10th International Conference on
Sustainable Waste Management towards Circular Economy

December 02 – 07, 2020, Jadavpur University, Kolkata, India

International Society of Waste Management, Air and Water (ISWMAW)
Centre for Sustainable Development and Resource Efficiency Management, Jadavpur University, India
Centre for Sustainable Technology, Indian Institute of Science, India

Principal Organisers

10th IconSWM-CE 2020
International Society of Waste Management Air and Waster
ISWMAW

Sponsors :

IndianOil

SINTEF

Divis

Organising Partners :

UNCRD

UNIDO

IGES Institute for Global Environmental Strategies

SACEP

SUNWAY UNIVERSITY

CRIC

IPLA International Partnership for Expanding Waste Management Services of Local Authorities (IPLA)

DBFZ

Please do not circulate the schedule to anyone who has not been registered. It is a controlled document to paid participants only.

How to join : NO SEPARATE LINK IS NECESSARY TO JOIN THE CONFERENCE. PLEASE CLICK ON THE [Click to Join] given for each session on the schedule. This will allow joining respective the session in the hall. It will not allow you to click two sessions at a time from one device.

CONTACT : iswmaw@gmail.com ; Website: www.iswmaw.com

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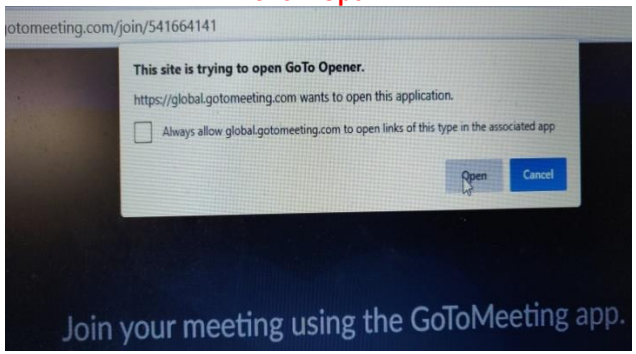
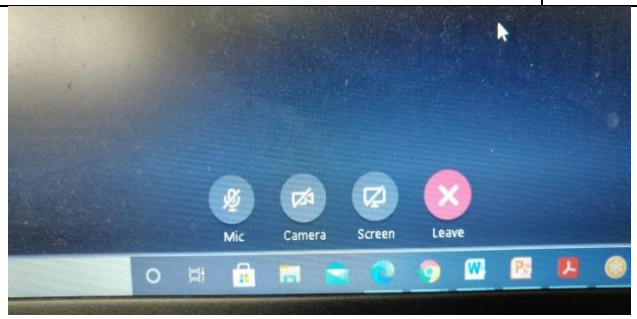
Please note if there is any last minute change of your presentation time in exigency.

Please Read Carefully : Guidelines for Chairs, Speakers and Participants to join & continue

You can join hall 1,2&3. Clicking [Click to Join] written beside respective hall as shown below, needs No link.

peakers and Chairs: Kindly be present in the hall for the session 15 minutes earlier to the time of the session. If the speaker is not available the chairs and organisers will proceed to next speaker. Speaker, if cannot share the screen for presentation, our organisers will share the screen for your speech to avoid delay. Presentation time: Keynote: 15 minutes; Others : 10 mins

HALL 1 [Click to join]	HALL 2 [Click to join]	HALL 3 [Click to join]
Figure 1: Once you [click to join], this prompt will come. Click- Open. 	 Figure 2: Once you click- open, you will join the meeting platform.	Four buttons at the bottom will appear. MIC, Camera and Screen buttons should by crossed always as shown unless you are requested to open. If your click on Leave buttons, you can leave the meeting. You can join again by [click to join] on the schedule. If you have any problem in the meeting, you leave and join again in similar way. If you want to join another session, you have to leave from one session and can join other. Platform won't allow you to join two sessions at a time.

1. **Chairs: You will be introduced by the Hall Managers to start the session. The organisers will invite the speakers one after another. QA will be conducted by you with the help of organisers. Questions will be taken from chat box written by the participating delegates. You are requested to rate the presentations for IconSWM-CE excellence Awards. You are requested to prepare the Chair's summary to present at the end of the session. You are requested to send the rating form filled in and the Chair's Summary to: iconswm.review@gmail.com after the session finished. At the end of the session, request all to click on the camera to take a photo. At the end, please mute the MIC so that organisers can start the next session.**
2. **Speakers: On your turn, click Mute button to speak. Please be ready with your ppt open on your laptop during the previous presentation. On your turn, open your ppt, click on Screen button at the bottom and share the ppt and make full screen mode. If you have any problem, request the organisers to share your ppt. keep always MIC button crossed to avoid any disturbances. Please send the ppt with file name, session number_your presentation serial number in the session_your name to iconswm.review@gmail.com by 30.11.2020. [e.g., SS1_02_ Ramona or, TS5_01_Kunal or, SS7_01_Kåre OR, TS15_07_Nilofar AND such.**
3. **Participants: Join, keep your microphone, camera and screen button crossed to avoid any disturbances.**

Summary of Schedule: 10thIconSWM-CE 2020, December 02 - 07, 2020 [Time given in IST]

2/12/2020: 10.20	**Hall 1: Inaugural Ceremony : Delegates may enter the hall 1 FROM 10.20 Hrs (IST) onwards**

Prof. Dr. Sadhan Kumar Ghosh, Chairman, 10th IconSWM-CE & the President of ISWMAW, expresses his gratitude to all the speakers, chairs, sponsors, principal organizers, organizing partners, members in the committees, participants and their sponsoring organizations, hall management and the organizers for their support & participation in 10th IconSWM-CE 2020 making 240 presentations from 44 countries, UNCRD, UNIDO and UNEP with over 700 participating delegates in sessions under this stressed pandemic COVID-19 situation. Hope to present a meaningful event. Looking forward to see you in 11th IconSWM-CE 2021 for the benefit of the environment, mankind & living creatures.

Participating Countries	10thIconSWM-CE 2020 will be participated by delegates and speakers from countries, namely, Bangladesh, Bhutan , Bolivia , Brazil, Chile, China, Ethiopia, Egypt, France, Georgia, Germany, Hungary, India, Indonesia, Japan, Lebanon, Malaysia, Mexico, Morocco, Myanmar, Nepal, Netherlands, Nigeria, Norway, Philippines, Portugal, Rowanda, Russia, Soudi Arabia, South Korea, South Sudan, Spain, Sweden, Tanzania, Thailand, Togo Republic, Turkey, Uganda, UK, Uruguay, UK, USA, Vietnam, Zambia, and UN organizations: UNCRD, UNEP and UNIDO.		
2/12/2020 10.50 - 12.20	**Inaugural Ceremony**		
	HALL 1	**HALL 2**	**HALL 3**
Hall Management Team	Hall Manager : Dr. Kaniska Sarkar, India	Hall Manager : Dr. Aparup Konar, India and Dr. Asit Aich,	Hall Manager : Prof. Sudip K. Das, India and Dr. A. Mandal,
Organizers	Tejaswi Rana, Sourya Chakraborty, [Dr. Sutripta Sarkar, Sonali Roy Choudhury, (Remote)]	Jayeeta Banerje, Tanya Gupta, [Dr. Payel Ghosh, Rahul Baidya, (Remote)]	Raktim Dasgupta; Krishanu Hait; Abesh Chatterjee; [Anaya Ghosh, Rajarshi Chakraborty, (Remote)]
12.30 - 14.00	**HALL 1**	**HALL 2**	**HALL 3**
2/12/2020	**Special Session - Philippines**	**AD & Composting**	**Circular Economy & Built Environment**
	Special Session (SS1) : Waste Management & Circular Economy in Philippines :(8 Presentations)	**Technical Session (TS)-1: (10 Presentations)**	**Technical Session (TS)- 2: (8 Presentations)**
	Chair : Prof. Albert N. Naperi, Philippines	**Chairs: Prof. M. Nelles, Germany**	**Chairs: Mr. C R C Mohanty, Japan; Mr.** M Rao Divi, **India**
14.00 – 14.30	**Recess**	**Recess**	**Recess**
2/12/2020 14.30 – 16.15	**HALL 1**	**HALL 2**	**HALL 3**
2/12/2020 14.30 – 16.15	**Special Session (SS2) :** Waste Management & Circular Economy in Bangladesh: (10 Presentations)	**Technical Session (TS3) : Circular Economy:** (9Presentations)	**Special Session (SS3) :** WM & CE in countries in Northern & West Africa: (10 Presentations)

Chairs	Chair: Prof. M Alamgir. Member UGC, Bangladesh	Chairs : **Mr Rohit Kumar, IAS, Ministry of Rural Development, India & Dr. Vladimir Naryev, Russia**	Chairs : Prof. A. Dachour, Prof. Souad El Hajjaji, Morocco
2/12/2020 16.30 - 18.00	**HALL 1**	**HALL 2**	**HALL 3**
	Technical Session (TS) – 4: Landfill (9 Presentations)	**Special Session (SS4) :** Circular Economy & Employees' Wellbeing in Industries (GCRF & RAE sponsored): (7 Presentations)	**Technical Session (TS) – 5; COVID 19 & Biomedical Waste Management :** (9 Presentations)
	Chairs: Prof. Mehmet Sinan Bilgili, Turkey and Prof. S. K. Das, India	**Chairs: Prof. P. K. Dey, UK and Prof. Sadhan K Ghosh, India**	**Chairs : Prof. P. Agamuthu, Malaysia**
	HALL 1	**HALL 2**	**HALL 3**
2/12/2020 18.30 – 20.45	**Special Session (SS 5) :** Waste Management & Circular Economy in South American Countries: (8 Presentations)	**Technical Session (TS) - 6: Wastewater (9** Presentations)	**Technical Session (TS) –7: COVID 19 & Biomedical Waste Management** (6 Presentations)
	Moderators: Prof. C. Suaniand Dr. P. Gustavo.	**Chairs: Prof. Chiranjib Bhattacharya and Prof. Tapas K. Das**	**Chairs: by Prof. Francesco Di Maria, Italy**
	HALL 1	**HALL 2**	**HALL 3**
3/12/2020 11.00 – 13.30	**Special Session (SS 6):** Waste Management & Circular Economy in Nepal and Bhutan: (10 Presentations)	**Technical Session (TS) – 8: E-waste & Plastic Waste management and Marine Littering. (9** Presentations)	**Technical Session (TS)- 9: Recycling & Solid Waste Management: (10** Presentations)
	Chairs: Dr. Khatiwada, Ms. Ugyen Tshomo	**Chairs: Mr. Kazunobu Onogawa and Prof. P Agamuthu**	**Chairs : Prof. Aniruddha Mukherjee and Prof. Pradip Sikdar, India**
3/12/2020 13.30– 14.00	**Recess**	**Recess**	**Recess**
3/12/2020 14.00 – 16.30	**HALL 1**	**HALL 2**	**HALL 3**
	Special Session (SS 7) : OPTOCE – Sponsored by *SINTEF*, Norway; NORAD and Norwegian Ministry of Foreign Affairs (11Presentations)	**Technical Session (TS) - 10 : Wastewater** (10 Presentations)	**Technical Session (TS) -11 : Construction and Demolition Waste Management (7** Presentations)
	Coordinator : Dr. Kåre Helge Karstensen, and Mr. Palash K. Saha, SINTEF	**Chairs : Prof. Ranjana chowdhury, and Prof. Papita Saha Das, Kolkata**	**Chairs:** José António Silva Carvalho Campos Matos , portugal and prof. Venugopal Mahapatra, odisa
3/12/2020	**HALL 1**	**HALL 2**	**HALL 3**
3/12/2020 16.45- 18.15	**Technical Session (TS) -12: Waste Management and associated aspects:** (8Presentations)	**Technical Session (TS) –13 Climate Change, /Circular economy/bio energy:** (10 Presentations)	**Special Session : (SS 8): Meeting for International Research Collaboration**
	Chairs : Mr. Binay Kumar Jha, Director, SBM, MoHUA, GoI, Prof. Deben Chandra Baruah, Tejpur University, India	Chairs : Prof. Aniruddha Mukherjee & Prof.Soma Mukherjee	**Chairs : Prof. Sadhan K Ghosh**
3/12/2020	**HALL 1**	**HALL 2**	**HALL 3**
3/12/2020 18.30 – 20.30	**Technical Session (TS) - 14 : Sustainable Waste Management : (**10Presentations)	**Technical Session (TS)- 15: Waste Water (9** Presentations)	**Technical Session (TS)- 16: (To be added)**

	Chair : Prof. R. L. Mersky, USA and Dr. Mauro D. Berni, Mexico	**Chairs : Dr. Suneel pandey, Teri and Dr. B. Majumdar, Sulav, India**	**Standby sessions**
4/12/2020	**HALL 1**	**HALL 2**	**HALL 3**
4/12/2020 11.00 – 13.00	**Special Session (SS 9) :** Waste Management & Circular Economy in Russian Federation (8 Presentations)	**Technical Session (TS) - 17: Bioenergy/ Processes/ LCA / Bioremediation: (10** Presentations)	**Technical Session (TS)- 18: Hazardous and Industrial Wastes Management & Recycling: (8** Presentations)
	Chairs : Dr. Vladimur Maryev, Prof. Liubarskaia Maria,	**Chairs: Dr. H. N. Chanakya, Issc and Prof. M srimurali, Svu, India**	**Chairs: Dr. siddhartha mukherjee, Lurgy ltd. and Prof. damodharan, Svu, India**
4/12/2020 13.00-13.30	**Recess**	**Recess**	**Recess**
4/12/2020 13.30 – 15.30	**Special Session (SS 10) :** Waste Management & Circular Economy in Hungary (6 Presentations)	**Special Session (SS11) :** Water Management, Recirculation Technology & INDIA H20 Project (EU & DBT sponsored) : **(6** Presentations)	**Special Session (SS 12) : WM & CE in countries in Eastern and Southern Africa: (11 Presentations)**
	Chairs : Dr. Kovack Jozsef, Dr. Farkas, Hilda,	Chair : Prof. Philip Davies, Prof. Gabriela Quesada	**Chairs: Dr. Rocio A. Diaz-Chavez**
7/12/2020	**HALL 1**	**HALL 2**	**HALL 3**
7/12/2020 11.00 – 13.00	**Technical Session (TS) – 19 Climate Change, /Circular economy/bio energy:** (4 Presentations)	**Technical Session (TS) - 20: Wastewater/waste management:** (4 Presentations)	**Technical Session (TS)- 21: Hazardous and Industrial Wastes/wastewater/waste management: (to be added)**
	Chairs: Prof. Soma Mukherjee and Prof. Apurba Ghosh, India	**Chairs: Prof. B. C. Meikap IIT KGP and Prof. Amit Hazra, Biswabhrati, India**	**Chairs: To be announced**
7/12/2020 13.00-13.30	**Recess**	**Recess**	**Recess**
7/12/2020 13.30 – 15.00	**Special Session (SS-13): Waste Recovery and Circular Economy in Petroleum and petrochemical industries:**	**Technical Session (TS) – 22**SWM	**Technical Session (TS) –23** Bio energy
	Chairs: Mr. J. P. Singa, ED, Pipelines Divn., ER, IOC Ltd.		
	Speakers to be announced later		
7/12/2020 16.00 – 17.30	**Valedictory: Presentation of Chair's Summary, Awards Ceremony; Announcement of 11th IconSWM-CE 2021**		

Detail Schedule of 10th IconSWM-CE 2020, December 02-07, 2020

[An official pre-event of 11th 3R Forum on Circular Economy in Asia and the pacific, 2021]

Time given in IST. Please convert time as per your country's geographical location

Please [Click to join] in any Hall any time during the program; kindly keep your microphone in Mute mode

2/12/2020 : 10.20 hrs.	**Programme on 2nd December 2020 : Hall 1 : Inaugural Ceremony [Click to join]**	
Prof. Dr. Sadhan Kumar Ghosh, Chairman, 10th IconSWM-CE & the President of ISWMAW, expresses his gratitude to all the speakers, chairs, sponsors, principal organizers, organizing partners, members in the committees, participants and their sponsoring organizations, hall management and the organizers for their support & participation in 10th IconSWM-CE 2020 making 240 presentations from 44 countries, UNCRD, UNIDO and UNEP with over 700 participating delegates in sessions under this stressed pandemic COVID-19 situation. Hope to present a meaningful event. Looking forward to see you in 11th IconSWM-CE 2021 for the benefit of the environment, mankind & living creatures.		
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2/12/2020 10.50-12.20	Hall 1 : Hall will be opened at 10.20am (IST) for the entry of the delegates. Participants are requested to be in Mute mode and Camera off. Questions can be written in Chat box which will be attended by the Chairs and organisers. After the inaugural ceremony three halls will be opened. You choose your session and join. You can switch over from one hall to other any time by only clicking on respective **[Click to Join].**	
10.50 -11.00	10th IconSWM-CE : Program Introduction by : Dr. Kaniska Sarkar, JU and Dr. Sutripta Sarkar, CU	
11.00 - 12.20 INAUGURAL CEREMONY	**Welcome Speech**:Prof. Sadhan K. Ghosh, Chairman,IconSWM-CE- **5 minutes** **Speech by:** Dr. Rene. Van. Berkel, UNIDO Representative in India; - **5 mins** **Speech by:** Mr. Rohit Kumar, IAS, JS, MG NERGA, MoRD, GoI- **5 Minutes** **Speech by:** Mr. Binay K. Jha, Director, SBM, MOHUA,GoI -**5 mins** **Keynote Speech by :** Mr. C R C Mohanty UNCRD, UNCRD, Japan; Co-Chairman, 10th IconSWM-CE 2020 - **10 minutes** **Release of Proceedings of abstracts of 10th IconSWM-CE 2020.** **Inauguration Speech :** Prof. Suranjan Das, Vice Chancellor, Jadavpur University, India;- **10 minutes:** **Speech by :** Mr. M Rao Divi, DIVIS Laboratory, India; **-5 minutes**	**Speech by :** Mr. K. Onogawa, Director, CCET IGES, Japan; Co-Chairman, 10th IconSWM-CE 2020 **-5 minutes** **Speech by :** Prof. M. Nelles,Rostock University, Germany; Co-Chairman, 10th IconSWM-CE 2020-**5 minutes** **Speech by :** Dr. Kare H. Karstensen, SINTEF, Norway; Co-Chairman, 10th IconSWM-CE 2020 **-5 minutes** **Speech by :** Prof. P. Agamuthu, WMR, Malaysia; **-5 minutes** **Speech by** : Dr. Alberto N. Naperi, BSCAU, Philippines **-5minutes** **Vote of Thanks by** : Dr. H N Chanakya, IISc, India**; -5 minutes**

	HALL 1 [Click to join]	HALL 2 [Click to join]	HALL 3 [Click to join]
Hall Team Management	**Hall Manager : Dr. Kaniska Sarkar, India**	**Hall Manager : Dr. Aparup Konar, India and Dr. Asit Aich,**	**Hall Manager : Prof. Sudip K. Das, India and Dr. A. Mandal,**
Organizers	Tejaswi Rana, Sourya Chakraborty, [Dr. Sutripta Sarkar, Abhijit Hazra (Remote)]	Jayeeta Banerje, Tanya Gupta, [Dr. Payel Ghosh, Rahul Baidya, Rajarshi Chakraborty, (Remote)]	Raktim Dasgupta; Krishanu Hait; Abesh Chatterjee; [Anaya Ghosh, Sonali Roy Choudhury, (Remote)]
	HALL 1 [Click to join]	**HALL 2 [Click to join]**	**HALL 3 [Click to join]**
	Special Session - Philippines	**AD & Composting**	**Circular Economy & Built Environment**
2/12/2020 12.30 – 14.00	**Special Session (SS1) :**Waste Management & Circular Economy in Philippines	**Technical Session (TS)- 1**	**Technical Session (TS)- 2**
	Chair : Prof. Albert N. Naperi, Philippines	**Chairs: Prof. M. Nelles, Germany and**	**Chairs: Mr. C R C Mohanty, Japan and Mr.** M Rao Divi, **India.**
	Mycelial growth performance of pleurotusostreatus and volvariellavolvacea in common kitchen wastes, Joany Alyssa B. Abogado, April Ann A. Cañal, and Arce D. Bellere**, Philippines.** **Advocating Circular Economy: Pili (Canariumovatum) Pulp Oil Isolation as IGP for Pili Processing Households in the Bicol Region Philippines,** *Ramona Isabel S. Ramirez,* **Philippines.** **Agroforesting Development in Mt. Isarof for Poverty Alleviations and Aversion of Climate Change Impact**, Llesol. Celerino B**, Philippines.** **Fishing for life: An Ecosystem-based climate change adoption and mitigation in Fishery,** Valenzuela, Flordeliza B**, Philippines.** **Assessment of Watershed conservation and preservation**,Villavicencio, Jose Noel P**, Philippines.** **Sustainable Agriculture and Climate Change Adaption and Litigation System at the Local**	**Keynote Speech : Energy Recovery frim biomass in Germany, Prof. M. Nelles, Germany** **Effect of solids concentration for the solubilization of waste activated sludge in microwave pre-treatment,** RagashreeSrinivas and Sabumon P.C., **India**. **A study of the Processes, Parameters, and Optimization of Anaerobic Digestion for food waste,**Dr. Jyothilakshmi. R, Sumangala Patil, Hemanth Kumar. K. J, Dr. Sadhan Kumar Ghosh, Dr.Sandya Jayakumar. **India.** **Effects Of Dried Sludge Types In Biowaste Decay Using Aerobic Composting Barrel,** Marcelino N. LunagJr, Luis Alphonso C. Aunor, Marvin Clark O. Bartolome, Kristian Matthias A. Luquingan[2], Prendonn R. Ocon, Carl Bryan P. Pacol, Tyron Clemens B. Palitayan, John Cedrex C. Quimson, Lucky Jemard F. Quintay, John Michael M. Simon, Earl Jonas C.Wagan, *Saint Louis University*' **Philippines**,	**Keynote Speech : Water efficiency and circularity in industry for competitiveness and resilience,** Dr René Van Berkel, UNIDO Representative, Regional Office in India, **Delhi** **Keynote Speech: Circular Economy implementation in Asia and the Pacific, Mr. C R C Mohanty, UNCRD, Japan.** **Keynote Speech: Circular Economy / Value Recovery / Enhanced Life Cycle – Today's Solution to Sustainable Waste Management,** M Rao Divi, **India.** **Potential of Graphene reinforced Geopolymer composites towards and circular economy sustainability,** R.S. Krishna[1*], J Mishra[2], S K Das[3], BNanda[4], S K Patro[5], S.M. Mustakim, **India.** **Upcycling of scraps from industries – a new dimension of circular economy,***MohantyRupashree,* *[1*]SrikantaPatnaik,* **India** **Indonesia Main-Waste Bank for Sustainable Waste Management Towards Circular Economy,** Ratnawati Kusuma Jaya[*], Sari Viciawati Machdum,

	Level, Foronda, Vladimir F,**Philippines** (Disaster management) **Disaster risk reduction management awareness and preparedness in the selected public secondary schools in guinobatan, albay,** Cecilla Rosa L. Patiam, Mhica Joy O. Escalo, **Philippines.** **Characteristics and value adding in Agri-Industrial Wastes for Organic farm Input production**, Abonal, Melchora V,**Philipines.** **QA and Chair's Summary**	**Valorization of Organic solid waste Using Anaerobic digestion**, Mr. R. Balamurugan, Dr. S. Sankaran**, India.** **Modelling and simulation of a farm-scale biogas digester operated with crop residues,** Preseela Satpathy, Frank Uhlenhut, Chinmay Pradhan, **India/Germany.** **Home Composter A Review,** Satya Ranjan Panda; Kalpana Sahoo; Basudeb Munshi; Madhusree Kundu, **India**. **Assessment of the Performance of Different Animal Manure and Feacal Sludge Composting to Optimize the Mix Proportion – A Review,** Balaganesh Pandiyan, Vasudevan Mangottiri, Natarajan Narayanan, **India.** **QA and Chair's Summary**	**Indonesia.** **Management Insights for an Efficient Circular Built-Environment: Determining Factors and Framework Development,**Purva Mhatre[1*], Vidyadhar Gedam[1], Seema Unnikrishnan, **India.** **Management insights for Reuse of Materials in a Circular Built-Environment,** Purva Mhatre[1*], Vidyadhar Gedam[1], Seema Unnikrishnan, **India**. **Feasibility Study of Commercialized Self Circulating Biogas Generators: A Circular Economy Approach,**BhuvanaVaradha V. P., Devanand B., Thavasivamanikandan T., SelvaNandhini S**. India.** **QA and Chair's Summary**
2/12/2020 **14.00 – 14.30**	**Recess**	**Recess**	**Recess**
	HALL 1[Click to join]	**HALL 2[Click to join]**	**HALL 3[Click to join]**
2/12/2020 **14.30 – 16.15**	**Special Session (SS2) :** Waste Management & Circular Economy in Bangladesh	**Technical Session (TS3) : Circular Economy**	**Special Session (SS3) :** WM & CE in countries in Northern & West Africa
Chairs	**Chair : Prof. M Alamgir. Member UGC, Bangladesh**	**Chairs : Mr Rohit Kumar,** IAS, Ministry of Rural Development, India **& Dr. Vladimir Maryev, Russia**	Chairs : **Prof. Abdelmalek Dachour and Prof. Souad El Hajjaji, Morocco**
	Occupational Health Safety of Waste Workers: A Review towards sustainable waste management in Bangladesh", Zuthi, M. F. R and Hossain A. CUET, **Banglesdeh** **Assessment of Solid Waste Management Options in the Slums of Khulna City,**TusarKanti Roy, AzmeriFerdous, SadikaMaheruma Khan, **Bangladesh.**	**Keynote address: Circular Economy in Rural India,** Mr Rohit Kumar, IAS, Ministry of Rural Development**, India** **Moving from Waste to Resource Management: A Case Study of Lake Toba, Indonesia**, Miwa Tatsuno, Institute for Global Environmental Strategies (IGES), **Japan** **Integrated Solid Waste Management In Smart Cities: A Case Study Of Lagos State In Southwestern Nigeria**,	**Anaerobic co-digestion of drain sludge with fermentescible municipal waste of sokode (TOGO),** NitaleM'Balikine KROU, Gnon BABA, Ogouvidé AKPAKI, **Togo Republic.** **Spent coffee grounds: efficient corrosion inhibitor and bioactive components source,** Fatima Bouhlal1, Ghita Amine Benabdellah, Mohammed Dalimi, Mohammed El Mahi, Souad El Hajjaji, NajouaLabjar, **Morocco**

	Treating of Water Bodies of Dhaka City by Vetiver Based Phytoremediation, Samira Tasnim Progga1,*, Mohammad Shariful Islam, **Bangladesh.** **Estimation of particulate matter pollution on different major roadways in khulna using geospatial & environmental analysis,**Prottay Mazumder, Jobaer Ahmed Saju, and Q. H. Bari, **Bangladesh**. **A Compact System Development for Mitigating the Faecal Sludge Transportation & Emptying Problems** Md Shehab Uddin1,, Dr. Md Nurul Islam, Nazmus Sakib, Rafat Safayet, Shariar Kabir Shohan, Nashid Mumtaz, **Bangladesh.** **A Comparative Analysis of Different Faecal Sludge Emptying Methods Used in Developing Countries,**Hakim Dina Anjum, Faria Noor, Rezwana Sarwar, Md Enamul Haque Dr. A.R.M. Harunur Rashid and Sonia Shahid,**Bangladesh.** **A Low-cost Technical Solution for Emptying and Transporting Sludge from Narrow Road**, Nafiza Anjum1, Zafrian Ikbal Shuvo, Neloy Chandra Das, Abu Bakkar Siddik, Rakibul Alam, Md Abid Hasan, **Bangladesh** **Air Purification Unit for Fecal Sludge Emptying to Protect the Operators and the Neighborhood from Toxic Gas Exposure – A Conceptual Design Approach**, Sajib Kar, Tanweer Ahmed, A. F. Abrar Ibn Monabbar, Nur Alam Mondal4, Md Abid Hasan,**Bangladesh** **Sensor Based Global Positioning Monitoring System for Fecal Sludge Management-Impact on Manual Monitoring Improvement by Technological Support**, Rubayet Ahmed, Md.	Oluwadare Joshua OYEBODE, **Nigeria** **Red mud based geopolymer concrete for sustainable waste management,**Nikita Barik, Jyotirmoy Mishra**,India** **Utilization of Banana Peels Waste with Rice Washing Water as a substrate in Microbial Fuel Cell Technology,** Nurul Khaerani Anwar **, Indonesia.** **Strategies for Transition towards Circular Economy in Municipal Solid Waste Management System in India**, Sarwani Budarayavalasa and Richa Singh,**India** **Water Efficiency and Circularity in Industry for Competitiveness and Resilience**, René Van Berkel, Zinaida Fadeeva, **India.** **Environmentally Sustainable Municipal Solid Waste Management-A Case Study Of Thiruvananthapuram, India**, Megha T. S, Sheetal Kamble, Akshey Bhargava, Purvi Patil, **India** ***QA and Chair's Summary***	**Detecting cadmium (II) by using coal extracted from organic waste as modifier of carbon paste electrode,** Khaoula ABBI, Lina Hermouch, Youssra El Hamdouni, Abdelmajid Skalli1, Mohammeed Dalimi, Mohammed El Mahi, El MostaphaLotfi, Souad El Hajjaji, Najoua Labjar, **Morocco.** **Adsorption of (methylene blue) onto natural oil shale: kinetics of adsorption, isotherm and thermodynamic studies,** MaryemRAHMANIa*, Ahmed MOUFTIc,d, ,MohamadineEL'MRABETe, AbdelmalekDAHCHOURe, Souad EL HAJJAJIa, **Morocco** **Job creation, entrepreneurship and capacity building in solid waste management : panacea towards circular economy,** Oluwadare Joshua OYEBODE**, Nigeria.** **Analysis of the technical and financial approaches to solid waste management in a medium-sized city: case ofSokodé in Togo,** NitaleM'Balikine KROU, Gnon BABA2, **Togo Republic.** **Wastewater Reuse in Morocco: challenges to change in perceptions towards social acceptance,** Tarik CHFADI, Driss Dhiba, Souad El Hajjaji, Abdelghani Chehbouni**, Morocco**. **Constructed wetland technology for wastewater treatment in Morocco,** Maria Benbouzid1,*, Jamal Mabrouki1, Souad El Hajjaji, Abdelmalek Dahchour, **Morocco.** **Methylene blue removal by Adsorption using low-cost material as adsorbent**, Nora Samghouli1,*, Fatima Zahrae Abahdou1,N.Labjar and Souad El Hajjaji1, **Rabat 10000, Morocco** **Natural products as adsorbent for treatment of wastewater for reuse,** Souad El Hajjaji, Abdelmalek

	Shahidul Islam,, Sadia Hossain Dristi, Md. Abdul Karim and Sonia Shahid, **Bangladesh** **QA and Chair's Summary**		Dahchour, Driss Dhiba, Benguerir, **Morocco** **Utilization of Sodium Alginate Recovered from Brown Algae for Production of Edible Films**, S.R. Mostafa, K.S. Nagy, M.A. Sorour; Cairo University, and Food Technology Research Institute, ARC, Cairo, **Egypt** **QA and Chair's Summary**
2/12/2020	**HALL 1 [Click to join]**	**HALL 2 [Click to join]**	**HALL 3 [Click to join]**
16.30 - 18.00	**Technical Session (TS) –4: Landfill**	**Special Session (SS4) :** Circular Economy & Employees' Wellbeing in Industries (GCRF & RAE sponsored)	**Technical Session (TS) – 5;** **COVID 19 & Biomedical Waste Management**
	Chairs: Prof. Mehmet Sinan Bilgili, Turkey and Prof. S. K. Das, India	**Chairs: Prof. P. K. Dey, UK and Prof. Sadhan K Ghosh, India**	**Chairs : Prof. P. Agamuthu, Malaysia**
	Keynote Speech : Nanowaste Management and the Fate of Nanomaterials in Bioreactor Landfills, Mehmet SinanBilgili, Yildiz Technical University, Istanbul, Turkey **Keynote Speech : Landfill leachate treatment using electrocoagulation: Case the Controlled Discharge of the City of Mohammedia-Morocco**, JamalMabrouki,*, Souad El Hajjaji1, DrissDhiba**, Morocco** **Impact Assessment of Open Dumping and Garbage Farming on Human Health and Adjacent Ecosystem: A Case Study,** RiaGhosh, Dr. TumpaHazra, Kolkata**, India** **Knowledge, attitude and practices on solid waste management of communities living near close vicinity to okhla landfill site in delhi,** BiniSamal,ParasUtkarsh,Shyamala Krishna Maniand MD Omprakash, **India.** **Phytotoxicity assessment of landfill leachate emanating from young and legacy landfills using Lepidiumsativumvar,** N. Anand1, Gireesha	**Opening remarks by Prof.** Siva Ramakrishn, K,**Vice Chancellor of GITAM** **Keynote speech : Could circular economy facilitates achieve economic, environmental and social performance equally?,** Prof. Prasanta Dey, Aston University, **UK** **Transforming Indian SMEs through circular economy approach,** Prof. Sai Nudurupati , GITAM, Vizag, **India** **Circular Economy implementation in SMEs in India,** Raktim Dasgupta, Jadavpur University, **India** **Addressing wellbeing and Mental Health issues of SMEs manpower**, Dr.Soumyadeb Chaudhury, Toulouse Business School, **France** **Presenteeism and Productivity loss in Working Women of India, Thailand and Bangladesh due to Menstrual problems,** Suneetha Kandi, GITAM, Vizag, **India**	**Keynote speech by Dr, Kunal Sarkar,** Senior Vice Chairman & Senior Consultant Cardiac Surgeon, MEDICA Superspecialty Hospital, Kolkata, India **Direct and indirect effects of COVID 19 pandemic on the environment and public health: Rethinking the strategies for plastic wastes, hospital wastes, and waste water management,** Ritwija Bhattacharya, AniruddhaMukhopadhyay and PrithaBhattacharjee, **India.** **The Impact Of Environmental Waste Due To Aftermath Covid-19 Pandemic**, K. R. Padma, K. R. Don, **India.** **Biomedical Waste Management: Need of the hour in the present COVID -19 pandemic scenario,** Shilpa Bose, **India.** **Protection of ConservancyWorkers Against COVID-19: Case of Waste Bengal,** Dr. M.N. Roy and Dr. Debasri Mukherjee**, India.** ***Waste Management Initiatives in West Bengal for Health and Environment during COVID-19***

	T Mohannath1, P. Sankar Ganesh1*, Telangana, **India** **Assessment of the Impact of Bio-solids Application in Okra Cultivation Derived from Stabilized Fecal Sludge,**Atun Roy Choudhury, L K Mahalakshmi, JheelamSarkar, Namita Banka, Rajarshi Banerjee,**India** **Fluid catalytic cracking catalyst driven production of bio fuel from waste plastic pyrolysis oil: A sustainable way of Waste Valorization**, Abhijit Hazraa,b, Priyabrata Banerjeea,, Sadhan Kumar Ghoshc,, Harish Hirania, **India.** **Biogas Recovery From Poultry And Piggery Waste: A Review,** David O. Olukanni and Chukwuebuka N. Ojukwu, **Nigeria** **Modeling and Analysis of Linear Irrigation System,**Md. Touseef Ahamad, P. Jahnavi, Khaleel Abdul Hur Ali**, India** **QA and Chair's Summary**	**Circular economy adoption in textile and clothing industries in Bangladesh,** Dr Krish Saha, Birmingham City University, **UK** **Reduction of carbon footprint through energy efficiency measures in the UK SMEs**, Mr Jamal Lea, Aston University, **UK** **Closing remarks,** Professor Pawan Budhwar, Head of Aston Business School, **UK** **QA and Chair's Summary**	***pandemic, DebaprasadSarkar, SutriptaSarkar, Poulami Mukhopadhyay*, India.** **A critical analysis of the impacts of COVID-19 on the Indian economy and ecosystems and opportunities for circular economy strategies**, Anaya Ghosh , Sadhan Kumar Ghosh , Jyoti Prakas Sarkar , Bimal Das,**India.** **Exercise in Immune Health Management and Rehabilitation against COVID 19**, Dr. AparupKonar, Prof. Samiran Mondal,**India.** **QA and Chair's Summary**
2/12/2020	**HALL 1[Click to join]**	**HALL 2[Click to join]**	**HALL 3[Click to join]**
18.30 – 20.45	**Special Session (SS 5) :** Waste Management & Circular Economy in South American Countries	**Technical Session (TS)- 6: Wastewater**	**Technical Session (TS) –7: COVID 19 & Biomedical Waste Management**
	Moderators: Prof. C. Suani and Dr. P. Gustavo.	**Chairs: Prof. Chiranjib Bhattacharya and Prof. Tapas K. Das**	**Chairs : by Prof. Francesco Di Maria, Italy**
	Chair: Opening speech by Prof. Sadhan K. Ghosh, India, **Section 1: Promoting the Sustainability in LAC based on Circular Economy** **Moderator: Suani Coelho, USP Professor, Brazil** **From Waste to Resource - Shifting paradigms for smarter wastewater interventions in Latin**	**Effect of physicochemical parameters on biodegradation of 4–Nitrophenol by an isolated indigenous bacterial consortium,** Priyanka Sarkar, Apurba Dey, **India.** **The Study of Hydrochemical Composition of Wastewater of the Capital City of Georgia,** NatelaDzebisashvili (Dvalishvili)[1], Mariam Tabatadze' *Institute of Hydrometeorology at Georgian Technical University, **Georgia,***	**Session Keynote Speech : by Prof. Francesco Di Maria, "Presence of SARS-CoV-2 on urban catabolites and the role of waste management.** Francesco Di Maria, **Italy** **Protection of Conservancy Workers against COVID-19: Case of Waste Bengal** Dr. M.N. Roy and Dr. Debasri Mukherjee**, India.** **COVID Related Biomedical Wastes: Emerging**

	America and the Caribbean, Diego Rodrigues, Sr. Economist, Water Global Practice, World Bank, **Uruguay** **Brazil as the go-to market for biogas production,** Alessandro Amadio, UNIDO Representative for Brazil and Venezuela, **Brazil/Italy.** **Experiences of Biodigesters Network for Latin America and the Caribbean**, Mariela Pino, General Coordinator of RedBioLac, **Chile** **Debater : Gustavo Rafael Collere Possetti, Sanepar R&I Manager / ISAE Professor**, **Brazil** **Section 2: Innovation and partnerships in LAC for the sustainability at "normal new" context Moderator :** G. R. C. Possetti, **Brazil** **Circular Economy and Water Technology: Perspectives from a partnership between TheNetherlands and Brazil,** LuewtonLemos F. Agostinho, Wetsus, European Centre of Expertise for Sustainable Water Technology and NHL Stenden University of Applied Sciences., **Brazil/Netherlands** **Sustainable Sanitation Alliance Latin America Network, Lourdes Valenzuela**, Regional SuSanA Coordinator (Latinoamérica) / Directora de comunicación AGUATUYA, **Bolivia** **Pandemic response plans in Water Companies: Results from the online network in Brazil and Peru,** Carolina B. G. Cabral, Engineer of Rotaria do Brasil, **Brazil/Peru** **Debater :**Suani Coelho, USP Professor, **Brazil** **QA and Chair's Summary**	**An appraisal on a meso-scaled study for surface water pollution level measurement in Durgapur Industrial region, West Bengal, India, S**uman Chatterjee, Kaniska Sarkar, **India.** **Decolorization and detoxification of Congo Red azo dye by Immobilized Laccase of Streptomyces sviceus,** Bhoodevi Chakravarthi, Vani Mathkala and Uma Maheswari Devi Palempalli**, India.** **Removal of Fluoride from Wastewater by Precipitation and Coagulation in a Continuously Fed Stirred Tank Reactor,** Anup P. Pardey ,Dr. AvijitBhowal, Dr. Papita Das , SudhanyaKarmakar**, India.** **Bioaugmentation approach to enhance aerobic granular reactor (AGR) performance in industrial wastewater treatment: a mini review,** S. Ghosh, S. Chakraborty, **India.** **Natural Adsorbent Incorporated Polymer Composite Membrane for Waste Water Treatment,**Paramita Das, Chiranjib Bhattacharjee, **India.** **Environmental issues of the river Saraswati: a perception based study from Tribeni to Nasibpur, Hooghly,** Arkadeep Dutta, S.Chakraborty, M Banerjee, **India** **Modelling and Analysis of Portable Water Hyacinth Remover**,Mohammad Touseef Ahamad, M. Sai chand, A. Bharat Kumar, Khaleel Abdul Hur Ali**,India** **QA and Chair's Summary**	**Challenges And Future Directions,**IpsitaMaity, SudeshnaGhoshal, Aniruddha Mukhopadhyay**, India.** **Environmental Sound Management of Biomedical Waste Generated During COVID Pandemic Crisis in India,** Richa Singh[1*] and SarwaniBudarayavalasa, **India** **Health Care waste management in Nepal: Pre- and post-COVID-19 scenario,** BinayaSapkota, **Nepal** **Resonance of COVID-19 pandemic on municipal solid waste management: An Empirical assessment from West Bengal, India,** DebaprasadSarkar, SutriptaSarkar, ArpitaGhow, Ananya Mukherjee,**India.** **LPG Reticulated System instead of Conventional LPG Cylinders for Residential Flats : A step to reduce physical intervention essential for combating COVID-19,** Ashanendu Mandal, Sudip Kumar Das, Kolkata India **COVID Related Biomedical Wastes: Emerging Challenges And Future Directions,**Ipsita Maity, Sudeshna Ghoshal, Aniruddha Mukhopadhyay**, India** **Psychological trauma faced during the pandemic outburst of covid-19 disease,** K. R. Padma, P. Josthna**, India.** **QA and Chair's Summary**

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3/12/2020 **11.00 – 13.30**	**Special Session (SS 6) :** Waste Management & Circular Economy in Nepal and Bhutan	**Technical Session (TS) – 8 : E-waste & Plastic Waste management and Marine Littering**	**Technical Session (TS)- 9: Recycling & Solid Waste Management**
	Chairs: Dr. Khatiwada, Nepal; **Ms. Ugyen Tshomo,** National Environment Commission, **Bhutan**	**Chairs: Mr. Kazunobu Onogawa, Japan, and Prof. P Agamuthu, Malaysisa**	**Chairs : Prof. Aniruddha Mukherjee, India and Prof. Pradip Sikdar, India**
	Keynote Speech : Nexus of COVID 19, Health and Sanitation, Dr. Usha Jha, Member, National Planning Commission**, Nepal** **Life Cycle Assessment of Solid Waste Management Options in Dhulikhel Municipality, Nepal**, Anish Ghimire, Kathmandu University, **Nepal** **Escalated Use of Plastics on the verge of COVID-19 Pandemic in Nepal: Challenges and Recommendations,** Dipika KC, Freelance Researcher, Kathmandu, **Nepal,** **Study Of Hospital Waste and Management Practices in the Isolation Wards of the Kathmandu Valley during COVID-19**, Ina Shrestha, Freelance Researcher, Kathmandu, **Nepal** **Assessing the Pharmaceutical compounds in the wastewater from selected hospitals of Kathmandu, Nepal**, Shreeya Bhattarai, Kathmandu University, **Nepal** ***Integrated Waste Utilization on Induction Furnace Slag***, Lekhar N.Sharma, Head, E& OHS, Prodn.Manager of QC, Lhaki Steel Plant, **Bhutan.** ***Potential Drivers for Municipal Solid Waste***	**Keynote Speech: Strategies to Reduce Marine Plastic Pollution from Land-based Sources in Low and Middle-Income Countries,** Kazunobu Onogawa**, Japan.** **Keynote Speech: Plastics Waste Management in Malaysia,** Agamuthu, P & Jayanthi B, **Malaysia.** **Keynote Speech: Public Policy toward Municipal Plastic Waste in Bandung City, Indonesia,** Arisman, Suyud Warno Utomo**, Indonesia.** **Generic model of sustainable e-waste management of Kolkata, Dr. Shelly De (Pandit), Dr. SubhasisMukhopadhyay and Dr. Dipankar Dey, India.** **Review on recent methodology towards epoxy removal from e-waste PCBs, Balaji R.1*,Prabhakaran D.2, Thirumarimurugan M, India.** **E-Waste as an emerging Public Health Challenge- Indian Perspective, Prof. P. Vijaya Lakhsmi, Y. Sathvik, India/USA.** **A call for a value rearrangement to achieve sustainability – example of single use**	**Adaptation of recycling policy for solid waste management for Kolkata metropolitan city,** Udita Mukherjee, Kaniska Sarkar**, India.** **Critics on Solid Waste Management Policies: Advancement towards a zero-waste goal,** Monjit Roy, Srimanta Ray, **India.** **Perspective on glass waste management,** Abhigyan Chakraborty, Srimanta Ray, **India.** **Prevalence of Anaemia among rural women having Poor sanitation practice: findings from a cross-sectional study in Odisha, India,** Kripalini, Kulumina Dash, **India.** **Effect of different quantity and types of polymer films on kitchen waste,** AmritPritam Rout, DeepshikhaDatta, Bimal Das**, India.** **Road towards sustainable urban solid waste management: Review of diversion practices of Baguio City,** Philippines, Jeffrey Z. Duran, Marcelino N. Lunag, Jr , Eugene D. Buyucan, Jessie C. Elauria, **Philippines** **A Mini- Review on Economic Aspects of Market Waste Valorization in India,** Sutripta Sarkar1 and Debaprasad Sarkar2

	Management Problems in Bhutan, Krishna Lal Chhetri, Country Head, South Asian Forum for Environment, **Bhutan** ***Inclusion of Waste Management in Educational Institutes and Community,*** Ugyen Tshomo, Asst. Environment Officer, Waste Management Flagship Program, Waste Management Division, National Environment Commission, Bhutan. ***Assessing the extent of antibiotic pollution in hospital wastewater using HPLC****,* S. Bhattarai,*, R. Joshi, R. Bhatta, S. L. Shyaula, Dhulikhel, ***Nepal*** **Study of hospital waste and management practices in the isolation wards of the kathmandu valley during covid-19.** I. Shrestha, D. KC, Y. Dahal, B. Thapa and A. Ghimire, **Nepal.** **The E-Waste Management Novel Social Challenges for Nepal: Post Covid-19 Issue,**J. Giri, H. R. Joshi, S. Aryal, R. Gautam, A. Neupane, R. Bhattarai, **Nepal** **QA and Chair's Summary**	**plastics,LavtizarVesna, Japan.** **Quantification and Characterisation of microplastics in freshwater kaveri river sediments collected at Tiruchirappalli, India.,** SelvakumarMuniraj, PraveenkumarDharmaraj, TamilselviDuraisamy, SivasankarVenkatraman and VasanthyMuthunarayanan, **India.** **1. Survey methodologies to determine the supply chain & inventory of non-recyclable plastic wastes in landfill and other sectors towards closing the loop through co-processing,** Sourya Subhra Chakraborty Sadhan K. Ghosh, **India** **2. Sampling plan and test methodologies of non-recyclables & recyclable plastic wastes from different sources for reciculation through co-processing,** Abesh Chatterjee, Sadhan K. Ghosh**,India** **3. Co-processing of Non-Recyclable plastic waste in Cement Kiln** Sadhan K Ghosh, Tejashwi rana**, India** **QA and Chair's Summary**	, Kolkata, **India** **Life Cycle Assessment Of Solid Waste Management Options For Dhulikhel Municipality, Nepal,**S. Bajracharya, A. Adhikari, A. Ghimire, **Nepal** **Urban Green Space Solid Waste Management for Climate Mitigation of Khulna City**, Tusar Kanti Roy, Md Mustafa Saroar, Md Ashraful Alam,**Bangladesh** **Industrial Solid Waste Management Practices in Ota, Ogun State, Nigeria,** David O. Olukanni and Essien E. Mmenieabasi, **Nigeria** **QA and Chair's Summary**
3/12/2020 **13.30– 14.00**	**Recess**	**Recess**	**Recess**
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3/12/2020 **14.00 – 16.30**	**Special Session (SS 7) : OPTOCE – Sponsored by *SINTEF*, Norway; NORAD and Norwegian Ministry of Foreign Affairs**	**Technical Session (TS) -10 : Wastewater**	**Technical Session (TS) -11 :Construction and Demolition Waste Management**
	Coordinator : Dr. Kåre Helge Karstensen, and Mr. Palash K. Saha, SINTEF.	**Chairs : Prof. Ranjana chowdhury, and Prof. Papita Saha Das, Kolkata**	**Chairs: Dr. Elisabete Teixeira, Portugal and Prof. Benugopal Mahapatra, Odisha, India**
	OPTOCE: Ocean Plastic Turned into an Opportunity in Circular Economy **Opening remarks : HE Norway's Ambassador**	**Applicability of industrial solid waste as a low-cost adsorbent for removal of toxic phenol from wastewater,** AshanenduMandal, Sudip Kumar Das, **India.**	**Reduction of construction and demolition wastes with its reuse in different construction scenarios**, E.R. Teixeira, A. Fernandes , j. Campos E matos, **Portugal.**

	to India, Mr. Hans Jacob Frydenlund, **Delhi** **Keynote presentation – OPTOCE,** Dr. Kåre Helge Karstensen, SINTEF**, Norway** **Introduction to the India-Norway Marine Pollution Prevention Initiative**, Mr. Karan Mangotra **UNEP**, **Delhi** **Ongoing OPTOCE research at Jadavpur University**, Kolkata, India, Prof. Sadhan K Ghosh, Jadavpur, **India** **Remedial Strategy for the Ghazipur Dumpsite in Delhi, India,** G Nigam*, L Valsan, P K Saha, K H Karstensen, C J Engelsen, M Babu, **India; & Norway.** **Ongoing OPTOCE research at Asian Institute of Technology, Bangkok**, Prof. Dr. Chettiyappan Visvanathan, Asian Institute of Technology, Bangkok, **Thailand** **Ongoing OPTOCE research at Vietnam National University**, Prof. Dr. Trinh, VNU, Hanoi, **Vietnam** **Ongoing OPTOCE research at Yangon University,** Prof. Dr Aye Mi San, Yangon University, **Myanmer** **Landfill Mining project in Thailand,** Dr. Vincent Aloysius, General director, Ecocycle, **Thailand** **Co-processing of non-recyclable Plastic Wastes in Vietnam,** Mr. Bruno Fux, General director, Ecocycle, **Vietnam**	**Applicability of different adsorption isotherms for adsorption**, SamanwitaBhattacharya, BaisaliRajbansi andSudip Kumar Das, **India.** **Scale-up Design Methodology of the adsorption process,** Research Scholar, Chemical Engineering Department, University of Calcutta, **India**. **An inclusive review on possible adsorption mechanism of the heavy metals or organic pollutants present in wastewater with the agricultural waste and its by-products**, KoushikGhosh, IndrajitGhosh,AsitBaranBiswas, Sudip Kumar Das**, India.** **Impact of agricultural pollutants on aquatic ecosystem and its management: a review,** Munish Sharma, Navneet And Munit Sharma, **India**. **Exploration of River Bank Filtration and its Performance along River Damodar, West Bengal, India,** Amita Mondal, Udayan Mondal, Harish Hirani,Naresh C. Murmu, Priyabrata Banerjee, **India.** **Weighted Arithmetic Index Method-A Complementary Tool for Generating Water Quality Indices,** M. Musabbir Ahnaf, Islam M. Rafizul and M. Badiuzzaman Shuvo **Bangladesh.** **Removal of Ofloxacin using advanced process from wastewater with Toxicity analysis of end product and moving towards sustainable technological**	**An investigation on mechanical properties of IS concrete specimens confined with FRPcomposites,** Sudheer Ponnada, and G. ChandramukhiSai, **India.** **Construction waste management in public housing projects through application of ranking and principal component analysis,** Adil Masood[1*], Akash Prakash[2], Kafeel Ahmad[1] Abdul Hameed Siddiqui[1], QuocBao Pham, **India/Vietnam.** **Using Steel Ladle Furnace Slag in Cementitous Media,** Iffat SULTANA and G. M. Sadiqul ISLAM, **Bangladesh.** **Construction wastes management towards innovation and circular economy in nigeria: challenges and way forward,** Oluwadare Joshua OYEBODE, **Nigeria.** **Life cycle analysis – an analysis of input, output and power consumption for small scale compressed stabilized soil block production,** Mohamed Suhail Thayyil[1], Dr. Renu Pawels[2] K. AnaghaVenugopal[3], *Kerala*, **India** **A Study On Theories Of Plasticity And Their Applicability To Soils Under Environmental Engineering**, Maaz Allah Khan, Syed TabinRushad, **India** **QA and Chair's Summary**

	Co-processing of non-recyclable Plastic Wastes from Yangtze River in China, Ms Meijia Liu, CRAES/MEE, Beijing, **China** **QA and Chair's Summary**	**development,**Krishanu Hait[1*], Sadhan K Ghosh[2], Asok Adak,' **India** **Adsorption of Malachite Green over modified BambusaTulda: Taguchi Optimization**, Nirban Laskar1*; Arpan Herbert2; Upendra Kumar, Silchar, **, India** **Swachha Sundara, NammaBidar;Waste Management project in the Karez of Naubad**, Naveen YS**, India** **QA and Chair's Summary**	
3/12/2020	**HALL 1 [Click to join]**	**HALL 2 [Click to join]**	**HALL 3 [Click to join]**
3/12/2020 **16.45- 18.15**	**Technical Session (TS) -12 : Waste Management and associated aspects**	**Technical Session (TS) –13 Climate Change, /Circular economy/bio energy**	**Special Session : (SS 8): Meeting for International Research Collaboration**
	Chairs : Mr. Binay Kumar Jha, Director, SBM (Urban), MoHUA and Prof. Deben Chandra Baruah India	**Chairs : Prof. Dr. Hosam E.A.F. Bayoumi Hamuda, Hungary; Prof. David O. Olukanni, Covenant University, Nigeria**	**Chairs : Prof. Sadhan K Ghosh**
	MSW as an IoT enabled service– A Case of Ekamra-Kshetra, SukanyaDasgupta, Avik Roy, **India.** **Environmentally sustainable municipal solid waste management – A case study of Thiruvananthapuram, India,** Magha T.S, Dr. AksheyBhargava, SheetalKamble, PurviPatil**, India.** **Review: Potential of earthworm for solid waste management,**KomalDuhan, RachnaGulati and MukhanWati,**India.** **SwachhaSundara, NammaBidar; Waste Management project in the Karez of Naubad,** Naveen YS**, India.** **Sustainable municipal solid waste management: A GHG reduction study of Kolkata,** Samran Banerjee, AmitDutta, **India.**	**Economics of Nutrient Filtering Service of Mangrove Ecosystem of Karnataka, India,** *Balamurugan, S., Muthukrishnan, L., Karthi, N., Niruban Chakkaravarthy, D., Yogaanandhi, A.,Asir Ramesh, D., Karnataka**, India.*** **Carbon Neutral Farming: Pathway for Climate Change Mitigation,** Dineshkumar M, Vijay Nepolean A, BharaniPriya A, Naveen Romi J, RaveenaShri G K, *Kirubakaran V**, *Tamil Nadu**, India*** **Consideration climate change in the protection of the Environment in Georgia,** LianaKartvelishvil, LashariKurdashvili, **Georgia** **Locally Fabricated Technology to Contemplate Circular Economy in Faecal Sludge Management - A Case Study of Technology Maturation and its impact for Bangladesh**, Sonia Shahid, Md Abid	**All the country members and delegates are invited to participate and propose different collaborative research projects. ISWMAW-IconSWM-CE will support for collaboration.**

	Waste Management in Beleghata Deshbandhu Girls' High School (H.S.), Dr. Mandira Ghosh, **India.** **Exploring Synergistic Integration of ZED and Waste Management,** R. Dasgupta, S.K Ghosh, A.R.Mukhopadhyay, Kolkata, **India** **A Review : Municipal Solid Waste Management in India,**KomalDuhan, RachnaGulati and MukhanWati,**India** **QA and Chair's Summary**	Hasan,**Bangladesh.** **Antifungal activity of fruits, leaves, and seeds extract of *ceibapentandra* against *Colletotrichumcoccodes,*** James Carlo P. Frias, Arce D. Bellere, Shiela Mae M. Alforte, Rica B. Sarit, Jeffrey S. Catubig ,**Philippines.** **Studies on bioremediation of lead using lead resistant Acinetobacter sp 158 immobilized in calcium alginate beads**, M. Bose S. Datta, P. Bhattacharya ,**India** ***An environmentally friendly process pathway for safe disposal of paddy stubble,*** *aSurface Engineering and Tribology Division, CSIR-Central Mechanical Engineering Research Institute,* ***India*** **QA and Chair's Summary**	
3/12/2020	**HALL 1[Click to join]**	**HALL 2[Click to join]**	**HALL 3[Click to join]**
3/12/2020 **18.30 – 20.30**	**Technical Session (TS)- 14 :Sustainable Waste Management**	**Technical Session (TS)- 15: Waste Water**	**Technical Session (TS)- 16:**
	Chair : Prof. R. L. Mersky, USA and Dr. Mauro D. Berni, Brazil	**Chairs : Dr. Suneel pandey, Teri and Dr. B. Majumdar, Sulav, India**	
	Keynote Speech : International Variations in MSW Practice - Why the Differences, Prof. R. L. Mersky, Widener University, Philadelphia**, USA** **Keynote Speech : Resource Circulation for circular economy in Asia Pacific and other regisons,** Prof. Sadhan K Ghosh, Jadavpur University, Kolkata, India. **Circular Economy in the Electronics and Cell Phones Industry: International practices and recommendations for Mexico,** Yesenia Chavana-Castro, Ismael Aguilar-Barajas, **Mexico.**	**Waste to energy as an alternative energy source for waste management in Nepal,** Bindu MallaThakuri, Sadhan Kumar Ghosh, Sun Jin Yun, **India/South Korea** **Hydrophilicity improvement of Polysulfone Membrane Using Different weight percentages of Polyvinylpyrrolidone And a performance study in Dairy Wastewater Ultrafiltration,** Somakraj Banerjee, Arijit Mondal, Ranjana Das, and Chiranjib Bhattacharjee, **India.** **Wastewater Ultrafiltration and Hydrophilicity improvement of Polysulfone membrane Using Polyvinylpyrrolidone,**	Standby sessions

	Techno-economic and life-cycle assessments of small-scale biorefineries for butyric acid, isobutanol and isobutene production, Andrés Suazo, Fidel Tapia, Germán Aroca, Julián Quintero**, Chile** **E-waste in Mexico's northern border cities: challenges and prospects,** María Eugenia González Ávila, **Mexico.** **Strategy For Electronic Waste Management For Sustainable And Green Environment In Nigeria**, Oluwadare Joshua OYEBODE**, Nigeria** **Waste Management in BeleghataDeshbandhu Girls' High School (H.S.),** Dr. Mandira Ghosh, **India** **A Call for a Fashion Pact: Challenges and Opportunities for Circular Economy in the Brazilian Fashion Industry,** AnaFábia Ribas de Oliveira Ferraz Martins, Angela Cassia Costadello, Yasmin Pires Wolff, Stella Maris da Cruz Bezerra, **Brazil**. **Upgrading Landfill Gas to Biomethane and the Potential Use in Urban Bus Fleets,** Mauro D. Berni[1], Paulo C. Manduca[1], Ivo L. Dorileo[2], Leonardo G. de Vasconcelos**, Brazil.** **From Urban Waste to Urban Farmers: Can we close the agriculture loop within the city bounds?,** Rafael Carvalho Machado, **Brazil.** **QA & Chair's Summary**	Somakraj Banerjee[1], ArijitMondal, Ranjana Das, and ChiranjibBhattacharjee,**India.** **Utilization of agro-waste material as potential adsorbent for wastewater ,** SumaiyaSulaiyam Alyaaqubi1, Murutza Ali Syed, FerozShaik, Mohammed Nayeemuddin,**Soudi Arabia** **Development of Layered Double Hydroxide Derived Adsorbents for Removal Of ArsenicToxicity,** Manjusha Chakraborty, Ranjana Das, Chiranjib Bhattacharjee,**India.** **Modeling steady-state performance of MBBR treating municipal sewage,** Rishi Raj Verma, Shilpa V Mishra, P. Sankar Ganesh, **India.** **Recovering water from Textile Effluent using Solar dryer,** Nilofar Nisha J, Devi Priyanka R,**India**. **Detecting cadmium (II) by using coal extracted from organic waste as modifier of carbon paste electrode**, Khaoula ABBI, , Lina Hermouch, Youssra El Hamdouni, Abdelmajid Skalli1, Mohammeed Dalimi1, Mohammed El Mahi1, El Mostapha Lotfi1, Souad El Hajjaji, Najoua Labjar,**Morocco.** **QA and Chair's Summary**	

4/12/2020	**HALL 1[Click to join]**	**HALL 2[Click to join]**	**HALL 3[Click to join]**
4/12/2020 **11.00 – 13.00**	**Special Session (SS 9) :** Waste Management & Circular Economy in Russian Federation	**Technical Session (TS) - 17: Bioenergy/ Processes/ LCA / Bioremediation**	**Technical Session (TS)- 18: Hazardous and Industrial Wastes Management & Recycling**
	Chairs : Dr. Vladimur Maryev, Prof. Liubarskaia Maria, Russia	**Chairs: Dr. H. N. Chanakya, IISc and Prof. M Srimurali, SVU, India**	**Chairs: Dr. Siddhartha Mukherjee, Lurgy ltd. and Prof. Damodharan, SVU, India**
	Keynote Speech: Dr. **Vladimir Maryev,** Federal Institute, Ecological Industrial Policy Centre, **Russia, "Russia towards the SDGs. National project "Ecology" and Waste recycling Strategy as focal points for Circular Economy development in Russia",** **Keynote Speech: Liubarskaia M.,** Saint-Petersburg State University of Economics, Saint Petersburg, Russia-"**Prospects of Introduction of Solid Waste as a Renewable Energy Source in Russia"** **Corporate Environmental Responsibility as an Important Aspect of Circular Economy, Ipatova D.** , Higher School of Economics, Saint-Petersburg, Russia **The Role of Automation in Eco-Industrial Park Development in Russia, Yaroslavtsev D.** (Baltic Academy of Tourism and Entrepreneurship, Saint-Petersburg, Russia **Hazardous waste management as the important issue in CE approaches. Pilot projects in the Russian Federation**., Ekaterina Demicheva, UNIDO expert, **Russia**, **Industrial symbiosis as the base for secondary resources management within the CE**	**Studies on bioremediation of lead in a packed bed bioreactor using lead resistant *Acinetobactersp. 158* immobilized in calcium alginate beads,** M. Bose*, S. Datta, P. Bhattacharya, **India.** **Biomining: A Sustainable Solution for Reclamation of Open Landfills in India,** Nabanita Ghosh, Dr. Tumpa Hazra, Dr. Anupam Debsarkar, **India.** **Immobilization of Tannase from Alternaria alternate TUSGF1on chitosan beads,**TapasiPolley, Uma Ghosh,**India.** **Optimization of saccharification process parameters for bioethanol production from waste broken rice,**PayelMondal, AnupKumarSadhukhan, AmitGanguly, ParthapratimGupta**, India.** **Production of ethanol from food waste,** D. Y. Patil Institute of Engineering, Management & Research, **India.** **Biofuels and Health Hazards – An Overview,** Swapan Banerjee, Soumen Ghosh, Gourav Dhar Bhowmick, Ronit Mondal, Ashim Kumar Giri, **India.**	**Coal fly ash utilization in India: A review,** Dipankar Das*, Prasanta Kumar Rout, Tripura, **India** **Sludge management in crude oil storage tanks at PHBPL Haldia,** Sayantan Das, AnkitMangal, Risabh Kumar, DebduttaBiswas, IOCL, Haldia, **India** **Demonstration Of Recycing Potential Of Fly Ash And Ggbs As Geopolymeric Binder For Construction Of Utility Building**, Dr R. Jeyalakshmi,*[1] R Bharath[2], T Revathy[2], Baskara Sundararaj[3], Rajamane N P Kattankulathur, **India** **Ferrochrome ash-based geopolymer concrete incorporating fly ash and lime water**, Jyotirmoy Mishra[1*], Bharadwaj Nanda[1], Sanjaya Ku. Patro[1], Shaswat Ku. Das[2], R.S. Krishna[1], Syed M. Mustakim[3,] Odisha, **India** **Bioaccumulation of cobalt by two identified bacteria isolated from galvanizing industrial sludge,** Dipankar Roy, and Arup Kumar Mitra, **India.** **A study on the annual and seasonal variation of the air quality index of NCR-Delhi**, Baishali Chakraborty, Srimanta Ray**,India** **Occupational Health Safety of Waste Workers: A Review towards Sustainable Waste Management in**

	framework. Practical implementation in Russia, Tatiana Smirnova**, Gubkin University, Russia** & Dr. AmaniMaalouf **, Lebanon** . **Cost optimization, feasibility, and reliability of hybrid renewable energy water pumping system for the climatic conditions of Haldia using HOMER: A case study**, MadhumitaDas and RatanMandal,**India** **Study And Analysis Of Solar Radiation In Tropical Region Of India,**P. Narendra Mohan, [2]Md. TouseefAhamad, **India** **QA and Chair's Summary**	**Assessment of Different Methods of Extraction of Banana Fibre from Banana Pseudostem Waste,** LipsitaSaha, Samima Razia, Ramalaxmi Dutta, Aniruddha Mukhopaddhayay, Debasish Das, **India.** **Physicochemical Characterisation And Toxicity Study Of Poultry Litter Biochar ,** Anjali T.B, Anand M., Kerala**, India** **Fortification of tomato powder in dairy products**, SrijeetaSaha*1, RajarshiChakraborty, **India** **Bio utilization of agro wastes for production of anticancer enzyme L-asparaginase by solid state fermentation , Jayamadhury Ravuri, , India** **QA and Chair's Summary**	**Bangladesh**, Md. Arif Hossen, Mst. Farzana R Zuthi,**Bangladesh.** **Greening of Solid Waste Management System in Achieving Sustainable Development Goals,**Chowdhury S R, Ghosh S K,**India** **QA and Chair's Summary**
4/12/2020 **13.00-13.30**	**Recess**	**Recess**	**Recess**
13.30 – 15.30	**HALL 1[Click to join]**	**HALL 2[Click to join]**	**HALL 3[Click to join]**
4/12/2020 **13.30 – 15.30**	**Special Session (SS 10) :** Waste Management & Circular Economy in Hungary	**Special Session (SS 11) :** Water Management, Recirculation Technology & INDIA H20 Project (EU & DBT sponsored)	**Special Session (SS 12) : WM & CE in countries in Eastern and Southern Africa**
	Chairs : Dr. Kovack Jozsef, Dr. Farkas, Hilda,	**Chair : Prof. Philip Davies, UK; Prof. Gabriela Quesada, Netherlands.**	**Chairs: Dr. Rocio A. Diaz-Chavez,** SEI, **Kenya**
	Session Keynote : Efficiency of Utilisation of Wastewater sludge in Agriculture Supporting Circular Economy, Prof. Hosam E.A.F. Bayoumi Hamuda, Óbuda University, Budapest**, Hungary** Session Keynote : ***Plastic waste management in Hungary***, Dr. Farkas, Hilda,**Hungarian Consulate office in India** **Session Keynote : Thermal decomposition in waste management - legal obstacles to practical**	**Keynote Speech: Prof. Philip Davies,** Birmingham University**, UK** **INDIA H20 project at PDPU,** Prof. Anurag Mudgal, PDPU, **India** **FO with biomimetic membranes towards resource recovery from urban wastewater and landfill leachate,** Isaac Fernández, SaínzaArufe, Cristina Martínez, CETIM, ParqueEmpresarial de Alvedro, **Spain**	**Keynote : A bioeconomy strategy and synergies with circular economy for Eastern Africa.** Dr. Rocio Diaz-Chavez, SEI, **Kenya** **Keynote :** Dr . Ivar Virgin**, SEI, Sweden** **Fibre Based Bio-plastics a sustainable replacement to fossil-based plastics and their role in fostering the growth of the circular economy,** Mr Dennis Ssekimpi, HyA Bioplastics, **Uganda** **Bio-Processes applied to Industrial Waste**

	implementation in EU practice, Jozsef Kovacs, Felso-Bacska Storage Windpark Limited Liability Company; Hungary ***Environmental analytics in the Hungarian waste management practices***. , Dr.CsabaÁgoston, chemist, professor in chemical analysis. **Waste polymer recycling by high temperature process: opportunity for hydrogen production and for less CO_2 emission,** Norbert Miskolczi, ***University of Pannonia, Veszprém, Hungary*** **Vegetable oils for the modification of polylactic acid: opportunities and challenges,** Bianka Nagy, Norbert Miskolczi, ***University of Pannonia, Veszprém, Hungary*** **QA and Chair's Summary**	**INDIA H20 project at Delft,** Prof. Gabriela Quesada, **Netherlands** ***Business model of a wastewater treatment plant in India referring to INDIA H2O project***, Sadhan K Ghosh, &KrishanuHait, Jadavpur University**, India** **Business Models and DST for Wastewater project INDIA H2O,** Prof. P. K. Dey, Aston University, UK Aquaporin Presentation (tbc) ***QA and Chair's Summary***	**Remediation,** Prof Karoli Njau, BioConversion Technology Africa Company Limited, **Tanzania** **Current state of the Affairs of waste management and Prospects in Circular Economy- A case of Juba City, South Sudan,** Dr. Clara Lumori, Hai Mayo Residential Area, Juba, **South Sudan, South Sudan.** **Prospect of circular economy: Opportunities & Challenges in Ethiopia,** Dr Tekkle and Kassahum**, Ethiopia** ***Circular Economy of Agriculture Wastes in Plastic alternatives for Food Packaging,*** M. A. Sorour, M. M. Helmy, A. S. ElMahrouky, A. S. Elnawawy, Salwa R. Mostafa, FTTRI, ARC, Egypt and Chemical Engineering Department, Faculty of Engineering, Cairo University, **Egypt** **Transitioning South Africa towards a Waste to resource Circular Economy,** Prof. Cristina Trois, University Kwazulu Natal, **South Africa** **Towards a Circular Economy: A Sustainable Solid Waste Management System for Airports,** BUPE .G. MWANZA, **Zambia.** **Circular Economy Innovations: Quantity of Faecal Sludge in Lusaka for Resource Recovery – A possible key to Zambia's Deforestation Problem?** Dr. Flora K. Chitalu, R. Eng, MEIZ, Department of Mechanical Engineering, School of Engineering, **The University of Zambia, Zambia** **QA and Chair's Summary**
7/12/2020	**HALL 1 [Click to join]**	**HALL 2 [Click to join]**	**HALL 3 [Click to join]**
7/12/2020 **11.00 – 13.00**	**Technical Session (TS) – 19 Climate Change, /Circular economy/bio energy**	**Technical Session (TS) - 20: Wastewater/waste management**	**Technical Session (TS) - 21: Hazardous and Industrial Wastes/wastewater/waste management**

	Chairs: Prof. Soma Mukherjee and Prof. Apurba Ghosh, India	**Chairs: Prof. B. C. Meikap IIT KGP and Prof. Amit Hazra, Biswabhrati, India**	**Chairs:**
	Concentration of sucrose solution by Air Stripping in Rotating Packed bed, Moumita Sharma, Avijit Bhowal, Siddhatha Datta**,India** **Environmental analytics in the Hungarian waste management practices**, Dr. Csaba Ágoston, Chemist,**Hungary** **The Role of Automation in Eco-Industrial Park Development in Russia ,**Yaroslavtsev D**,Russia.** **Parametric optimization for regeneration of waste lubricating oil by CCD approach**, Sayantan Sarkar, Deepshikha Datta, Bikash Kumar Mondal, Bimal Das, **India**	**Keynote speech on 10th international conference on sustainable management towards circular economy by Dr. Indra Mitra, Director CAMBI, India** **Keynote speech by Biswajeet Shown, Reliance India ltd.** **Waste water management in USA, T**. K. DAS et al, St. Martins University, USA **Highly Cost-effective Cryogenic Capture of Industrial Emissions for Clean Energy-Environment**,Sadhan K Ghosh, Idowu Oduniyi**, Nigeria.** **Effect of the electrode on the treatment of coconut industry effluent using Microbial Fuel Cell,** Sanju Sreedharan, Dr. Renu Pawels, Kerala, India **Green synthesis of gold nanoparticles using Oldenlandiacorymbosa plant extract,** K S Deepak, Deepshikha Dutta, Bimal Das ,**India** **Waste water treatment and resource circulation in the East Africa Community (EAC) , Amb. Prof. Michael koech and k.j.munene, Kenyatta university, Kenya.** **Dena NanoTech Limited,** Dr. Smarajit Roy**,, USA** **Design and Fabrication of a Novel Triphasic Anaerobic Bioreactor for the Co-treatment of Organic Municipal Solid Waste and Slaughterhouse Waste,** Atun Roy Choudhury, P. Sankar Ganesh, Prasenjit Mondal, Namita	

		Banka, Rajarshi Banerjee, Hyderabad, **India** ***QA and Chair's Summary***	
7/12/2020 **13.00-13.30**	**Recess**	**Recess**	**Recess**
	HALL 1 [Click to join]	**HALL 2 [Click to join]**	**HALL 3 [Click to join]**
7/12/2020 **13.30 – 15.00**	**Special Session(SS-13): Waste Recovery and Circular Economy in Petroleum and petrochemical industries:**	**Technical Session (TS) – 22:** SWM	**Technical Session (TS) –23 :** Bio energy
	Chairs: Mr. J. P. Sinha, ED, Pipelines Divn., ER, IOC Ltd. and	**.**	
	Speakers to be announced later **QA and Chair's Summary**		
7/12/2020 **14.30 – 15.45**	**HALL 1 [Click to join]**	**HALL 2 [Click to join]**	**HALL 3 [Click to join]**
	Standby sessions	**Standby sessions**	**Standby sessions**
7/12/2020 **16.00 – 17.30**	**HALL 1 [Click to join]**		
	Valedictory : Presentation of Chair's Summary, Awards Ceremony;		
	Announcement of 11th IconSWM-CE 2021		

International Society of Waste Management, Air and Water (ISWMAW)

(Registered under the Waste Bengal Societies Registration Act, XXVI, 1961, No. S/1L/80049 of 2011-12); Email : iswmaw@gmail.com; Web site: www.iswmaw.com;

CONTACT : iswmaw@gmail.com ; Website: www.iswmaw.com

Main Objectives of the ISWMAW:

1. *The International Society of Waste Management, Air and Water will promote environmentally sound solid waste management practices, effluent treatment practices, Air and Water pollution control practices, general environment protection awareness etc. to achieve sustainable Development*
2. *The ISWMAW will support research, policy instruments, implementation and awareness generation on Sustainable Development Goals 2030.*
3. *The International Society of Waste Management, Air and Water will be involved in educating the management groups, process owners, Ragpickers & waste*

handlers, SHG, adult poor, school children and college going students and others through training, awareness and technical assistance.

4. *International cooperation and collaboration in building technological and organizational expertise to make the developing cities and municipalities self-reliant in dealing with the growing generation of municipal solid waste, including new emerging waste streams such as electronic waste (E-waste), plastic waste, Bio Medical waste, construction and demolition waste, and household hazardous waste and industrial hazardous wastes and encouraging lower materials consumption and resource circulation.*
5. *Development of Solid waste management, Air and Water quality monitoring and management as a profession.*
6. *Organising the flagship programme, the International Conference on Solid Waste Management and Exhibition (IconSWM), in different parts of the country and abroad for generating awareness.*
7. *Research and development in solid waste management, recycling, Waste-to-energy, Bio-fuels, Air and Water management & technology, water harvesting, Ground Water and drinking Water, LCA, Carbon Footprints, Climate Change and related social aspects.*
8. *Involving in activities related to Standardization, LCA, Green House Gas (GHG) Emission, Carbon Footprints and other sustainability issues and Development of a Policy and framework on Waste Management, Air and Water management.*
9. *Involving civic bodies and concerned NGOs working in this field for effective implementation of the National policy.*
10. *Support and encourage the private sectors, Academia, Universities, R &D Institutions, Small & Medium Sized Enterprises (SME)s, NGOs, community based organizations (CBOs), informal sector, development banks, and other stakeholders to collaborate with cities and municipalities in developing and implementing sustainable waste management strategies and projects.*
11. *Improvement and formulation in legislation and its enforcement in the field of Waste Management, Air and Water management with specific law to impose accountability on Realty and other industries responsible for generating wastes and incorporating air and water management.*
12. *Awareness & community involvement - Organising effective awareness programmes at all levels across all community to achieve the level of awareness. To help promote awareness in the society in order to uplift moral standards by teaching adults and children alike the need for ascribing to higher standards to as to produce a cleaner, better and healthier society and be able to incorporate the pollution control measures.*
13. *To create awareness & opportunity among the men and women belonging to low socio-economic condition in the rural and slums areas by organizing different awareness programmes & trainings to find out their own talents and resources within themselves to fight against their own poverty .*
14. *Professional recognition nationally and internationally and to get affiliation to the International Solid Waste Associations. Development of expertise in the above areas.*
15. *Organizing Training Courses, workshops, seminars, symposiums, conference, and exhibitions on these issues.*
16. *Publishing books, journals, periodicals and reports on related issues and distribute those on sale. To encourage and support writing research articles and publication on various contemporary issues.*
17. *Playing a leading role and coordinating role in bringing practitioners, users, scientists, technologists, administrators and community together to collaborate on the continuous improvement and harmonization of framework, terminologies, methodologies and implementation related to Solid & liquid Waste, Air and Water management.*
18. *To encourage projects in maintaining, manage or partner to society developmental works and to open centres and /or Chapters of the society in various parts of the country and abroad for propagation of awareness, knowledge and cooperation.*

19. *To setup, establish, maintain and manage centers for the study of sociology, psychological counseling, handicraft and other subjects of interest for community development and to initiate and promote advance technologies in concerned areas.*

20. *To quit assistance for the un-employment young men and women belonging to low socio-economic condition In the Rutland slums by organizing different vocational training programme and launching different innovative self-help group (SHG) supporting plans and programmes for unprivileged people anywhere in the county & in West Bengal.*

Major Activities performed since 2009

International Conference on Solid Waste Management (IconSWM) is the flagship programme of the International Society of Waste Management, Air and Water (ISWMAW) to promote environmentally sound solid waste management practices, effluent treatment practices, Air and Water pollution control practices, general environment protection awareness etc. in India and abroad for mass awareness and evolving collaborative research for effective waste management and environment protection. Following are the details of previous IconSWM Conferences. The International Conference on Solid Waste Management (IconSWM) has been renamed as International Conference on Solid Waste Management towards Circular Economy (IconSWM-CE) to promote the concepts and implementation strategies of Circular Economy and resource efficiency as a part of SDG 2030.

Conference & Date	**Venue**	**Organizers**	**No of Delegates & Countries**
Planned : 10th IconSWM-CE 2020; Dec 02-07,'20 On Virtual Platform	Jadavpur University, Koljat, West Bengal, India. On Virtual Platform	ISWMAW, CSD&REM, Jadavpur University; CST IISc., UNCRD, IPLA,	Expected : 700, delegates from 44 Countries.
9th IconSWM 2019; Nov 27-30, 2019	KIIT, Bhubaneswar, Odisha, India.	ISWMAW, KIIT, OSPCB, CQMS, Jadavpur University; CST IISc., UNCRD, IPLA, UNIDO,	550 Delegates from 21 Countries.
8th IconSWM 2018 Nov 24-27, 2018	Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.	ISWMAW, CQMS, Jadavpur University; CST IISc., Swachh Andhra corporation (SAC), APPCB; UNCRD, IPLA, UNIDO, UNEP	Expected : 855, Delegates From 29 Countries.
7th IconSWM 2017 Dec 15-17, 2017	PJ T State Agriculture University, Rajendranagar, Hyderabad, Telangana, India.	ISWMAW, CQMS, Jadavpur University; CST IISc., TERI;	800 Delegates, from 27 Countries.
6th IconSWM 2016 Nov 24-26, 2016	Jadavpur University, Kolkata, India.	ISWMAW; CQMS, Jadavpur University, CST, IISc, IIT Kgp, TERI, CRIC, Kolkata.	557 Delegates From 23 Countries.
5th IconSWM 2015 Nov 24-27, 2015	National Science Seminar Complex, Indian Institute Of Science, Bangalore, India.	ISWMAW; CISTUP, Indian Institute of Science, Bangalore; CQMS, Jadavpur University,	500 Delegates From 21 Countries .
4th IconSWM 2014 January 28-31, 2014	AN Agriculture University, Rajendranagar,Hyderabad, Andra Pradesh, India.	Department of UD.Govt. of Andra Pradesh CQMS, Jadavpur University; ISWMAW;	1200 Delegates From 17 Countries.
3rd IconSWM 2012	Infosys Campus, HI Area, Mysore, Karnataka,	Mysore City Corporation, Mysore;	1400 Delegates

July 30-Aug 1, 2012	India.	ISWMAW; CQMS, JU.	From 11 Countries.
2nd IconSWM 2011 Nov 7-9, 2011	Jadavpur University , Main Campus, Kolkata,India.	CQMS, Jadavpur University, Kolkata. & ISWMAW	500 Delegates From 11 Countries .
1st IconSWM 2009 4th-6th Nov. 2009	Netaji Indoor Stadium & Khudiram Anusilan kendra, Kolkata, India.	CQMS, Jadavpur University, Kolkata; ISWMAW; Municipalika; .	700 Delegates From10 Countries.

As of now, delegates from most of the states in India and the several countries who participated in different IconSWM are, Australia, Austria, Bangladesh, Bhutan, Brazil, China, Egypt, France, Georgia, Germany, Huntington, Hong Kong, Italy, Israel, Japan, Kuwait, Lebanon, Malaysia, Mayanmer, Mauritius, Nepal, New Zealand, Nigeria, Netherlands, Portugal, Philippines, Rep. of Arab Emeritus, Rep of Korea, Russia, Serbia, South Africa, Soudi Arabia, Singapore, Sri Lanka, Sweden, Thailand, Taiwan, UK, USA, Vietnam etc.

Glimpses of some of the activities

Webinars organized by ISWMAW in 2020

Date	Title	Participation & Collaborators /Join Organisers
Nov 20, 2020	*Webinar on Sustainable Development and Low Carbon Technology*	CSD&REM, ISWMAW
Sept. 30, 2020	*IconSWM-Asia and the Pacific Connect Webinar* : Circular Economy and Waste Management under pandemic COVID-19	UNCRD, IPLA, India : CSD&REM Jadavpur University, CST, Indian Institute of Science, Bangalore; Consortium of Researchers in International Collaboration (CRIC) A few more organization to be decided
Sept 18, 2020	*IconSWM-India-Vietnam Connect Webinar* : Circular Economy and Waste Management under pandemic COVID-19	Participation : 350 from 12 countries ; UNCRD, IPLA, Vietnam: HUST and ISPONRE, India : CSD&REM Jadavpur University and CST, Indian Institute of Science, Bangalore, Consortium of Researchers in International Collaboration (CRIC)
Sept 10, 2020	*IconSWM-India-Philippines Connect Webinar* : Resource Circulation and Waste Management under pandemic COVID-19	Participation : 300 from 14 countries UNCRD, Philippines: University of Santo; Tomas, Adamson University Manila, Central Bicol State University of Agriculture, Vietnam : Vietnam National University of Agriculture, India : CSD&REM Jadavpur University, CST, Indian Institute of Science, Bangalore, Consortium of Researchers in International Collaboration (CRIC) and NIT Durgapur,
August 11, 2020	*IconSWM-India-Nigeria Connect Webinar* : Resource Circulation and Waste Management under pandemic COVID-19	Participation : 850 from 15 countries Nigeria : University of Ilorin, Covenant University, Lagos State Environmental Protection Agency, (LSEPA), Nigerian Institution of Environmental Engineers, (NIEE), Lower Niger River Basin Development Authority, (LNRBDA), The Nigerian Institute of Mechanical Engineers, (NIME), Nigeria Society of Chemical engineers and Association of Professional Women Engineers of Nigeria (APWEN) India : Centre for Sustainable Development and Resource Efficiency Management, Jadavpur University; Consortium of Researchers in International Collaboration (CRIC) and CST, Indian Institute of Science, Bangalore
July 02, 2020	*Webinar* : Waste Management in post COVID-19 Situation in South Asian Countries	Participation : 430 from 22 countries SACEP, and IGES

June 05, 2020	World Environment Day (WED) Webinar : Biodiversity and Environmental Protection during Pandemic Outbreak of COVID 19	Participation : 1145 from 26 countries UNCRD, *SACEP, IPLA and* , Jadavpur University, Consortium of Researchers in International Collaboration (CRIC)

Research Project

1. **Funded Research Projects to Prabhu Jagatbandhu College 2018 : India :** Waste Management: A Municipal Level Study in West Bengal for assessing 3R concept implementation in the JAICA SWM project; **Partners :** Prabhu Jagatbandhu College, Andul, Howrah, ISWMAW and CQMS, Jadavpur University, West Bengal **Collaborators :** Uttarpara, Konnagar, Rishra, Sreerampore, Champadani and Vaidyabati in Hooghly district, West Bengal. Jointly funded by ISWMAW and Prabhu Jagatbandhu College.

2. **Research Projects 2017** : Projects will be identified and evolved on, waste quantification, Occupational Health Hazards of waste handlers, implementation of social welfare schemes for waste handlers, EPR Implementation and Review of Swachh Survekshan Report of SBM.

3. **International Collaborative Research Project on Circular Economy 2018-2021 :** CRIC and ISWMAW taken up the research project with 10 countries to assess the CE implementation in different countries and develop publication during 2018-2021. Researchers from 10 countries agreed to work voluntarily.

4. **International collaborative Research Projects 2016 : BRICS E-waste Project (** up to July 2019): "Waste electrical and electronic equipment management and Basel Convention compliance in Brazil, Russia, India, China and South Africa (BRICS) nations". Collaborative research project with individual funding; Lead Partner: Department of Mechanical Engineering, Jadavpur University, India; Other Partners : BCRCAP, Tsinghua University, BCRC, China; Dept of Civil, Env & Arch Engineering, University of Colorado, USA; State Dept of City Management, Saint-Petersburg State University of Economic, RussiaN Federation; School of Env. Sciences, University of Venda, South Africa; Innovarelab Pesquisa e Consultoria, São Paulo, Brazil.

5. **International collaborative Research Projects 2016 : India and China -** Collaborative Research Project on *E-waste Management* (October 2016 – October 2019): Jadavpur University and Tsinghua University, Beijing, China.

6. **Bio gas Plant at MCC 2015 :** Bio gas Project in Mysore City Corporation in 2014-2015.

7. **Research Project at IISc., Bangalore 2015-2017** : Research Project on SWM in CST, IISc Bangalore in 2014-2016.

8. **International collaborative Research Projects 2015:** *"Global Waste Management, Resource Circulation and 3R*" (March 2016 – March 2020); Principal Investor in India Prof Sadhan Kumar Ghosh; Lead Partner: 1.

a. **India**; Jadavpur University; Collaborative Partners and respective country Lead : 2. **Australia**; Griffith University, Griffith School of Engg, Queensland, 3. **Egypt,** University of Cairo; 4. **Germany,** Rostock University; 5. **Italy,** LAR[5] Laboratory – Dipartimento di Ingegneria, University of Perugia, Perugia; 6. **Rep. of Korea**, Kyonggi University. 7. **South Africa-** The Cape Peninsula University of Technology, Cape Town; 8. **Thailand,** AIT; 9. **USA**, Widener University. Lead Supporting Organisation/Society : 10. International Society of Waste Management, Air and Water (ISWMAW) and 11. Consortium of Researchers in International Collaboration (CRIC).

9. **International collaborative Research Projects : India & Italy 2016** : Collaborative Research Project on "*Sustainable Development Goals – Realisation in Global Perspectiv*e" (June 2016 – December 2019) : Partners : Jadavpur University, India; LAR[5] Laboratory – Dipartimento di Ingegneria, University of Perugia, Perugia, Consortium of Researchers in International Collaboration (CRIC) and International Society of Waste Management, Air and Water (ISWMAW).

Publications

1. Circular Economy: Global Perspective, Editors: **Ghosh**, Sadhan Kumar (Ed.)/ Outcome of the research project on Circular Economy contributed by 21 countries | Springer 2020
2. **Emerging Technologies for Waste Valorization and Environmental Protection, Editors:** Ghosh**, S.K.,** Bhattacharya**, C.,** Satyanarayana**, S.V.,** Varadarajan**, S. (Eds.)** | Springer 2018
3. IconSWM Proceedings : The 1st IconSWM 2009 to 9th IconSWM-CE 2019 proceedings have been published each year and released on the day of the Conference.
4. Solid Waste Policies and Strategies: Issues, Challenges and Case Studies, **Editors:** Ghosh**, Sadhan Kumar (Ed.)** | Springer 2019
5. Recent Trends in Waste Water Treatment and Water Resource Management, Springer 2019
6. Waste Management as Economic Industry Towards Circular Economy, Editors: **Ghosh**, Sadhan Kumar (Ed.), | Springer 2019
7. Energy Recovery Processes from Wastes, Editors: **Ghosh**, Sadhan Kumar (Ed.) | Springer 2018
8. Waste Management as Economic Industry Towards Circular Economy, DOI: 10.1007/978-981-15-1620-7, *published in March 2020*,Springer Nature Publication;ISBN 978-981-15-0532-4;
9. Urban Mining and Sustainable Waste Management, https://www.springer.com/gp/book/9789811505317,*published in March 2020*,Springer Nature Publication;ISBN: 978-981-15-1620-7;
10. Special Issue of WM&R Journal : Published in 9th IconSWM-CE 2019. Springer Book : "Utilization and Management of Bioresources" has been published with 30 selected papers in September 2017 out of the papers presented in 6th IconSWM 2016. http://www.springer.com/in/book/9789811053481.
11. Circular Economy and Fly Ash Management, Springer Nature, 25-Oct-2019 - Science - 160 pages| **Springer 2019**
12. Solid Waste Policies and Strategies: Issues, Challenges and Case Studies, Springer Nature, 10-Mar-2020 - Science - 221 pages| **Springer 2018**
13. Sustainable Waste Management: Policies and Case Studies, 7th IconSWM—ISWMAW 2017, Volume 1, **Editors:** Ghosh**, Sadhan Kumar (Ed.)** | Springer 2018
14. Waste Management and Resource Efficiency, Proceedings of 6th IconSWM 2016, **Editors:** Ghosh**, Sadhan Kumar (Ed.)** | Springer 2019.
15. Utilization and Management of Bioresources, Proceedings of 6th IconSWM 2016; Editors: **Ghosh**, Sadhan Kumar (Ed.), | Springer 2018.
16. Springer Book : "Waste Management and Resource Circulation" is in the process of publication with 122 selected papers expected to be released in December 2017- January 2018 out of the papers presented in 6th IconSWM 2016.
17. ELSEVIER Journal Publication : 104 selected Papers from 5IconSWM 2015 have been published in Procedia Environmental Sciences (ELSEVIER) in August 2016. Please refer the link. http://www.sciencedirect.com/science/journal/18780296/35.

IconSWM Excellence Awards

IconSWM Excellence Awards have been given to the researchers for significant papers, to municipalities, Temples and industries for their significant achievement in waste management fields in each of the IconSWMs.

IconSWM Lifetime Achievement Awards

The award has been instituted from 2018 to recognize and honour the individual for significant contribution in the areas of waste management worldwide.