO

INAUGURATION SESSION	Thursday, 07 <sup>th</sup> March 2019   09.00 to 10.10   Grand Cristal Ballroom	
	08.00 – 09.00	Conference Registration
	09.00 – 09.10	Lightning of Oil Lamp and National Anthem
	09.10 – 09.20	Welcome Address Welcome Address by Mr. Isanka P. Gamage ( <i>Co-Founder &amp; Managing Director - The International Institute of Knowledge Management (TIKM), Sri Lanka</i> )
	09.20 – 09.30	Speech by the Conference Co - Chair Dr. Dongbei YUE ( <i>Associate Professor and Associate Dean, School of Environment, Tsinghua University, China.</i> )
	09.30 – 09.40	Speech by the Conference Co - Chair Dr. Randika Jayasinghe ( <i>Head of the Department, Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura, Sri Lanka</i> )
	09.40 – 10.00	Guest Speech by the Mr. S.M. Madawalagama ( <i>Director, Solid Waste Division, Ministry of Internal and Home Affairs and Provincial Councils and Local Government, Sri Lanka</i> )
	10.00 – 10.10	Conference Photograph
	10.10 – 10.30	Morning Refreshments

<b>KEYNOTE FORUM</b>	<b>Thursday, 07<sup>th</sup> March 2019   10.30 to 11.50   Grand Cristal Ballroom</b>	
	10.30 – 11.10	"Circular Solutions – Waste and Resource Management for Sustainability" Prof. Margaret Bates ( <i>University of Northampton, England</i> )
	11.10 – 11.50	"Finding the Right Way to Take Care of MSW Leachate" Dr. Dongbei YUE ( <i>Associate Professor and Associate Dean, School of Environment, Tsinghua University, China</i> )

<b>RECOGNITION OF INNOVATIONS</b>	<b>Thursday, 07<sup>th</sup> March 2019   11.50 to 12.10   Grand Cristal Ballroom</b>	
	11.50 – 12.00	Mr. Suresh Madushan ( <i>Innovation of UCEMB App.</i> )
	12.00 – 12.10	Mr. Lahiru Wijerathna ( <i>First Yogurt Cup Recycling program in Sri Lanka</i> )

<b>INDUSTRY WORKSHOP</b>	<b>Thursday, 07<sup>th</sup> March 2019   12.10 to 12.40   Grand Cristal Ballroom</b>	
	12.10 – 12.40	Conducted by INSEE Eco cycle
	12.40 – 13.30	Networking Lunch

<b>TECHNICAL SESSION 01</b>	<b>WASTE MANAGEMENT, REDUCTION AND REUTILIZATION</b>		
	Thursday, 07 <sup>th</sup> March 2019   13.30 to 15.30   Grand Cristal Ballroom		
	Chaired by: Prof. Wing Keung Law ( <i>Nanyang Technological University, Singapore</i> )		
	13.30 – 13.50	A1	Using Market Based Instruments in Managing Municipal Solid Waste Problem. The Case of Dhaka City  Rahman A ( <i>School of Business, Independent University, Bangladesh</i> )
	13.50 – 14.10	A2	The Role of Tourism on The Environmental Pollution; In Nilaveli Beach at Trincomalee District  Agampodi B.P ( <i>Sri Lanka institute of Advanced Technological Education, Sri Lanka</i> )
	14.10 – 14.30	A3	Environmental Behaviour of Construction Workers on Waste Management at Construction Sites  <sup>1</sup> Kaluarachchi M.S, <sup>1</sup> Waidyasekara K.G.A.S, <sup>2</sup> Rameezdeen R. ( <i><sup>1</sup>University of Moratuwa, Sri Lanka, <sup>2</sup>University of South Australia, Australia</i> )
	14.30 – 14.50	A4	Role of Municipal Councils in Solid Waste Management – Current practices and future challenges in Sri Lanka  <sup>1</sup> Zimar A.M.Z, <sup>1</sup> Aslam Saja A.M.1, <sup>2</sup> Haraguchi M. ( <i><sup>1</sup>South Eastern University of Sri Lanka, Sri Lanka, <sup>2</sup>Harvard Kennedy School, Cambridge, Massachusetts, USA</i> )
	14.50 – 15.10	A5	Feasibility of Concrete Containing Recycled Concrete Aggregates  H.M.S.C.H. Bandara, G. Thushanth, H.M.C.C. Somarathna ( <i>University of Jaffna, Sri Lanka</i> )
	15.10 – 15.30	A6	vPresent Status, Roles and Challenges of Local Government Authorities in Solid Waste Management in Sri Lanka - A review  Muthukumara S.A.U.R, Jayasinghe G.Y. ( <i>Faculty of Agriculture, University of Ruhuna, Sri Lanka</i> )
15.30 – 15.50		Evening Refreshments	

<b>POSTER SESSION</b>		<b>Thursday, 07<sup>th</sup> March 2019   15.30 to 16.00   Grand Cristal Ballroom</b>
		Chaired by: Dr. Dongbei YUE ( <i>Tsinghua University, China</i> )
15.30 – 16.00	P1	Study on Renewable Energy Consumption Potential for Electricity Generation as A GHG Mitigation Option in Sri Lanka Nayanika S.A.D, Danthurebadara M ( <i>University Of Peradeniya, Sri Lanka</i> )
	P2	Improvement of Waste Reverse Logistics Model by Complex Transportation Cost Analysis Šomplák R, Janošák F, Nevrlý V, Smejkalová V, Pavlas M ( <i>Faculty of Mechanical Engineering, Brno University of Technology, Czech Republic</i> )
	P3	Comparative Study on Desulfurization of Waste Rubber Pyrolysis Oil in Sri Lanka <sup>1</sup> D.M.K.G Dissanayake, A.C.A. <sup>1</sup> Jayasundara, <sup>2</sup> H.D.S Chamruk ( <sup>1</sup> <i>University of Peradeniya, Peradeniya, Sri Lanka</i> , <sup>2</sup> <i>Siam City Cement (Lanka) Ltd, Puttum, Sri Lanka</i> )
	P4	Forecasting of Waste Production Using Confidence Interval Estimation <sup>1</sup> Smejkalová V, <sup>1</sup> Šomplák R, Nevrlý V.1, <sup>1</sup> Pavlas M ( <sup>1</sup> <i>Brno University of Technology, Czech Republic</i> )

<b>WORKSHOP - I</b>		<b>Thursday, 07<sup>th</sup> March 2019   16.00 to 17.30   Grand Cristal Ballroom</b>
16.00 – 17.30	“ Be a Leading Activist on Waste Management ” Dr. Randika Jayasinghe ( <i>Head of the Department, Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura, Sri Lanka</i> )	

<b>TECHNICAL SESSION 02</b>	<b>WASTE MODELLING</b>		
	Thursday, 07 <sup>th</sup> March 2019   17.30 to 18.30   Grand Cristal Ballroom		
	Chaired by: Prof. Aminur Rahman ( <i>Independent University, Bangladesh</i> )		
	17.30 – 17.50	B1	Quantification and Assessment of Collection Costs for Various Systems  Nevrlý V, Šomplák R, Smejkalová V, Khýr L, Pavlas M ( <i>Faculty of Mechanical Engineering, Brno University of Technology, Czech Republic</i> )
	17.50 – 18.10	B2	Effects of Pyrolysis Kinetics on Incineration Modelling  Adrian C. H. Lai, Adrian Wing-Keung Law ( <i>Nanyang Environment and Water Research Institute (NEWRI), Nanyang Technological University, Singapore</i> )
18.10 – 18.30	B3	Organic Waste Composting: A Resource Recovery Approach towards Sustainable Environment  <sup>1</sup> Aslam HMUA, <sup>2</sup> Butt MAb, <sup>2</sup> Bareen F-, <sup>2</sup> Shafiq M, <sup>3</sup> Butt FA, Shahid M <sup>2</sup> , Javaid A <sup>2</sup> and <sup>2</sup> Husnain A ( <i><sup>1</sup>University of Management and Technology, Pakistan. <sup>2</sup>University of the Punjab, Pakistan, <sup>3</sup>Albert Ludwigs University, Germany</i> )	

## DAY 02 - FRIDAY, 08<sup>TH</sup> MARCH, 2019, HOTEL TAJ SAMUDRA, COLOMBO

<b>TECHNICAL SESSION 03</b>	<b>WASTE OIL AND WASTE WATER RECYCLING</b>		
	Friday, 08 <sup>th</sup> March 2019   08.40 to 10.20   Longdon		
	Chaired by: Dr. Lai Chun Hin Adrian ( <i>Nanyang Technological University, Singapore</i> )		
	08.40 – 09.00	C1	Evaluation of PM Emissions of a Diesel Engine Fueled with Waste Cooking Oil Biodiesel: A Systematic Review  Oshinusi O.H, Gray G.M ( <i>The George Washington University, U.S.A</i> )
	09.00 – 09.20	C2	Removing Organic Oil from Sintered Neodymium-Iron-Boron Scraps by Solvent Extraction for Recycling  Li Zhou, YQ Jin ( <i>Institute for Thermal Power Engineering, Zhejiang University, China</i> )
	09.20 – 09.40	C3	Assessment of Associated Policies and Management Frameworks for Development of New Policy on Waste Cooking Oil (WCO) Management in Malaysia  <sup>1</sup> Nur Mazlini Razali, <sup>1</sup> Tuan Ab Rashid Tuan Abdullah, <sup>2</sup> Wan Asma Ibrahim, <sup>3</sup> Muhamad Nazrain Muhamad Nassri ( <sup>1</sup> Universiti Tenaga Nasional, Malaysia, <sup>2</sup> forest Research Institute Malaysia, <sup>3</sup> Uni10 Energy SDN BHD)
	09.40 – 10.00	C4	Investigation of Electrochemical Denitrification of Prawn-Farm Wastewater  <sup>1</sup> K. Kirujika <sup>2</sup> S. Kreshaanth, <sup>2</sup> C. Gunathilake, <sup>1</sup> D. T. Udagedara, <sup>2</sup> A. Manipura ( <sup>1</sup> Uva Wellassa University of Sri Lanka, Sri Lanka, <sup>2</sup> Faculty of Engineering, University of Peradeniya, Sri Lanka)
	10.00 – 10.20	C5	Detergent Removal from Waste Water - A Solution using Locally Available Waste  <sup>1</sup> M.M. Prabhakaran <sup>1</sup> P.K. Chandravathi <sup>2</sup> D.J. Killedar ( <sup>1</sup> Saras Engineering and Environ Consultants, Kerala, India, <sup>2</sup> SGSITS, Indore, MP, India)
10.20 – 10.40		Morning Refreshments	

<b>TECHNICAL SESSION 04</b>	<b>WASTE MANAGEMENT &amp; SOCIAL ISSUES</b>	
	Friday, 08 <sup>th</sup> March 2019   10.40 to 11.40   Longdon	
	Chaired by: Dr. W.J.S.K Weerakkody ( <i>Wayamba University of Sri Lanka, Sri Lanka</i> )	
	10.40 – 11.00	D1 Environmental Benefits of Biowaste Treatment Methods <sup>1</sup> Pavlas M, <sup>1</sup> Dvořáček J. Gregor J. <sup>1</sup> Kropáč J., <sup>1</sup> Šomplák R, <sup>2</sup> Pitschke T, ( <sup>1</sup> Faculty of Mechanical Engineering, Brno University of Technology – VUT Brno, Czech Republic, <sup>2</sup> Bifa Umweltinstitut GmbH, Germany)
	11.00 – 11.20	D2 Occupational Health Hazards of Itinerant Waste Buyers (IWBS) In Kathmandu, Nepal <i>Ashish Khanal (Kathmandu University, Nepal)</i>
11.20 – 11.40	D3 Applicability of Zero Waste Concept in the Hotel Sector in Sri Lanka <i>Darshani D.B.M, Jayasena H.A.E.C, Soorige S.D.A (University of Moratuwa, Sri Lanka)</i>	

<b>ONLINE VIDEO PRESENTATION</b>	Friday, 08 <sup>th</sup> March 2019   11.40 – 12.00   Longdon	
	11.40 – 12.00	V1 A Study on Challenges for Adoption of Reverse Vending Machine: A Case of North Bengaluru, India <i>Pramita S. K, Dr.Mamatha S. V, Abhishek Gowda S, Mhatre Prathamesh, Deeksha R, Srikanth U (Ramaiah University of Applied Sciences, India)</i>
	12.00 – 13.00	Networking Lunch

<b>TECHNICAL SESSION 05</b>	<b>PLASTIC AND E-WASTE MANAGEMENT</b>	
	Friday, 08 <sup>th</sup> March 2019   13.00 – 14.00   Longdon	
	Chaired by: Prof. Wing Keung Law ( <i>Nanyang Technological University, Singapore</i> )	
	13.00 – 13.20	E1 Micro Plastic Pollution on Coastal Ecosystems and Marine Waters in Sri Lanka  <sup>1</sup> Galagoda, R.U, <sup>2</sup> Jayasinghe, G.Y. ( <sup>1</sup> <i>University of Sri Jayewadenepura, Sri Lanka</i> <sup>2</sup> <i>University of Ruhuna, Sri Lanka</i> )
13.20 – 13.40	E2 Uniaxial Tensile Characteristics of Natural Fiber Composites from Banana Fibre and Thermoplastic Waste  S. Sanjith, W. Priyantha, H.M.C.C. Somarathna, D.S. Sampath ( <i>Faculty of Engineering, University of Jaffna, Sri Lanka</i> )	
13.40 – 14.00	E3 Conceptual Framework to Enable Zero Waste in Construction Industry  Liyanage K.L.A.K.T, Waidyasekara K.G.A.S, Mallawaarachchi H. Pandithawatta T.P.W.S.I ( <i>University of Moratuwa, Sri Lanka</i> )	

<b>WORKSHOP - II</b>	<b>Friday, 08<sup>th</sup> March 2019   14.00 to 15.30   Longdon</b>	
	14.00 – 15.30	“Managing and Controlling Waste in the Workplace for a Sustainable Business”  Prof. Margaret Bates ( <i>University of Northampton, England</i> )
	15.30 – 15.50	Evening Refreshments



<b>TECHNICAL SESSION 06</b>	<b>WASTE GENERATION AND COMPOSTING</b>		
	Friday, 08 <sup>th</sup> March 2019   15.50 to 17.30   Longdon		
	Chaired by: Dr. Lai Chun Hin Adrian ( <i>Nanyang Technological University, Singapore</i> )		
	15.50 – 16.10	F1	Co-Composting of Fecal Sludge and Organic Solid Waste as A Resource for Agriculture  <i><sup>1,2</sup>Thiel F, <sup>3</sup>Pushpakumara A.W.S., <sup>1</sup>Marschner B <sup>3</sup>Weerakkody W.J.S.K. (<sup>1</sup>Ruhr University Bochum, Institute of Geography, Germany, <sup>2</sup>International Water Management Institute, Resource Recovery &amp; Reuse, Sri Lanka, <sup>3</sup>Wayamba University of Sri Lanka, Sri Lanka)</i>
	16.10 – 16.30	F2	An Investigation on Influence of Household Attitudes and Behavior for Performance of Solid Waste Management System in Sri Lanka: Application of Q Methodological Approach  <i>D.G.M.M Dodawatta, Dr. S.S Kariyawasam (University of Moratuwa, Sri Lanka)</i>
	16.30 – 16.50	F3	Estimating Per Capita Solid Waste Generation in Households for Effective Waste Management System  <i>Jayasekara K.T.R, Dinugala H.P (University of Sri Jayewardenepura, Nugegoda, Sri Lanka)</i>
16.50 – 17.10	F4	Analysis of Municipal Solid Waste Compost on Compliance with Sri Lanka Quality Standards  <i><sup>1,2</sup>Thiel F.1, <sup>3</sup>Rathnathilaka A.T.D.,<sup>1</sup>Marschner B <sup>3</sup>Weerakkody W.J.S.K. (<sup>1</sup>Ruhr University Bochum, Institute of Geography, Germany, <sup>2</sup>International Water Management Institute, Resource Recovery &amp; Reuse, Sri Lanka, <sup>3</sup>Wayamba University of Sri Lanka, Sri Lanka)</i>	
17.10 – 17.30	F5	Sustainable Construction Through Waste Management in the Metal Product Supply Chain in Sri Lanka  <i><sup>1</sup>N.W.S. Kumarasena, <sup>1</sup>D.I.C. Gurusinghe, <sup>1</sup>R.C. Wijemanna, <sup>2</sup>M. Balakrishnan, <sup>2</sup>N. Srivastava<sup>2</sup>, <sup>3</sup>R. Batra, <sup>3</sup>S. Pathan, <sup>4</sup>M.M. Moller (<i>National Cleaner Production Centre (NCPC), Nugegoda, Sri Lanka</i> <sup>2</sup><i>The Energy and Resources Institute (TERI), Darbari Seth Block, India</i> <sup>3</sup><i>STENUM Asia Sustainable Development Society, India</i> <sup>4</sup><i>Austria Recycling, Wipplingerstrasse, Austria</i>)</i>	

<b>CONFERENCE CLOSURE</b>	<b>Friday, 08<sup>th</sup> March 2019   17.45 to 18.05   Longdon</b>	
	17.45 – 18.00	Conference Concluding and Awarding Ceremony
	18.00 – 18.05	Vote of Thanks Mr. Duminda Koralagamage ( <i>Assistant General Manager - The International Institute of Knowledge Management (TIKM), Sri Lanka</i> )

**Conference Co – Chair and Keynote Speaker**

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**Assi. Prof. Dr. Dongbei YUE**

**Tsinghua University, China**

**Conference Co - Chair**

.....  
**Dr. Randika Jayasinghe**

**University of Sri Jayewardenepura, Sri Lanka**

**Keynote Speaker**

.....  
**Prof. Margaret Bates**

**University of Northampton, United Kingdom**

**Conference Convener**

.....  
**Mr. Isanka P. Gamage**

**(The International Institute of Knowledge Management, Sri Lanka)**

**Rapporteur**

**Conference Secretary**

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**Mr. R.M. Keerthi Sri Chandana**

**(The International Institute of Knowledge Management, Sri Lanka)**

## Evaluation Panel

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- Dr. Dongbei YUE (*Tsinghua University, China*)
- Prof. Margaret Bates (*University of Northampton, England*)
- Dr. Randika Jayasinghe (*University of Sri Jayewardenepura, Sri Lanka*)

### Organizer



### Tour Partner



### Academic Partner



### Event Partner

