

The Thirty-Sixth International Conference on Solid Waste Technology and Management

Virtual

March 14 – March 16, 2021

AGENDA

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- Chukwu Onu, Southern University A & M College, **USA**
- Dr. Lakshmi Raghupathy, TERI School of Advanced Studies (TERI-SAS), **India**

DETAILED AGENDA

All times are USA Eastern Time (GMT -4)

SUNDAY, MARCH 14

12:00 p.m. - 6:00 p.m.

Conference check-in and registration

MONDAY, MARCH 15

8:00 – 10:00

Welcome and Opening Plenary

Welcome: *Ronald L. Mersky*, ICSW Chair, Widener University, USA

Plenary Presentation: Pentagonal Cooperation in Promoting 3R and Circular Economy, *Sadhan Kumar Ghosh*, Dean, Faculty of Engineering & Technology, Jadavpur University and President, International Society of Waste Management, Air and Water, **India**

10:00 – 12:00

Sessions 1

SESSION 1A

Sustainable Solid Waste Management

Assessment of Impacts of Municipal Solid Waste on Soil Properties Using Geophysical and Physicochemical Methods at Ajakangba Refuse Dumpsite, Ibadan Southwestern, Nigeria, *Aderemi A. Alabi*, Federal University of Agriculture, Abeokuta, Nigeria, *Oluwaseun Olurin*, Federal University of Agriculture, Abeokuta, Nigeria, *Abiola S. Ogungbe*, Lagos State University, Lagos, Nigeria, *A. O. Adewale*, *V. Makinde*, *O. P. Olulana* and *D.S. Williams*, **Nigeria**

Review of GHG's Contribution to Climate Change from Waste Management Practices and Mitigation Opportunities., *Shamim Ahsan*, Metropolitan State University of Denver, **United States**

Environmentally Sustainable Municipal Solid Waste Management-A Case Study of Kolhapur, India, *Shraddha Bhilatiya*, KIT's College of Engineering, Kolhapur., *Akshey Bhargava*, Rajasthan Pollution Control Board, CEPT University, India, *Pratiksha Nalawade*, KIT's College of Engineering, Kolhapur., *Rugved Kulkarni*, **India**

Pollution. Bane to Boon Conversion of Wastes into Utility Products, *Valmiki Rangachar Sreenivasa*, Independent, **India**

SESSION 1B
Agricultural and Food Wastes

Study of the Technical and Economic Feasibility of Using Biogas Energy for Anaerobic Digestion of Pig Manure with Magnetite Addition in Brazil, *Maxi Estefany Huamán Córdova*, Federal University of Itajubá (UNIFEI), *Hellen Luisa de Castro e Silva*, Federal University of Itajubá (UNIFEI), *Regina Mambeli Barros*, Federal University of Itajubá (UNIFEI), *Electo Eduardo Silva Lora*, *Geraldo Lúcio Tiago Filho*, *Ivan Felipe Silva dos Santos*, **Brazil**

Statistical Study of the Effect of Organic Amendments Based on Agro-Food Co-Products on the Physico-Chemical Properties of Moroccan Soils, *Imane Mehdaoui*, Sidi Mohammed ben Abdellah University, *Sanae Jennan*, Sidi Mohammed ben Abdellah University, *Zineb Majbar*, Sidi Mohammed Ben Abdellah university, *Ben Abbou Mohamemd*, *El haji Mounia*, *Taleb Mustapha*, *Rais Zakia*, **Morocco**

On-site Aerobic Biodegradation of Food Waste: Analysis and Applications of Aerobic Digesters, *Rachel Burch*, University of Delaware, *Savannah Sipes*, Duffield Associates, *Daniel Cha*, University of Delaware, *Michael Chajes*, **USA**

Biolipid Production by the Oleaginous Yeast *Rhodosporidium Toruloides* Using Apple Pomace as a Primary Carbon Source, *Arda Tuhanioglu*, Middle East Technical University, *Deniz Çekmecelioglu*, Middle East Technical University, **Türkiye**

Steam Explosion of Citrus Juice Processing Residues for Recovery of Valuable Compounds, *Christina Dorado*, USDA-ARS, *Randall G. Cameron*, USDA-ARS, *John A. Manthey*, USDA-ARS, *Kyle L. Ferguson*, **U.S.A.**

SESSION 1C
Recycling 1

A Review of the Multiple-Criteria Decision-Making Approaches Applied to Waste Electrical and Electronic Equipment (WEEE), *Samuele Marinello*, Modena and Reggio Emilia University, *Rita Gamberini*, Modena and Reggio Emilia University, *Francesco Lolli*, Modena and Reggio Emilia University **Italia**

A User-Friendly Model to Calculate Cost Effectiveness of Single and Dual Stream Recycling, *Griffin Walker*, Stony Brook University, *David Tonjes*, Stony Brook University, *Elizabeth Hewitt*, Stony Brook University, *Krista Thyberg*, *Nicholas Alberto*, *Sandra Torres Vera*, **United States**

Evaluation of Plastic Collection, Disposal and Recycling in Brazil, *Liseane Padilha Thives*, Federal University of Santa Catarina (UFSC), *Enedir Ghisi*, Federal University of Santa Catarina (UFSC), *João Francisco Thives da Luz Fontes*, Federal University of Santa Catarina **Brazil**

Recycle My Battery, *Sri Nihal Tammana*, Recycle My Battery, *Sri Nihal*, **US**

12:00-14:00
SESSION 2
Poster Session 1

Microwave-Assisted Hydrothermal Synthesis of Zeolite Membrane from Coal Fly Ash for Wastewater Treatment Application, *Ozioma Nwachukwu*, Southern University and A&M College, *Chukwu Onu*, Southern University and A&M College, **United States**

Improving Solid Waste Management Practices in Primary Schools in Ibadan, Nigeria, *Adekunle Suraju Lateef*, University of Ibadan, *Chidinma Rosemary Uzomba Babatunde Taiwo Hammed*, University of Ibadan, *Elijah A. Akintunde*, **Nigeria**

Current Status and Challenges of Electronic Waste Management in India, *Sabeela Fatima*, Aligarh Muslim University, **India**

Waste Management in Lake Tana Basin—Case of Rapidly Urbanizing Bahir Dar City, *Biruk Abate*, Bahir Dar University-Bahir Dar Institute of Technology, *Goraw Goshu*, Bahir Dar University -College of Environmental Science and Agriculture, **Ethiopia**

Modeling Turbulence in Landfill Gas Flow: Ingress into a Horizontal Well, *Abhishek Baral*, Thompson Rivers University, *Yana Nec*, Thompson Rivers University, **Canada**

Analysis on the Influencing Factors of the Classification Effect of Urban Residential Domestic Waste—A Case Study in Glen Ridge City, New Jersey, *Sicheng Ding*, George School, *Zhipeng Yu*, Chongqing University, *Lu Yu*, Chongqing University, *Tang Xinru*, *Jiang Xinyan*, *Hu Yuanhao*, *Deng Shanshan*, *He Qiao*, *Zhang Qixuan*, *Fu Xin*, *Oumi Tijiang*, *Zeng Xiaolan*, **United States**

The Cost of Logistics in Waste to Materials and Energy Systems, *Gamini Mendis*, Penn State Behrend, *Justin Richter*, Penn State University, *Alicyn Rhoades*, Penn State Behrend **USA**

Characterization of PAHs, Dioxins, and VOCs as Result of Garbage Burning in Rural Arizona, *Emmanuel Gonzalez Figueroa*, University of Arizona, *Amanda Bates*, University of Arizona, *Steve Hadeed*, University of Arizona, *Marty Lindsey*, *Mary Kay O'Rourke*, **United States**

A Qualitative Approach to Evaluating National Waste Trends: A Meta-Analysis of EPA Reports 1975-2018, *Matthew Johnston*, Stony Brook University, *Elizabeth Hewitt*, Stony Brook University, *Krista Thyberg*, Stony Brook University, *David Tonjes*, **United States**

14:00-16:00
Sessions 3

SESSION 3A
Case Studies 1

The Circular Economy and Health Protection in the Czech Republic, *Magdalena Zimová*,

National Institute of Public Health, *Anita Závodská*, Barry University, **Czech Republic**

Sustainable Solid Waste Management in Nigeria, *Olufemi Oyedele*, Fame Oyster & Co. Nigeria, **Nigeria**

Waste Management in Lake Tana Basin—Case of Rapidly Urbanizing Bahir Dar City, *Biruk Abate*, Bahir Dar University-Bahir Dar Institute of Technology, *Goraw Goshu*, Bahir Dar University-College of Environmental Science and Agriculture, **Ethiopia**

Waste Collection & Management, *Margaret Beyslow*, Environmental Protection Agency of Liberia, *Lucia Paye-Layleh*, Environment Protection Agency, *Andyll Quamie*, Environment Protection Agency, *Moretha Browne*, **Liberia**

Ecological Sanitation for Sustainable Human Waste Management and Rural Food Security in Bangladesh, *Masudul Hoq Chowdhury*, Bangladesh Academy for Rural Development, **Bangladesh**

SESSION 3B

Landfill

State-of Art Reappraisal of Amended Clay Liners in Landfill, *Aswathy CM*, National Institute of Technology Karnataka, *Sunil B.M*, National Institute of Technology Karnataka, **India**

Prediction of Leachate Quantity and Quality from a Landfill Site in a Snow Area by the Long Short-Term Memory Model, *Kazuei Ishii*, Hokkaido University, *Masahiro Sato*, Hokkaido University, *Satoru Ochiai*, Hokkaido University **Japan**

How Chlorides Affect the Mobility of Radionuclides in a Waste Repository and the Derivation of an Adequate Acceptance Criterium, *Erik Coppens*, ONDRAF/NIRAS, **Belgium**

Municipal Solid Waste Management by Engineered Landfills in Indian Smart Cities, *Deepak Singh Baghel*, Academy of Scientific and Innovative Research, *Lakmikanthan P.*, Csir-National Environmental Engineering Research Institute, *Sunil Kumar*, Csir-National Environmental Engineering Research Institute **India**

SESSION 3C

Use of Wastes in Construction 1

Effect of crushed glass waste on compressive strength of concrete, *Prakash M Munnoli*, S.D.M College of Engineering & Technology/Visvesvaraya Technological University, *Ishan Soodan*, S.D.M College of Engineering & Technology/Visvesvaraya Technological University, *Kumar Ashish*, S.D.M College of Engineering & Technology/Visvesvaraya Technological University, *Kumar Aman Sagar*, *KA Rahul*, **India**

Dynamic motion of retaining wall with TDA backfill under earthquakes, *IL-SANG AHN*, University of Alaska Fairbanks, **USA**

Compressive Strength of Geopolymer Paste with Municipal Sewage Sludge Ash as Precursor, *Xiaochao Tang*, Widener University, *Ibrahim Alhassan*, Widener University, **United States**

16:00-18:00

Sessions 4

SESSION 4A

Difficult Contaminants

Dechlorination for Dioxin-Like Compounds Using Nano-Size Calcium Particles Under Dry Conditions, *Yusaku Imasaka*, Prefectural University of Hiroshima, *Yoshiharu Mitoma*, Prefectural University of Hiroshima, *Yumi Katayama*, Hachinohe Institute of Technology, *A Halem Hadi Imran Bin*, **Japan**

Characterization of PAHs, Dioxins, and VOCs as Result of Garbage Burning in Rural Arizona, *Emmanuel Gonzalez Figueroa*, University of Arizona, *Amanda Bates*, University of Arizona, *Steve Hadeed*, University of Arizona, *Marty Lindsey*, *Mary Kay O'Rourke*, **United States**

PFAS - The Circular Environment, *Ivan Cooper*, National Wastewater Practice Leader, Civil & Environmental Consultants, Inc., **USA**

SESSION 4B

Waste Management Economics

Resuscitating the Market for Post-Consumer Materials Through Exchange-Traded Derivatives, *Jordan Howell*, Rowan University, *Daniel Folkinshteyn*, Rowan University, *Jordan Moore*, Rowan University **USA**

The Cost of Logistics in Waste to Materials and Energy Systems, *Gamini Mendis*, Penn State Behrend, *Justin Richter*, Penn State University, *Alicyn Rhoades*, Penn State Behrend **USA**

An Economic and Environmental Evaluation of a Novel Circular Economy Waste Management Strategy, *Brooke Marten*, University of Colorado Boulder, *Sherri Cook*, University of Colorado Boulder, *Claire Butler*, University of Colorado Boulder, *Brooke Marten*, **USA**

Development of Solid Waste Management Decision Making Life Cycle Assessment Tool for Growing Economies, *Ketan Shah*, The University of Texas at Arlington, *Melanie Sattler*, The University of Texas at Arlington, **United States**

SESSION 4C

Case Studies 2

The Impact of Tourism on Solid Waste Generation in the Brazilian Municipality of Florianópolis, *Julio Dias*, Santa Catarina State University - UDESC, *Carlos De Rolt*, Santa Catarina State University, *Adriano de Amarante*, Santa Catarina State University - UDESC

Brazil

Knowledge and Perceptions about Electronic Wastes Amongst Informal Waste Collectors in Jos, Plateau State (Nigeria), *Isaac Tebogo Rampedi*, University of Johannesburg, *Kangyang Josiah Miner*, University of Johannesburg, *Ayodeji Peter Ifegbesan*, University of Olabisi-Onabanjo
South Africa

Circular Economy Prospects for Waste-Based Materials, *Luiz Solon Souza Barreto*, Federal University of Santa Catarina, *Enedir Ghisi*, Federal University of Santa Catarina, **Brazil**

Recycling and Reusing of Aircraft Materials and Composites, *Muhammad Mustafizur Rahman*, Wichita State University, *Ahsan Habib*, Wichita State University, *Eylem Asmatulu*, Wichita State University, **United States**

18:00-20:00
Sessions 5

SESSION 5A *Case Studies 2*

A Qualitative Approach to Evaluating National Waste Trends: A Meta-Analysis of EPA Reports 1975-2018, *Matthew Johnston*, Stony Brook University, *Elizabeth Hewitt*, Stony Brook University, *Krista Thyberg*, Stony Brook University, *David Tonjes*, **United States**

Relationship Between Urban Solid Waste Management and Quality of Life in Brazil, *Enedir Ghisi*, Federal University of Santa Catarina, *Liseane Padilha Thives*, Federal University of Santa Catarina, **Brazil**

Consume Less, Generate Less (Waste): How Two Universities are Trying to Make a Difference, *Anita Zavodska*, Barry University, *Anne Morrissey*, Dublin City University, **USA**

COVID-19 and its Impact on Waste Generation, *Anita Zavodska*, Barry University, *Anne Morrissey*, Dublin City University, **USA**

New York City's Solution to Solid Waste Management, *Glen Johnson*, Greeley and Hansen, **United States**

20:00-22:00
Sessions 6

SESSION 6A *Waste Collection and Facility Siting*

Developing a GIS-Based Optimization Framework for Waste-to-Energy Facilities for Western

Canada, Md Mashum Billal, University of Alberta, Roshni Mary Sebastian, University of Alberta, Amit Kumar, University of Alberta, Md Mashum, Canada

Privatization of Solid Waste Management: Opportunities and Challenges, Yahya Muhammed Bah Myrtati Dyah Artaria, University of Airlangga, Artaria Artaria, University of Airlangga, Indonesia

Evaluation on the Classification Effect of Residential Domestic Waste in Shapingba District, Chongqing City, Zhi Peng Yu, Chongqing University, Lu Yu, Chongqing University, Tang Xinru, Jiang Xinyan, Hu Yuanhao, Deng Shanshan, He Qiao, Zhang Qixuan, Fu Xin, Oumi Tijiang, Ding Sicheng, Zeng Xiaolana, China

Analysis on the Influencing Factors of the Classification Effect of Urban Residential Domestic Waste—A Case Study in Glen Ridge City, New Jersey, Sicheng Ding, George School, Zhipeng Yu, Chongqing University, Lu Yu, Chongqing University, Tang Xinru, Jiang Xinyan, Hu Yuanhao, Deng Shanshan, He Qiao, Zhang Qixuan, Fu Xin, Oumi Tijiang, Zeng Xiaolan, United States

SESSION 6B

Chemical Treatment 1

Optimization Approach for Solvent Extraction Process of Oily Contaminated Soil with Addition of Biosurfactant, Lely Fitriyani, Institute Technology of Bandung, Indonesia, Edwan Kardena, Institute Technology of Bandung, Sukandar Sukandar, Institute Technology of Bandung, Qomaruddin Helmy, Indonesia

Effect of Membrane Removal on The Production of Calcium Oxide from Eggshells Via Calcination, Samuel Tomi Aina, University of Pretoria, Barend Du Plessis, University of Pretoria, Vuyo Mjimba, Human Sciences Research Council, H.G. Brink, South Africa

Selective and Straightforward Recovery of Precious Metals from Waste Sources Using Dithiocarbamate-Modified Cellulose, Foni Bushon Biswas, Kanazawa University, Ismail M. M. Rahman, Fukushima University, Keisuke Nakakubo, Kanazawa University, Koki Yunoshita, Masaru Endo, Kanji Nagai, Asami S. Mashio, Tsuyoshi Taniguchi, Tatsuya Nishimura, Katsuhiko Maeda, Hiroshi Hasegawa, Japan

SESSION 6C

Research Advances 1

Modeling Turbulence in Landfill Gas Flow: Ingress into a Horizontal Well, Abhishek Baral, Thompson Rivers University, Yana Nec, Thompson Rivers University, Canada

The Properties and Formation of Fouling During Leachate Reverse Osmosis Membrane Treatment in Both a Typical Incineration Plant and a Landfill, Lu Yu, ChongQing University, Kunyu Li Zhipeng Yu, ChongQing University, Zeng Xiaolan, China

Optimization of Gasification Model for Hydrogen Production from Municipal Solid Waste, *Apinya Chanthakett*, Deakin University, *Arif Mohammad Taufiqul*, Deakin University, *Masud Khan Mohammad*, Central Queensland University, *Aman Maung Than Oo*, **Australia**

Investigation of Catalytic Degradation of Municipal Waste Expanded Polystyrene using Cu, CuO and CuCl₂ Catalysts, *Adnan Adnan*, University of Swat, *Jasmin Shah*, University of Peshawar, *Muhammad Rasul Jan*, University of Peshawar **Pakistan**

TUESDAY, MARCH 16

8:00-10:00

SESSION 7

Poster Session 2

Waste Management Practices and Its Effects on Student's Physical Health, *Marvin De Leon*, La Consolacion University Philippines Malolos City, Bulacan, **Philippines**

Assessment of Knowledge and Attitude Among Healthcare Workers on Medical Waste Management in Healthcare Facilities: A Systematic Review, *France Raphela*, Central University of Technology, Free State, **South Africa**

Preparation and Coloring Mechanism of Cobalt-Free Black Ceramic Pigments from Stainless Steelmaking Dust, *Mengke Liu*, Wuhan University of Science and Technology, *Guojun Ma*, Wuhan University of Science and Technology, *Xiang Zhang*, Wuhan University of Science and Technology **China**

An Eco-Innovative Solution for Reuse of Leachate Chemical Precipitation Sludge: Application to Sanitary Landfill Coverage, *Ana Baía*, Universidade da Beira Interior, *Alfredo Martínez-Cruz*, National Autonomous University of Mexico, *Annabel Fernandes*, Universidade da Beira Interior, *Filomena Ramos*, *Sofia Soares*, *Pedro Correia*, *Ana Lopes*, *Fátima Carvalho*, **Portugal**

New Perspectives in Recycling Titanium Chips by Solid State Processing, *Krzysztof Topolski*, Faculty of Materials Science and Engineering, Warsaw University of Technology, **Poland**

An Experimental Study on Durability of Improved Saline Soil Under Repeated Freeze- Thaw Cycles, *Fang Li*, Jiangsu Province Nanjing Engineering Vocational College, *Sunlin Sun*, School of Earth Sciences and Engineering Hohai University, *Deheng Zhang*, Department of Architecture Civil Engineering Nanjing Institute of Technology, **P.R. China**

Visualization of Classified Garbage in Space-Time Cube, *Bingbing Song*, Jiangsu Province Nanjing Engineering Vocational College, **The People's Republic of China**

Pakistan First Integrated Recourse Recovery Center (IRRC), *Syed Sheraz Ali Shah*, United Nations Human Settlement Programme (UN-Habitat), **Pakistan**

Evaluation on the Classification Effect of Residential Domestic Waste in Shapingba District, Chongqing City, *Zhi Peng Yu*, Chongqing University, *Lu Yu*, Chongqing University, *Tang Xinru*, *Jiang Xinyan*, *Hu Yuanhao*, *Deng Shanshan*, *He Qiao*, *Zhang Qixuan*, *Fu Xin*, *Oumi Tijiang*, *Ding Sicheng*, *Zeng Xiaolana*, **China**

Waste Collection & Management, *Margaret Beyslow*, Environmental Protection Agency of Liberia, *Lucia Paye-Layleh*, Environment Protection Agency, *Andyll Quamie*, Environment Protection Agency, *Moretha Browne*, **Liberia**

The Properties and Formation of Fouling During Leachate Reverse Osmosis Membrane Treatment in Both a Typical Incineration Plant and a Landfill, *Lu Yu*, ChongQing University, *Kunyu Li Zhipeng Yu*, ChongQing University, *Zeng Xiaolan*, **China**

Analysis of the Permanent Deformation and Loss by Induced Moisture in Asphaltic Mixtures of the Hma Type, Using Recycled Aggregates of Construction and Demolition Waste, *Tayná Macêdo*, University Federal of Sergipe, *Joelson Hora Costa*, University Federal of Sergipe, *Victor Manuel de Queiroz Lourenço*, University Federal of Sergipe, *Larissa Chagas Cordeiro*; *Gardênia Rocha*, **Brazil**

New measurements of the discharge and turnaround time of solid waste transportation in Lagos megacity, *Samuel Odewumi*, Lagos State University, Ojo, Lagos, **NIGERIA**

10:00-14:00.

SESSION 8

Special Workshop

Symposium on the Conversion of Waste Plastics into Monomers and Intermediates

Chemical Recycling of Polyolefins Over a Waste Refinery Catalyst, *Michael Jenks*, Utrecht University, *Ina Vollmer*, Utrecht University, *Bert Weckhuysen*, Utrecht University, *Florian Meirer*, **The Netherlands**

Deconstruction and Upcycling of Waste Polyol Plastics via Zeolite Catalysts, *Andrew Jaeschke*, University of South Carolina, *Michael Royko*, University of South Carolina, *Jochen Lauterbach*, University of South Carolina, *Alex Katz*, *Blake Macqueen*, **United States**

Thermal Degradation of Polystyrene to Monomers; Comparison of Microwave-Assisted Pyrolysis with Conventional Pyrolysis, *Amir Enferadi Kerenkan*, Pyrowave, *Jean-Philippe Lavolette*, Pyrowave, *Jocelyn Doucet*, Pyrowave, *Philippe Leclerc*, **Canada**

STL: Conversion of Waste Solids to Monomers and Intermediates, *Samyukta Pingali*, Manhattan College, *Gennaro Maffia*, Manhattan College, *Anne Gaffney*, University of South Carolina, **United States of America**

Waste Plastics Recycling or Repurposed During a Deep Space Mission, *Alexis Naclerio*,

Manhattan College, *Eden Collazo*, Manhattan College, *Samyukta Pingali*, Manhattan College, *Gennaro Maffia*, *Anne Gaffney*, **United States**

ASPEN-HYSYS Simulations for the Small Scale Conversion of Waste Plastics into Gaseous and Liquid Fuels, *Ahmed Elkhaiary*, Chemical Engineering Department, Alexandria University, *Gennaro Maffia*, Manhattan College, **Egypt**

14:00-16:00
Sessions 9

SESSION 9A *Use of Wastes in Construction 2*

Effect of Curing Regime on the Mechanical Properties of Recycled Aggregate Concrete, *Roz-Ud-Din Nassar*, American University of Ras Al Khaimah (AURAK), *Taqdees Aysha*, Concrete Technology L.L.C., **United Arab Emirates**

A Novel Mix Design for Wood Ash-Incorporated Rammed Earth Material, *Amin Ajabi*, The University of British Columbia Okanagan, *Chinchu Cherian*, The University of British Columbia Okanagan, *Sumi Siddiqua*, The University of British Columbia Okanagan **Canada**

Using Local Waste Plastics in Asphalt Modification to Improve Engineering Properties of Roads, *Finn Hall*, University of the Sunshine Coast, *Greg White*, University of the Sunshine Coast, **United Kingdom**

Analysis of the Permanent Deformation and Loss by Induced Moisture in Asphaltic Mixtures of the Hma Type, Using Recycled Aggregates of Construction and Demolition Waste, *Tayná Macêdo*, University Federal of Sergipe, *Joelson Hora Costa*, University Federal of Sergipe, *Victor Manuel de Queiroz Lourenço*, University Federal of Sergipe, *Larissa Chagas Cordeiro*; *Gardênia Rocha*, **Brazil**

SESSION 9B *Biological Treatment 2*

Role of Microbial Inoculant in Composting of Garden Waste Using Aerated In-Vessel Technology, *Sandeep Kumar Mishra*, Sardar Vallabhbhai National Institute of Technology, Surat, *Kunwar D. Yadav*, Sardar Vallabhbhai National Institute of Technology, **India**

Effects of Municipal Solid Waste Compost on Growth and Yield of Vegetables Crops in Agricultural Soils of Mysore District, Karnataka, India, *Kaveri M Kumar*, University of Mysore, *Shiddappa L Belagali*, University of Mysore, **India**

Performance Studies on Biogas Production Using Paper Waste and Cow Dung in Community Based Biodigester, *Jyothilakshmi Ramaswamy*, M. S. Ramaiah Institute of Technology, *Sumangala Patil*, M. S. Engg College, Bangalore, *Hemanth Kumar K J*, VVCE, *Sandhya*

Jayakuma, Sadhan Kumar Ghosh, India

Identification of Suitable Earthworm Species for Recycling of Fly Ash as Vermiash, *Gourab Roy*, MBB College, Agartala, **India**

SESSION 9C
Research Advances 2

Anaerobic Decolorization and Biodegradation of Reactive Red Azo Dye Using Immobilized Mixed Cells: Toxicity Characterization, *Zainab Ismail*, University of Baghdad, *Basma Hameed*, University of Baghdad, **Iraq**

New measurements of the discharge and turnaround time of solid waste transportation in Lagos megacity, *Samuel Odewumi*, Lagos State University, Ojo, Lagos, **NIGERIA**

Characterization, concentration of biochar and titanspheres and heavy metals assessment of Quercus suber cork powder fly ash fractions, *Renato Guimarães*, University of Porto, Sciences Faculty, *Alexandra Guedes*, University of Porto, Sciences Faculty, *Bruno Valentim*, University of Porto, Sciences Faculty, **Portugal**

16:00-18:00
Virtual Collaboration Reception

18:00-19:00
Sessions 10

SESSION 10A
Advances on Chemical Treatment 2

Use of PVDF (Polyvinylidene Fluoride) Fibers in the Process of Absorption of Contaminants in Saturated Sandy Soils, *Gabriella Vieira*, University of Brasilia, *Michéle Casagrande*, University of Brasilia, *André Cavalcante*, University of Brasilia, *Matheus Lopes*, **Brazil**

Physical and Chemical Differences in the Colors of Alkali Treated Solutions of Incinerated Rice Husk Ash Under Different Temperatures, *Ryoko Sekifuji*, Toyama Prefectural University, *Masafumi Tateda*, Toyama Prefectural University, *Hiroshi Takimoto*, Ishikawa Prefectural University **Japan**

SESSION 10B
Policy and Education

Teaching Solid Waste Management to Environmental Public Health Students Through Personal Waste Audit, Energy Saving, and Self-Reflection Analysis, *Susan Mirlohi*, California State University Fresno - Department of Public Health, **United States**

An Analysis of FEMA Public Assistance Funding for Disaster Debris Removal, *Julia Crowley*,
Western Carolina University, **United States**

19:00

Closing Session and Discussion