

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

Philadelphia, PA, USA

April 3 – April 6, 2016

AGENDA

(updated February 12, 2016)

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- Ofira Ayalon, University of Haifa and Samuel Neaman Institute, Technion, Israel
- Giuseppe Bonifazi, Sapienza – Università di Roma, Italy
- Maria Cristina Borba Braga, Parana Federal University, Brazil
- Shouu-Yuh Chang, North Carolina A&T State University, USA
- Toru Furuichi, Hokkaido University, Japan
- Professor Sadhan Kumar Ghosh, President, International Society of Waste Management, Air and Water, & Mechanical Engineering Dept., Jadavpur University, India
- Dr.(Mrs.) Kasturi Gadgil, I.I.T., Delhi (retired), India
- Ruby Mejía de Gutiérrez, Universidad del Valle (Cali), Colombia
- Mervat El-Hoz, University of Balamand, Lebanon
- Maria Liubarskaia, Saint-Petersburg State University of Economics, Baltic Academy for Tourism and Entrepreneurship, Russia
- Dr. Mary Purcell, Cork Institute of Technology, Ireland
- Ilan Nissim, Ministry of National Infrastructures, Energy and Water Resources, Israel
- Sara Ojeda-Benitez, Institute of Engineering, Autonomous University of Baja California, México
- Dr. Chukwu Onu, Southern University and A & M College, USA
- Professor Paul Phillips, University of Northampton, UK
- Dr. Eva Pongrácz, University of Oulu, Finland
- Prof. Krishna Reddy, University of Illinois at Chicago, USA
- Dr. Jerry E. Uhao, National Assembly Abuja, Nigeria
- Prof. Dongmin Wang, Director of Solid Waste Subcommittee of The Chinese Ceramic Society, P.R. China
- Anita Závodská, Barry University, USA

CONFERENCE SUMMARY

SUNDAY, APRIL 3, 2016

-Pre-Conference Tour of Philadelphia
-Opening Reception

MONDAY, APRIL 4, 2016

Opening Plenary

Oral Presentations

- 1A Utilization of Wastes in Construction 1
- 1B Education and Public Involvement
- 1C Geotechnical Analyses
- 1D Innovative Technologies and Concepts 1

- 2A Environment Impacts
- 2B Recycling
- 2C Utilization of Wastes in Construction 2
- 2D Landfill

- 3A Ash Management
- 3B Case Studies
- 3C Food Wastes
- 3D Biofuels from Wastes

- 4A Biological Treatment 1
- 4B Industrial Wastes
- 4C Utilization of Wastes in Construction 3
- 4D Construction and Demolition Wastes
- 4E Policy

Poster Session 1

TUESDAY, APRIL 5, 2016

Oral Presentations

- 5A Agricultural Wastes
- 5B Contaminated Sites 1
- 5C Medical Wastes
- 5D Innovative Technologies and Concepts 2

- 6A Thermal Treatment and Energy Recovery
- 6B Electronic Wastes
- 6C Biological Treatment 2
- 6D Sludge

Poster Session 2

Special Sessions and Workshops

- 7A Solid Waste Subcommittee of Chinese Ceramic Society
- 7B Professional Education Program
- 7C Contaminated Sites 2
- 7D Innovative Technologies and Concepts 3

Closing Reception

WEDNESDAY, APRIL 6, 2016

Technical Field Trips

DETAILED AGENDA

SUNDAY, APRIL 3

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

Conference check-in and registration

1:00 p.m. - 5:00 p.m.

Guided Tour of Philadelphia: The tour will include the Liberty Bell, Independence Hall and the Betsy Ross House along with a bus tour of the city.
(additional fee)

5:00 p.m. - 6:00 p.m.

Welcome Reception

MONDAY, APRIL 4

8:00 a.m. - 5:30 p.m.

Conference check-in and registration

8:00 a.m. – 9:00 a.m.

Coffee

9:00 a.m. – 9:30 a.m.

Opening Plenary

Resource Efficient Sustainable Circular Economy in Waste Management in Asia, *Sadhan Kumar Ghosh*, International Society of Waste Management, Air and Water & Jadavpur University, **India**

9:30 a.m. – 10:55 a.m.

Sessions 1

SESSION 1A

Utilization of Wastes in Construction 1

High Strength Lightweight Fly Ash Based Alkali Activated Materials, *Ze Liu*, China University of Mining & Technology, Beijing, **China**

Alkali Activated Concrete Based on Industrial By-Products (Fly Ash and Blast Furnace Slag) Exposed to Elevated Temperature, *William Gustavo Valencia Saavedra*, Universidad del Valle, *Daniela Eugenia Angulo Ramirez*, Universidad del Valle, *Ruby Mejia de Gutierrez*, Universidad del Valle, *Rafael Andres Robayo*, **Colombia**

Compressive Strength and Abrasion Resistance of Concrete Containing Used-Foundry Sand, *Gurpreet Singh Dhanoa*, Punjabi University, *Rafat Siddique*, Thapar University, **India**

Study on the Carbonation for Utilization of Construction Wastes, *Changsik Choi*, Institute for Advanced Engineering, *Bum Eui Hong*, Institute for Advanced Engineering, *Sungkyu Lee*, Institute for Advanced Engineering, *Cheol Jin Jeong*, **Korea**

Beneficial Use of Lightweight Aggregate Sintered from Dredged Material for Green Roof Construction, *Rui Liu*, Kent State University, *Reid Coffman*, Kent State University, *Timothy Ong*, Kent State University, **USA**

SESSION 1B

Education and Public Involvement

Single-Use Carrier Bags Charge in Scotland: Public Perceptions and Attitudes, *Adekunle Oke*, Robert Gordon University, **Scotland, UK**

Factors Affecting the Acquisition and Disposal of Second-hand Products Among Online Users, *Lorena Fortuna*, City College of New York, *Vasil Diyamandoglu*, City College of New York, **USA**

Teaching Solid Waste Management at University, *Anita Závodská*, Barry University, *Anne Morrissey*, Dublin City University, **USA**

Participatory Model Utilization for Improved Environmental Sanitation in Nigeria, *Nkonyeasua Kingsley Egun*, Greenspring Consulting, **Nigeria**

‘Nothing Can Be Done to Make Our Markets Clean’: A Qualitative Study of Attitudes of the African Marketplace Users Toward Waste, *Adeni Abigo*, University of Brighton, *Kassim Gidado*, University of Brighton, *Paul Gilchrist*, University of Brighton, *Emmanuel Aboagye-Nimo*, **United Kingdom**

SESSION 1C

Geotechnical Analyses

Evaluation of Mechanical Properties of Expansive Soil by Mixed with Waste Tire Chips, *Tri Harianto*, Hasanuddin University, **Indonesia**

Study of Influential Factors in the Compaction of Municipal Solid Waste in Lysimeters, *Rafael Lourenço Thomaz Favery Favery*, University of Campinas, *Mariana Politti Manzatto*, University of Campinas, *Renata Lima Moretto*, University of Campinas, *Gustavo Henrique Tonelli Dutra de Almeida*, *Miriam Gonçalves Miguel*, *Eglé Novaes Teixeira*, **Brazil**

Geotechnical Considerations for Building on and in Mined Sites, *Dorairaja Raghu*, Hatch Mott MacDonald, *Vatsal Shah*, Hatch Mott MacDonald, **USA**

Geotechnical Properties and Permeability of Compacted Clay in the Gölbaşı Region, Ankara, *Haluk Akgün*, Middle East Technical University, **Turkey**

SESSION 1D

Innovative Technologies and Concepts 1

Westinghouse Plasma Gasification for Power, Fuels and Chemicals, *Richard Fish*, Westinghouse Plasma Corp., **Canada**

Bright Green Island of Bornholm – Waste to Resource Labs Driving Sustainable Transition, *Hans-Christian Holmstrand*, Aalborg University, *Resourcelab Bornholm*, *Jens Hjul-Nielsen*, BOFA (Bornholms Municipal Waste Management Company), **Denmark**

Integrated Waste Management Systems for Developing Economies, *Lakshmi Raghupathy*, Teri University, **India**

Innovative Chemical Treatment of TBT (Tributyltin)-Impacted Marine Sediments: A Bench Scale Study, *George (Bud) Ivey*, Ivey International Inc., **Canada**

10:55 a.m. – 11:15 a.m.
Break

11:15 a.m. – 1:10 p.m.
Sessions 2

SESSION 2A ***Environment Impacts***

Analyzing Environmental Impacts and Energy Production of Various Treatment Method for Sewage Sludge and Food Waste in Macau using Life Cycle Assessment, *Irene Lo*, The Hong Kong University of Science and Technology, *Sam Chiu*, The Hong Kong University of Science and Technology, **Hong Kong, China**

Assessment of the Emissions for the Collection of Biodegradable Waste in a Life Cycle Perspective: The Influence of Source Separation Intensity and Collection Frequency, *Francesco Di Maria*, Dipartimento di Ingegneria - Università di Perugia, *Caternia Micale*, Dipartimento di Ingegneria - Università di Perugia, **Italy**

Environmental Impacts in Lawn Area Establishment and Maintenance, *Frans Silvenius*, Natural Resource Institute of Finland, *Oiva Niemeläinen*, Natural Resource Institute of Finland, *Sirpa Kurppa*, Natural Resource Institute of Finland, **Finland**

An Analysis of Grey Water Recycling Technologies Using AHP, *Biswajit Debnath*, International Society of Waste Management, Air and Water (ISWMAW), *Aryama Raychaudhuri*, NIT Trichy, *Sadhan Kumar Ghosh*, Jadavpur University, **India**

Vulnerability Assessment of Groundwater Pollution in the Vicinity of an Active Dumpsite (Olusosun), *Lagos, Nigeria*, *Abdulrafiu Olaiwola Majlagbe*, Lagos State University, *Adebola Abosede Adeyi*, University of Ibadan, *Oladele Osibanjo*, University of Ibadan, **Nigeria**

SESSION 2B ***Recycling***

Green Construction and Clean Environment through City and River Solid Waste Processing, *Yash Pal Gupta*, Naini Bridge Information, COWI-DIPL, *Pramila Gupta*, Allahabad Agricultural Institute, Naini, **India**

History of US Wood Pallet Disposal, Recovery, Reuse, and Recycling in the Last 20 Years, *Robert Bush*, Virginia Tech, *Philip Araman*, USDA Forest Service, **USA**

What a Management Waste: Unrecognized Informal Solid Waste Recycling in an Emerging African Megacity, *Smangele Dlamini*, University of the Witwatersrand, **South Africa**

The Separation of Household Organic Waste as a Method of Municipal Waste Reduction in the Czech Republic, *Anita Závodská*, Barry University, *Libuše Benešová*, Charles University in Prague, *Jakub Šmíd*, Charles University in Prague, **USA**

Techno Commercial Viability of Waste Plastic to Zero Waste (Plastic to Oil) in Developed and Developing Nations, *Kalyan Anne*, Pyrocrat Systems LLP, **India**

Waste Recycling: What Do Nigerian Prospective Teachers Know, Do and Feel?, *Ayodeji Ifegbesan*, University of Johannesburg, *Isaac T. Rampedi*, University of Johannesburg, **South Africa**

SESSION 2C

Utilization of Wastes in Construction 2

Steel Slag as a Construction Material: A Review, *Prakash Munnoli*, SDM College of Engineering and Technology, *Anusha Pai*, SDM College of Engineering and Technology, *Manohar Dandin*, SDM College of Engineering and Technology, *Gouthami K, Prajwal Shetty*, **India**

Preliminary Analysis of CDW in Mortars as a Partial Replacement of Sand, *Sofia Araujo Lima*, UNICAMP, *Maria da Conceição Santos Almeida*, IFPI, *Ismael da Cruz Freitas*, IFPI, **Brazil**

Lignin-Bitumen Composite for Sustainable Road Construction, *Eyram Norgbey*, Hohai University, *Jingyu Huang*, Hohai University, **China**

Use of Water Treatment Sludge in Compressed Stabilized Earth Blocks, *Nethmi Yasara Kasthuriarachchi*, University of Moratuwa, *Niranjani Ratnayake*, University of Moratuwa, **Sri Lanka**

Utilizing Industrial Wastes to Prepare High Performance Soil Stabilizer, *Hao Yu*, Beihang University, *Xin Huang*, Beihang University, *Dezhi Shao*, Beihang University, *Jinlong Liu*, **China**

Wood Construction Solid Waste Can Be Reduced in Home Building, *Philip Araman*, USDA Forest Service, Southern Research Station, *Daniel Hindman*, Virginia Tech, **USA**

SESSION 2D

Landfill

Landfill Site Selection Using Multi Criteria Decision Analysis and Geospatial Techniques, *Saad Malik*, Institute of Space Technology, *Javeria Gabriel Arain*, Institute of Space Technology, **Pakistan**

Permeability Study on Vary Density of Clay Liner for Sanitary Landfill, *Sitti Hijraini Nur*, Hasanuddin University, *Iskandar Maricar*, Hasanuddin University, **Indonesia**

Determination of Greenhouse Gas Fugitive Emissions in a Municipal Solid Waste Landfill, *Carlos Sánchez*, Technical University of Madrid, *Adolfo Narros*, Technical University of Madrid, *Isabel del Peso*, Technical University of Madrid, *M del Mar de la Fuente*, Encarnación Rodríguez, **Spain**

Effects of Waste Composition and Cover Practices on Landfill Methane Emissions,
Douglas Haith, Cornell University, USA

High Efficiency Landfill Gas Fired Power Plant Process with ORC, *Petri Kouvo, HSY*
Helsinki Region Environmental Services Authority, **Finland**

Surfactant Waste Can It Be Disposed to Anaerobic Bioreactor Landfills?, *Karthik R.*
Manchala, Virginia Tech/Atkins North America Inc., John Novak, Virginia Tech, USA

1:10 p.m. - 2:00 p.m.

Awards Luncheon

Presentation of the Russell Ackoff Award, Roy F. Weston Award, Iraj Zandi Award and Student Paper Award

2:00 p.m. – 3:55 p.m.

Sessions 3

SESSION 3A

Ash Management

Leaching Behavior and Stabilization of Heavy Metals in a Typical Fly Ash, *Qun Chen,*
Tsinghua University, *Ruixiao Lin,* Tsinghua University, *Yuxuan Guo,* Tsinghua
University, *Xue Gong, Yuqun Zhuo,* **China**

The Study and Application on Fly Ash Autoclaved Aerated Concrete in Self-Insulation
System of External Wall, *Pengxuan Duan,* Beijing Building Materials Academy of
Sciences Research, **China**

Transfer of Eco-Core Technology to Coal Ash Composite Products, *Kunigal*
Shivakumar, North Carolina A&T State University, **USA**

Shear Behavior of Rae Bareilly Pond Ash at Low Confining Pressure, *Sarvesh Chandra,*
Indian Institute of Technology Kanpur, *Rashmi Kumari,* Indian Space Research
Organization, *Rajesh Sathiyamoorthy,* IIT Kanpur, **India**

SESSION 3B

Case Studies

Status of Solid Waste Material Recovery (SWMR) in Benin Metropolis, Nigeria, *Dennis*
Iyeke Igbinomwanhia, University of Benin, *Emmanuel Ehis Osolease,* University of
Benin, **Nigeria**

Eco-Waste Reduction and Diversion Program in Makati City, *Andrew Lou Mungcal,*
University of Makati, *Mildred Castillo,* National Economic Development Authority,
Philippines

Assessment and Characterization of Municipal Solid Waste Generated in Minna, Niger
State, *Abdulsalami Kovo,* Federal University of Technology Minna, *Peter Idah,* Federal
University of Technology Minna, **Nigeria**

Solid Waste Characteristics and Its Economic Potentials in Bauchi Metropolitan Area,
Haruna Abdu Usman, Abubakar Tafawa Balewa University Bauchi, *Sarkile Kawuwa,*
Abubakar Tafawa Balewa University Bauchi, *Muhammad Aminu Adamu,* Abubakar
Tafawa Balewa University Bauchi, **Nigeria**

Municipal Solid Waste Generation and Composition in the Kanfing Municipal Council Area (KMC) – The Gambia, *Dawda Badgie*, University of Cape Coast, *Latifah Abd Manaf*, University Putra Malaysia, *Mohd Armi Abu Samah*, International Islamic University, Malaysia, **Ghana**

Community Based Solid Waste Management Strategy: A Case Study of Kaduna Metropolis, *Yusuf Rigasa Abdullahi*, Kaduna State University, *Badamasi Abdul Gambo*, Kaduna Polytechnic, *Naomi Galadimawa*, Kaduna State University, *Abubakar Gambo Umar*, **Nigeria**

Investigating the Impact of Waste Reduction Measures for Jos, Nigeria, *Janet Agati Yakubu*, University of Brighton, *Ryan Woodard*, University of Brighton, *Kassim Gidado*, University of Brighton, **United Kingdom**

Impact of Informal Sector in Integrated Solid Waste Management in Ibadan, Oyo State Nigeria - A Developing Country, *Lukman Habeeb.A*, Evekent Ltd, *Rotimi Lawal.O*, Evekent Ltd, *Abidemi Oluwasesan.A*, Evekent Ltd, **Nigeria**

Waste Management in USA through Case Studies: E-waste Recycling and Waste to Energy Plant, *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), *Joonheon Lee*, Seoul National University, *Achi Chibueze Godwin*, University of Ibadan, *Adekunle Oke*, *Reem A. Al-Rawi*, *Mervat El-Hoz*, **India**

Facility Siting: The Case of an Agro-processing Company in Wenchi (Ghana), *Joseph Opoku Kuma*, Czech University of Life Sciences, **Czech Republic**

Urban Solid Waste Management in Sunyani Municipality (Ghana), *Gabriel Twumasi Ankamah*, Czech University of Life Sciences, **Czech Republic**

SESSION 3C

Food Wastes

An Ecological Comparison of Food Waste Management Options Using a Hybrid Life Cycle Assessment Approach: A UK Case-Study of Composting, Anaerobic Digestion and Animal Feed, *Ramy Saleemdeen*, Cambridge University, *Erasmus Ermgassen*, Cambridge University, *Mi-Hyung Kim*, Seoul National University, *Andrew Balmford*, *Abir Al-Tabbaa*, **United Kingdom**

Utilization of Torula Yeast/Zymomonas Mobilis as Main/Reciprocal for Degradation of Municipal Organic Waste as Feed for Goats, *Chikezie Kanu Nkutere*, Michael Okpara University of Agriculture, Umudike, *Nnamdi Mbanefo Anigbogu*, Micheal Okpara University of Agriculture, Umudike, *Johnson Ezike*, Michael Okpara University of Agriculture, Umudike, **Nigeria**

Food Waste in the UAE Hospitality Sector: Decreasing the ‘Too Much’, *Sanaa Iqbal Pirani*, Masdar Institute of Science and Technology, *Hassan Arafat*, Masdar Institute of Science and Technology, **United Arab Emirates**

Conversion of Food Waste into Energy (Methane) Using Anaerobic Digestion, *Adekunle Oke*, Robert Gordon University, *Moses Ayololuwa Ejiwale*, Osun State Local Government Service Commission, **Scotland, UK**

SESSION 3D
Biofuels from Wastes

Bio Based Polyol from Agricultural Waste, *Chiragkumar Maheshbhai Patel*, V. P. & R. P. T. P. Science College, Affiliated to Sardar Patel University, *Vijaykumar Sinha*, V. P. & R. P. T. P. Science College, Affiliated to Sardar Patel University, **India**

Co-pyrolysis of Agricultural Waste and Biomass for Production of Liquid Fuels and Chemicals, *Christina Dorado*, USDA-ARS, *Charles A. Mullen*, USDA-ARS, *Akwasi A. Boateng*, USDA-ARS, *Mark A. Schaffer*, **USA**

Prospective of Biofuels Production from Animal Wastes, *Muhammad Arshad*, University of Veterinary & Animal Sciences Lahore, **Pakistan**

Recent Trends in Solid Waste Utilization for Biodiesel Production, *Shakinaz El-Sheltawy*, Cairo University, *Eslam Al-Sakkari*, Cairo University, **Egypt**

Modeling and Process Simulation of Biodiesel Production from Soybean Oil Using Cement Kiln Dust as a Heterogeneous Catalyst, *Shakinaz El-Sheltawy*, Cairo University, *Eslam Al-Sakkari*, Cairo University, *Mai Fouad*, Cairo University, **Egypt**

Lignocellulosic Biomass Supply Chain for Bioethanol Production, *Aryama Raychaudhuri*, NIT Trichy, *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), *S. T. Ramesh*, NIT Trichy, **India**

3:55 p.m. - 4:15 p.m.

Break

4:15 p.m. – 6:30 p.m.

Sessions 4

SESSION 4A
Biological Treatment 1

Assessment and Comparison of the Leaching Behaviour of Two Types of Compost Materials from Aerobic/Anaerobic Biodegradation Processes, *Francesco Lombardi*, University of Rome "tor Vergata", *Renato Gavasci*, University of Rome "tor Vergata", *Piero Sirini*, University of Florence, *M.C. Di Lonardo*, *S. Pantini*, *I. Verginelli*, *G. Costa*, **Italy**

Partial Flow Digestion in Municipal Biowaste Management, *Aino Kainulainen*, Helsinki Region Environmental Services Authority, *Christoph Gareis*, Helsinki Region Environmental Services Authority, *Petri Kouvo*, Helsinki Region Environmental Services Authority, **Finland**

A Potential Utilization of Muncial Solid Waste (MSW) through Vermicomposting, *Ornuma Taeporamaysamai*, Chulalongkorn University, *Chavalit Ratanatamskul*, Chulalongkorn University, **Thailand**

Assessment of Unprocessed Food and Yard Waste Composting at Universidad Industrial de Santander, *Colombia*, *Ricardo Oviedo-Ocaña*, Universidad Industrial de Santander, *Isabel Dominguez*, Universidad Industrial de Santander, *C.F. Pachón*, *A. Forero*, **Colombia**

Biogas Production from Lignocellulose-rich Waste Fractions, *Ilona Sarvari Horvath*, University of Borås, *Maryam Mohseni Kabir*, University of Borås, *Karthik Rajendran*, University of Borås, *Mohammad Taherzadeh*, **Sweden**

SESSION 4B

Industrial Wastes

Microwave Activation of Electric Arc Furnace (EAF) Slag for Strengthening Calcium Extraction with Ammonium Chloride Solution, *Zhibo Tong*, Wuhan University of Science and Technology, *Guojun Ma*, Wuhan University of Science and Technology, *Xiang Zhang*, Wuhan University of Science and Technology, **China**

Study on the Utilization of Red Mud, *Yihe Zhang*, China University of Geosciences, Beijing, *Xinke Wang*, *Fangshan Zhou*, **China**

Application of Industrial Solid Waste in Building 3D Printing Materials, *Xiqiang Lin*, Technology Center, China State Construction Co. Ltd., **China**

Research on the Particle Size Distribution Fractal Dimension of Ultra Fine Phosphorus Slag Powder, *Guoyou Li*, Technology Center, China State Construction Co. Ltd., **China**

Removal of Cr (VI) from Water Using GO/PVA as Adsorbent, *Devendra Kumar Singh*, Indian Institute of Technology (BHU), *Vijay Kumar*, Indian Institute of Technology (BHU), *Hadi Hasan Syed*, Indian Institute of Technology (BHU), **India**

Recycling of Kiln Rollers Grind Waste for the Preparation of Nano-size Support Ceramic Membranes, *Mai Roushdy*, British University, *Shereen Kamel Amin*, National Research Centre, *Shakinaz El-Sherbiny*, Cairo University, *H. Abdallah*, *M.F. Abadir*, **Egypt**

SESSION 4C

Utilization of Wastes in Construction 3

Particle Size Reduction of Landfill Glass to be Used as Replacement for Fly Ash in Concrete, *Larry Lehr*, Baylor University, *Mark McComb*, Baylor University, *Graham Ioerger*, Baylor University, **USA**

Effect of Crumb Rubber and Low Density Polyethylene on Flexible Pavements, *Prakash Munnoli*, SDM College of Engineering and Technology, *Anuash Pai*, SDM College of Engineering and Technology, *Manohar Dandin*, *Gouthami K*, *Prajwal Shetty*, **India**

Studies on Preparation of α High-Strength Gypsum BY Autoclaved Semi-Dry Process and Its Products, *Ying Li*, Beijing Building Materials Academy of Sciences Research, **China**

Utilization of Industrial Waste Steel (Blast Furnace Iron Slag) as Building Materials Case Study: PT. Barawaja Makassar, *M. Yahya Siradjuddin*, Hasanuddin University, *Sitti Hijraini Nur*, Hasanuddin University, **Indonesia**

Recycling of Granite Waste from Sawing Operation in Clay Brick for Civil Construction, *Carlos Maurício Fontes Vieira*, State University of the North Fluminense, *Juliana Gazem Rufino de Carvalho*, State University of the North Fluminense, **Brazil**

Use of Waste PVC Pipes in Constructing Bituminous Roads, *Ambika Behl*, CSIR-Central Road Research Institute, *Gajendra Kumar*, CSIR-Central Road Research Institute, *P. K. Jain*, CSIR-Central Road Research Institute, **India**

Characterization of Concrete Containing Finely Ground Waste Cathode Ray Tube Glass, *Paschal Okiroro Iniaghe*, Federal University Otuoke, Bayelsa State Nigeria, *Gilbert Umaye Adie*, University of Ibadan, Oyo State Nigeria, **Nigeria**

SESSION 4D

Construction and Demolition Wastes

Quantification of Construction and Demolition Wastes Produced in Coastal Communities: The Case Study of the State of Paraná, *Generoso De Angelis Neto*, Maringá State University, *Maria Cristina Borba Braga*, Parana Federal University, **Brazil**

Construction and Demolition Waste Management Using Domain Based Fuzzy Goal Programming, *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), *Payel Ghosh*, Adamas University, **India**

SESSION 4E

Policy

Codes for Solid Waste Management for Developing Countries: India and Egypt, *Sadhan Kumar Ghosh*, Jadavpur University, *S. T. El Sheltawy*, Cairo University, *S. A. El Sherbiny*, Cairo University, *M. M. K. Fouad*, **India**

Strategies for Reducing Municipal Solid Waste in Lebanon, Nigeria and India, *Mervat El-Hoz*, University of Balamand, *Adeniyi S. Aremu*, University of Ilorin, *Aryama Roychoudhury*, NIT Trichy, *Olasunkanmi M. Ojowuro*, *Abdulwahab Ugunbiyi*, *Sadhan Kumar Ghosh*, **Lebanon**

Post Earthquake Waste Management Scenario in Nepal, *Himadri Sekhar Haldar*, International Society for Waste Management, Air and Water, *Soumyajit Chatterjee*, International Society for Waste Management, Air and Water, *Biswajit Debnath*, International Society for Waste Management, Air and Water, *Sannidhya Kumar Ghosh*, *Sadhan Kumar Ghosh*, **India**

Effects of 3R Promotion Measures on Citizen Participation in 3R, *Yasuhiro Matsui*, Okayama University, *Vu Chi Mai Tran*, Okayama University, **Japan**

A Review of Reverse Logistics in Sustainability of the Organization, *Debashree De*, Indian Institute of Technology, Kharagpur, *Pradip Kumar Ray*, Indian Institute of Technology, Kharagpur, *Sadhan Kumar Ghosh*, Jadavpur University, Kolkata, **India**

Municipal Solid Waste Management in South Africa: Goal and Perspective, *Aifani Confidence Tahulela*, Cape Peninsula University of Technology, *Harry Ballard*, Cape Peninsula University of Technology, **South Africa**

POSTER SESSION 1

Evaluation Base on Daphnia Magna as an Indicator of Toxicity and Treatment Efficacy of Brewing Wastewater Treatment Plant, *Hoang Nguyen Khanh*, Industrial University of HCMC, *Hoang Phan Thi*, Tan Binh Medical Center, *Nguyen Hong Thien*, *Mai Thanh Nghe*, *Nguyen Ho Thai Son*, *Nguyen Xuan Hoan*, **Viet Nam**

Evaluation Base on Daphnia Magna as an Indicator of Toxicity and Treatment Efficacy of Tapioca Starch Processing Wastewater Treatment Plant, *Hoang Phan Thi*, Tan Binh Medical Center, *Hoan Nguyen Xuan*, HCMC University of Food Industry, **Viet Nam**

Solid Waste Reduction Management with Special Reference to Developing Countries, *Patrick Nwaopani*, University of South Africa, *Munyaradz Mujuru*, University of Limpopo, **South Africa**

Strategic Management of Waste Cycle in Large and Densely Populated Towns – The Case of Naples (Italy), *Paola Olimpia Achard*, University of L'Aquila, *Massimiliano Fabbicino*, University of Naples Federico II, **Italy**

Assessment of Resilience in Municipal Solid Waste Management Companies, *Massimiliano Fabbicino*, University of Naples Federico II, *Patrizia Agnello*, INAIL, *Paolo Bragatto*, INAIL, *Paola Olimpia Achard*, **Italy**

Lignin-Bitumen Composite for Sustainable Road Construction, *Eyram Norgbey*, Hohai University, *Jingyu Huang*, Hohai University, **China**

Medical Waste of Light-Based Scaffold Fabrication Materials and Their Environmental Impacts, *Ozlem Yasar*, New York City College of Technology, **USA**

Techno Commercial Viability of Waste Plastic to Zero Waste (Plastic to Oil) in Developed and Developing Nations, *Kalyan Anne*, Pyrocrat Systems LLP, **India**

Acclimation of Anaerobic Lagoon Sludge to Raw Abattoir Effluent in a 1000L UASB Digester, *Tamara Emms*, Griffith University, *Prasad Kaparaju*, Griffith University, **Australia**

Waste Tablets Characterization Aiming Recycling, *Vinicius Coelho Nóbrega da Motta*, UFES, *Renato Ribeiro Siman*, UFES, *Luciana Harue Yamane*, UFES, **Brazil**

Study of Influential Factors in the Compaction of Municipal Solid Waste in Lysimeters, *Rafael Lourenço Thomaz Favery Favery*, University of Campinas, *Mariana Politti Manzatto*, University of Campinas, *Renata Lima Moretto*, University of Campinas, *Gustavo Henrique Tonelli Dutra de Almeida*, *Miriam Gonçalves Miguel*, *Eglé Novaes Teixeira*, **Brazil**

Generation of Value Added Products from Food Waste through Biphasic Anaerobic Digestion, *Sameena Begum*, CSIR-Indian Institute of Chemical Technology, *Kiran Golluri*, CSIR-Indian Institute of Chemical Technology, *Bharath Gandu*, CSIR-Indian Institute of Chemical Technology, *Kranthi Kuruti*, *Shruthi Ahuja*, *D.K. Ahuja*, *Y.V. Swamy*, **India**

Organic Removal Efficiency of a 1000L UASB Digester Treating Raw Abattoir Effluent, *Tamara Emms*, Griffith University, **Australia**

Wood Construction Solid Waste Can Be Reduced in Home Building, *Philip Araman*,
USDA Forest Service, Southern Research Station, *Daniel Hindman*, Virginia Tech, **USA**

History of US Wood Pallet Disposal, Recovery, Reuse, and Recycling in the Last 20 Years, *Robert Bush*, Virginia Tech, *Philip Araman*, USDA Forest Service, **USA**

Case Study of a Solar Tower/Compost Waste-to-Energy Test Facility, *Kevin Anderson*,
Cal Poly Pomona, *Pedro Perez*, Cal Poly Pomona, *Benjamin Kampen*, Cal Poly Pomona,
Chris McNamara, *Joseph Juarez*, *Suzanne Shihadeh*, *Ali Sharbat*, *Reza Baghaei Lakeh*,
Marayam Shafahi, **USA**

Study on the Carbonation for Utilization of Construction Wastes, *Changsik Choi*,
Institute for Advanced Engineering, *Bum Eui Hong*, Institute for Advanced Engineering,
Sungkyu Lee, Institute for Advanced Engineering, *Cheol Jin Jeong*, **Korea**

Source Apportionment of Odor Emission from MSW and Control, *Ziyang Lou*, Shanghai
Jiao Tong University, *Zhongtao Sun*, Shanghai University of Electric Power, **China**

Waste Management in USA through Case Studies: E-waste Recycling and Waste to Energy Plant, *Sadhan Kumar Ghosh*, Jadavpur University & International Society of
Waste Management, Air and Water (ISWMAW), *Joonheon Lee*, Seoul National
University, *Achi Chibueze Godwin*, University of Ibadan, *Adekunle Oke*, *Reem A. Al-Rawi*, *Mervat El-Hoz*, **India**

An Analysis of Grey Water Recycling Technologies Using AHP, *Biswajit Debnath*,
International Society of Waste Management, Air and Water (ISWMAW), *Aryama Raychaudhuri*, NIT Trichy, *Sadhan Kumar Ghosh*, Jadavpur University, **India**

Beneficial Use of Lightweight Aggregate Sintered from Dredged Material for Green Roof Construction, *Rui Liu*, Kent State University, *Reid Coffman*, Kent State University,
Timothy Ong, Kent State University, **USA**

Surfactant Waste Can It Be Disposed to Anaerobic Bioreactor Landfills?, *Karthik R. Manchala*,
Virginia Tech/Atkins North America Inc., *John Novak*, Virginia Tech, **USA**

Facility Siting: The Case of an Agro-processing Company in Wenchi (Ghana), *Joseph Opoku Kuma*,
Czech University of Life Sciences, **Czech Republic**

Urban Solid Waste Management in Sunyani Municipality (Ghana), *Gabriel Twumasi Ankamah*,
Czech University of Life Sciences, **Czech Republic**

TUESDAY, APRIL 5

8:00 a.m. - 5:30 p.m.
Conference check-in and registration

8:00 a.m. – 8:30 a.m.
Coffee

8:30 a.m. - 10:10 a.m.
Sessions 5

SESSION 5A

Agricultural Wastes

Filtrate Reducer FBR of Drilling Fluid Prepared with Cellulose and Lignin in Biogas Residues, *Fengshan Zhou*, China University of Geosciences, Beijing, *Zhen Yan*, **China**

Effects of Cassava Peels on Biogas Production, *Mohamed Ben Oumarou*, University of Maiduguri, *Mohammed Dauda*, University of Maiduguri, **Nigeria**

A Sustainable Local Energy System Producing Amorphous Silica from Rice Husk and Developing Its Use in Geopolymer Concrete, *Masafumi Tateda*, Toyama Prefectural University, **Japan**

Recycling of Coirpith as Soilless Medium, *Paramananadham Joothi Pillai*, AVC College/Bharadhithasan University, *Ronald Ross P.*, Annamalai University, **India**

Comparative Study of Whey Utilization in India, New Zealand, and Australia - Identifying Untapped Potential and Means of Utilization, *Monami Das*, International Society of Waste Management, Air and Water (ISWMAW), *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), **India**

Exploring Recycled Waste in Enhancing Soil Enzymes Activity and Biomass Production in Arugula and Mustard Greens, *George Antonious*, Kentucky State University, **USA**

SESSION 5B

Contaminated Sites 1

Environmental Aspect and Impact of Contaminated Sites, *Padam Bahadur Mahat*, Clean Facility Management Nepal, **Nepal**

Studies of Adsorption-Desorption Dynamics of Metals on Simulated Soil and Their Potential Beneficiation for Metal Recovery, *Leonard Mgbeahuruike*, Manchester Metropolitan University, *Herman J. Potgieter*, University of Witwatersrand, Johannesburg, *Sanja Potgieter-Vermaak*, Manchester Metropolitan University, *Judith Barrett*, *Lizelle Van Dyke*, **United Kingdom**

Latest Results of the Remediation of a Cr-contaminated Site Using the FerroDECONT Process, *Klaus Philipp Sedlazeck*, Montanuniversität Leoben, *Daniel Höllen*, *Peter Müller*, *Robert Mischitz*, *Roland Pomberger*, **Austria**

Bioremediation of Polycyclic Aromatic Hydrocarbon Contaminated Soil by a Microbial Consortium through Supplementation of Biosurfactant Produced by *Pseudomonas aeruginosa* Strain, *Fisseha Andualem Bezza*, University of Pretoria, *Evans MN Chirwa*, University of Pretoria, **South Africa**

Application of a Coupled Estimation Method Using Flow and Transport Equations to a Real 1,4-dioxane Groundwater Contamination Site with Complex Hydrogeological Structure, *Kazuei Ishii*, Hokkaido University, *Toru Furuichi*, Hokkaido University, *Atsushi Fujiyama*, Hokkaido University, **Japan**

Surfactant Enhanced Push-Pull Method for In-Situ Remediation of Petroleum Contaminated Soil and Groundwater, *George (Bud) Ivey*, Ivey International Inc., **Canada**

SESSION 5C

Medical Wastes

Waste Management Options for Health Care Waste in Kaduna State: A Case Study of Tertiary Health Institutions, *Shuaibu Mohammed*, Shehu Idris College of Health Science Makarfi, *Yusuf Ahmed*, Kaduna Polytechnic, *Badamasi Abdul Gambo*, Kaduna Polytechnic, *Aisha Abdulsalam*, **Nigeria**

Medical Waste of Light-Based Scaffold Fabrication Materials and Their Environmental Impacts, *Ozlem Yasar*, New York City College of Technology, **USA**

Spontaneous Household Medicine Returns in the Brazilian Public Health System: Characterization and Legal Overview about Reverse Logistics, *Andre Pereira*, UFMG, *Raphael Tobias Barros*, UFMG, *Sandra Pereira*, InFaz, **Brazil**

Bio-medical Waste Management in India – A Novel Approach, *Lakshmi Raghupathy*, Teri University, **India**

Quantification of Medical Wastes Produced in Coastal Communities: The Case Study of the State of Paraná, *Generoso De Angelis Neto*, Maringá State University, *Maria Cristina Borba Braga*, Parana Federal University, **Brazil**

SESSION 5D

Innovative Technologies and Concepts 2

Micro Waste Management Model, *Pradip Baishya*, Assam Engineering College, *D.K. Mahanta*, Assam Engineering College, **India**

Massive Sodic Soil Reclamation Using Flue Gas Desulfurization Gypsum in China, *Qun Chen*, Tsinghua University, *Yan Li*, Tsinghua University, *Shujuan Wang*, Tsinghua University, *Yuqun Zhuo*, **China**

Challenges of Urban Solid Waste Management in Developing Countries, *Olufemi Oyedele*, Obafemi Awolowo University, **Nigeria**

Geospatial Technology as a Tool in Municipal Solid Waste Management and Monitoring in Nigeria, *Olaide Monsor Aderaju*, University of Porto, *Guerner Antonio Dias*, University of Porto, *Renato Guimarães*, University of Porto, **Portugal**

Household Solid Waste Management through Rooftop Farming, *Rabindra Kumar Rai*, Kathmandu Metropolitan City Office, **Nepal**

Kinetics of Synthetic Wastewater Oxidation in Supercritical Water, *Sijie Zhang*, Carleton University, *Rui Zhao*, Carleton University, *Jie Liu*, Carleton University, *Junjie Gu*, **Canada**

Supercritical Water Oxidation of Synthetic Wastewater, *Rui Zhao*, Carleton University, *Sijie Zhang*, Carleton University, *Junjie Gu*, Carleton University, *Jie Liu*, **Canada**

Big Data on Campus Waste Audit for Cost-effective Trash Management, *Moe Chowdhury*, Jackson State University, **USA**

Model of Secure Landfill Using Abandoned Mine Pit; Technical and Economic Imperatives in Poor Developing Nations, *Michael Nwachukwu*, Federal University of Technology, *Maureen Nwachukwu*, Federal University of Technology, **Nigeria**

10:10 a.m. – 10:30 a.m.

Break

10:30 a.m. – 12:15 p.m.

Sessions 6

SESSION 6A

Thermal Treatment and Energy Recovery

Towards Sustainable Use of Food Waste: Influence of Urea Addition on the Biogas Potential of Selected Fruit Wastes in Addis Ababa Ethiopia, *Getachew Gebreeyessus*, Haramaya University, *Berhanu Demisse*, Addis Ababa University, **Ethiopia**

Tar Conversion Characteristics During Catalytic Gasification-Reforming of Municipal Solid Waste, *Wei Wu*, Northeastern University, *Xianchao Zhou*, Northeastern University, *Xiangli Nan*, Northeastern University, **China**

Case Study of a Solar Tower/Compost Waste-to-Energy Test Facility, *Kevin Anderson*, Cal Poly Pomona, *Pedro Perez*, Cal Poly Pomona, *Benjamin Kampen*, Cal Poly Pomona, *Chris McNamara*, *Joseph Juarez*, *Suzanne Shihadeh*, *Ali Sharbat*, *Reza Baghaei Lakeh*, *Marayam Shafahi*, **USA**

Adsorption Capacity and Mechanism of Cadmium on Orange Peel-Derived Biochar at Different Pyrolysis Temperatures and Times, *Hai Tran*, Chung Yuan Christian University, *Sheng You*, Chung Yuan Christian University, *Huan Chao*, Chung Yuan Christian University, **Taiwan**

An Investigation on Tar Reduction in Producer Gas in Downdraft Gasifier System, *Shailendra Kumar Shukla*, Indian Institute of Technology (Banaras Hindu University), *Sunil Kumar*, Indian Institute of Technology (Banaras Hindu University), *Kunal Kanoi*, IIT Patna, **India**

Mathematical Correlation for Tungsten-Based Alloy Nanopowder to Determine the Relation between Temperature Time and Weight under Certain Temperatures, *Abdulsalam Alhazza*, Kuwait Institute for Scientific Research, **Kuwait**

SESSION 6B

Electronic Wastes

Electronic Waste Management Practice in Dhaka City, *Mohammad Habibur Rahman*, Bangladesh University of Engineering and Technology (BUET), Dhaka, *Farhana Chowdhury*, Stamford University Bangladesh, Dhaka, **Bangladesh**

Development of an Electrolytic Process for Selective Extraction of Copper Chemically and Biologically Leached from Electronic Waste, *Mynepalli Kameswara/Sridhar*, University of Ibadan, *Taiwo Babatunde/Hammed*, University of Ibadan, *Hana Ifeoluwa/Oyelami*, University of Ibadan, **Nigeria**

Waste Tablets Characterization Aiming Recycling, *Vinicius Coelho Nóbrega da Motta*, UFES, *Renato Ribeiro Siman*, UFES, *Luciana Harue Yamane*, UFES, **Brazil**

Potential Environmental and Health Impact Due to Unceasing Growth of E-waste, Recycling and Future Challenges, *Shamim Ahsan*, Metropolitan State University of Denver, **USA**

Bio-metallurgical Recovery of Gold from Printed Circuit Boards (PCB): A Review, *Biswajit Debnath*, International Society for Waste Management, Air and Water, *Sadhan Kumar Ghosh*, Jadavpur University, **India**

Waste Management in India: E-waste Recycling and Bio-methanation – Case Studies, *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), *Reshma Roychoudhury*, Heritage Institute of Technology, *Sushant B. Wath*, CSIR – NEERI, *Biswajit Debnath*, *Sandhya Jayakumar*, *Ajay Maloo*, **India**

SESSION 6C

Biological Treatment 2

Collection, Transportation, Estimation and Processing of Organic Waste Through Upgraded Composting Process, *Ravande Kishore*, Osmania University, *Beebi Asia Shaik*, Osmania University, *Kishore Ravande*, Osmania University, *Beebi Asia Shaik*, **India**

Environmental Sustainability of the Management of Bio-Waste by Co-Digestion with Sludge in a Life Cycle Perspective, *Francesco Di Maria*, Dipartimento di Ingegneria - Università di Perugia, **Italy**

Novel Up Flow Anaerobic Sludge Blanket Solid-State Reactor for Treatment of the Organic Fraction of Municipal Solid Wastes, *Gabriela Zafra Jiménez*, Tecnológico de Estudios Superiores de Ecatepec, *José Guadalupe Vian Pérez*, Universidad Autónoma Metropolitana Azcapotzalco, *Sergio Esteban Vigueras Carmona*, Tecnológico de Estudios Superiores de Ecatepec, *Alejandra Velasco Pérez*, **México**

Generation of Value Added Products from Food Waste through Biphasic Anaerobic Digestion, *Sameena Begum*, CSIR-Indian Institute of Chemical Technology, *Kiran Golluri*, CSIR-Indian Institute of Chemical Technology, *Bharath Gandu*, CSIR-Indian Institute of Chemical Technology, *Kranthi Kuruti*, *Shruthi Ahuja*, *D.K. Ahuja*, *Y.V. Swamy*, **India**

Acclimation of Anaerobic Lagoon Sludge to Raw Abattoir Effluent in a 1000L UASB Digester, *Tamara Emms*, Griffith University, **Australia**

Organic Removal Efficiency of a 1000L UASB Digester Treating Raw Abattoir Effluent, *Tamara Emms*, Griffith University, **Australia**

Assessment of Compost Quality through X-Ray Fluorescence and Energy Dispersive X-Ray Techniques, *Manohara Badekkanadka*, University of Mysore, *Shiddappa Lagamappa Belagali*, University of Mysore, **India**

Late Addition of Nutrient during Composting: Effect on N Loss, Greenhouse Gas Emission and Compost Stability, *Abebe Nigussie Nigatu*, Wageningen University, *Thomas Kuyper*, Wageningen University, *Andreas de Neergaard*, Copenhagen University, **The Netherlands**

Plasma Gasification Technology for Energy Recovery from Waste, *Rahul Baidya*, Jadavpur University, *Sadhan Kumar Ghosh*, Jadavpur University, **India**

Utilization of Discarded Waste in a Composting Plant for Energy Recovery by Plasma Gasification-A Proposed Model, *Rahul Baidya*, Jadavpur University, *Sadhan Kumar Ghosh*, Jadavpur University, **India**

Effect of Addition of Inoculum on Drum Composting of Food Waste: A Kinetic Study, *M. K. Manu*, Indian Institute of Technology Bombay, *Rakesh Kumar*, National Environmental Engineering Research Institute, *Anurag Garg*, Indian Institute of Technology Bombay, **India**

SESSION 6D

Sludge

Assessment of the Accuracy of the Results Produced by the Use of a Protocol to Quantify Viable Eggs of Ascaris in Sewage Sludge, *Maria Carolina Vieira da Rocha*, Parana Federal University, *Thays Kurek Sehenem*, Parana Federal University, *Maria Cristina Borba Braga*, Parana Federal University, **Brazil**

Identification of Viable Eggs of Ascaris suum in Sewage Sludge by a Biomolecular Technique, *Maria Carolina Vieira da Rocha*, Parana Federal University, *Thays Kurek Sehenem*, Parana Federal University, *Maria Cristina Borba Braga*, Parana Federal University, **Brazil**

Source Apportionment of Odor Emission from MSW and Control, *Ziyang Lou*, Shanghai Jiao Tong University, *Zhongtao Sun*, Shanghai University of Electric Power, **China**

Influence of Sludge and Sludge Bio-Char on the Transfer of Available Heavy Metals in Soil, *Guangwei Yu*, Institute of Urban Environment, Chinese Academy of Sciences, *Yin Wang*, Institute of Urban Environment, Chinese Academy of Sciences, *Xiang Zhang*, Institute of Urban Environment, Chinese Academy of Sciences, *Xiao-da Tang*, *Zhen Yu*, *Jie Li*, *Xing-dong Wang*, *Zhen-Jiao Xing*, *Zhiwei Li*, **China**

Municipal Solid Waste Management in Hangzhou, China, *Jouni Havukainen*, Lappeenranta University of Technology Energy, *Xiaodong Li*, State Key Laboratory of Clean Energy Utilization, Institute for Thermal Power Engineering of Zhejiang University, *Mingxiu Zhan*, State Key Laboratory of Clean Energy Utilization, Institute for Thermal Power Engineering of Zhejiang University, *Mika Horttanainen*, *Yan Jianhua*, **Finland**

Evaluation of Biochar Derived from Fecal Sludge: Nexus Approach Towards Sanitation, Energy and Soil Amendment, *Asgdom Malu*, Jimma University, *Abebe Betene*, Jimma University, *Wakagari Regassa*, Jimma University, *Helmut Kloos*, **Ethiopia**

12:15 p.m. – 1:15 p.m.

Poster Session 2

POSTER SESSION 2

Estimating Construction and Demolition (C&D) Waste Arising in Libya, *Ashraf Ali*, University of Wolverhampton, *Chukwunonye Ezeah*, University of Wolverhampton, *Jamal Khatib*, University of Wolverhampton, **United Kingdom**

Chemical Recycling: Discarded PET Bottles as Raw Material to Produce Flexible PVC, Sandro Donnini Mancini, Unesp, Beatriz Barcellos Mattos, Unesp, Luana Misae Hoshi Pinto, Unesp, Gustavo B. Silva, Antonio Rodolfo Junior, **Brazil**

Environmental Impact Assessment of Municipal Solid Waste Management Systems by Life Cycle Assessment, Michel Xocaira Paes, Unesp, Gerson Araujo de Medeiros, Unesp, Sandro Donnini Mancini, Unesp, **Brazil**

Proposal of Destination and Reusing of Thermal Transfer Ribbon, Camila Honorina Barbosa Nascimento, Senai College of Environmental Technology, Fernando Codelo Nascimento, Senai College of Environmental Technology, Edilene de Cássia Dutra Nunes, Senai College of Environmental Technology, Antônio Donizetti Giuliano, **Brazil**

The Impact of Medical Waste for Human Health and Environment, Vanessa Resende Cruvinel, University of Brasilia- Brazil, Hayssa Moares Pintel Ramos, University of Brasilia, Dayani Galato, University of Brasilia, **Brazil**

Limonene Derived from Waste Tires by Microwave Pyrolysis, Zhanlong Song, Shandong University, **China**

Study of Properties of Rigid PVC Additived with Thermoset Composite Micronized, Eliseu William, College SENAI of Environmental Technology, Gerson Marinucci, IPEN, Eliseu William, College SENAI of Environmental Technology, **Brazil**

Electronics Waste: The Opportunity to Create Sectoral Agreement in Brazil, Marcela Moraes, Universidade Federal do Espirito Santo, Vinícius Coelho Nóbrega, Universidade Federal do Espirito Santo, Renato Ribeiro, Universidade Federal do Espirito Santo, Yamane, L.H, **Brazil**

Utilization of Some Environmental Resource Materials as a Soil Conditioner, Ahmed Ali Abuzkhar, University of Tripoli, Ahmed Isa Tamzini, University of Aljabal Algharbi, **Libya**

A Review of the Existing Waste Oil Management Systems, Viktoriia Kapustina, Lappeenranta University of Technology, Mika Horttanainen, Lappeenranta University of Technology, **Finland**

Reaction Mechanism and Kinetics of the Mercury Solid Waste Pyrolysis: An Isoconversional Approach, Yailen Busto, Technological University of Israel, Edesmin Wilfrido Palacios Paredes, Central University of Ecuador, Filip M. G. Tack, University of Gent, Luis Manuel Peralta, Luis Ernesto Arteaga, Miriam de la Caridad Yera, Liz Mabel Ríos, **Ecuador**

The Effect of Curing Time and Temperature on the Properties of CFB Fly Ash Based Foam Geopolymer, Ningning Shao, China University of Mining & Technology, Beijing, **China**

Environmental Impact Assessment of Mercury Solid Waste Generated by a Chlor-alkali Industry, Edesmin Wilfrido Palacios Paredes, Central University of Ecuador, Yailen Busto, Technological University of Israel, Filip M. G. Tack, University of Gent, Luis Manuel Peralta, Xiomara Cabrera, Miriam de la Caridad Yera, Liz Mabel Ríos, **Ecuador**

Medical Waste Management in Rural and Urban Clinics, France Raphela, Central University of Technology, Free State, **South Africa**

Is the Use of Filled PET Bottles as Building Blocks a Safe Practice?, *Carmen Leonor Barajas*, Universidad Francisco de Paula Santander, *Luis Emilio Vera*, Universidad Francisco de Paula Santander, **Colombia**

Design and Construction of Reactors for Anaerobic Degradation of Plastic Films Simulating a Landfill, *Daniel Alejandro Valdés Acata*, Metropolitan Autonomous University. Corporation Azcapotzalco, *Alethia Vázquez Morillas*, Metropolitan Autonomous University. Corporation Azcapotzalco, *Margarita Beltrán Villavicencio*, Metropolitan Autonomous University. Corporation Azcapotzalco, *Abad Aldana Laura Gisela*, *Sánchez Martínez Juana*, *Velasco Pérez Maribel*, *Cano Blanco Mauricio*, **Mexico**

Study on the Utilization of Red Mud, *Yihe Zhang*, China University of Geosciences, Beijing, *Xinke Wang*, *Fangshan Zhou*, **China**

Environmental Aspect and Impact, *Padam Bahadur Mahat*, Clean Facility Management Nepal, **Nepal**

Studies of Adsorption-Desorption Dynamics of Metals on Simulated Soil and Their Potential Beneficiation for Metal Recovery, *Leonard Mgbeahuruike*, Manchester Metropolitan University, *Herman J. Potgieter*, University of Witwatersrand, Johannesburg, *Sanja Potgieter-Vermaak*, Manchester Metropolitan University, *Judith Barrett*, *Lizelle Van Dyke*, **United Kingdom**

Particle Size Reduction of Landfill Glass to be Used as Replacement for Fly Ash in Concrete, *Larry Lehr*, Baylor University, *Mark McComb*, Baylor University, *Graham Ioerger*, Baylor University, **USA**

One-step Preparation Process of Foam Glass-Ceramic from CRT Panel Glass, *Li Xin*, Shanghai Second Polytechnic University, *Yuan Hao*, Shanghai Second Polytechnic University, *Guan Jie*, Shanghai Second Polytechnic University, **China**

Comparative Study of Whey Utilization in India, New Zealand, and Australia - Identifying Untapped Potential and Means of Utilization, *Monami Das*, International Society of Waste Management, Air and Water (ISWMAW), *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), **India**

Codes for Solid Waste Management for Developing Countries: India and Egypt, *Sadhan Kumar Ghosh*, Jadavpur University, *S. T. El Sheltawy*, Cairo University, *S. A. El Sherbiny*, Cairo University, *M. M. K. Fouad*, **India**

Strategies for Reducing Municipal Solid Waste in Lebanon, Nigeria and India, *Mervat El-Hoz*, University of Balamand, *Adeniyi S. Aremu*, University of Ilorin, *Aryama Roychoudhury*, NIT Trichy, *Olasunkanmi M. Ojowuro*, *Abdulwahab Ugunbiyi*, *Sadhan Kumar Ghosh*, **Lebanon**

Post Earthquake Waste Management Scenario in Nepal, *Himadri Sekhar Haldar*, International Society for Waste Management, Air and Water, *Soumyajit Chatterjee*, International Society for Waste Management, Air and Water, *Biswajit Debnath*, International Society for Waste Management, Air and Water, *Sannidhya Kumar Ghosh*, *Sadhan Kumar Ghosh*, **India**

Construction and Demolition Waste Management Using Domain Based Fuzzy Goal Programming, *Sadhan Kumar Ghosh*, Jadavpur University & International Society of Waste Management, Air and Water (ISWMAW), *Payel Ghosh*, Adamas University, **India**

Preparation on Glass-Ceramics of Red Mud and Andradite by Sintering Method, *Yingmo Hu*, China University of Geosciences, *Yuhang Liu*, *Hongwei Huang*, *Fengshan Zhou*, *Yihe Zhang*, **China**

Novel Fertilizer Based on Solid Waste, *Pan Hu*, China University of Geosciences, *Yihe Zhang*, *Fengshan Zhou*, *Xinke Wang*, **China**

Effects of 3R Promotion Measures on Citizen Participation in 3R, *Yasuhiro Matsui*, Okayama University, *Vu Chi Mai Tran*, Okayama University, **Japan**

Construction and Demolition Waste Management (Tehran Case Study), *Babak Rouhi Broujeni*, Islamic Azad University, *Ghassem Ali Omrani*, *Reza Naghavi*, *Fatemeh Azadi*, **Iran**

Coal Production Chain Rating, *Marco Gaya de Figueiredo*, Universidade do Estado do Rio de Janeiro, *Luana Baia Ventura*, Universidade do Estado do Rio de Janeiro, *Wallace Souza*, Universidade do Estado do Rio de Janeiro, **Brasil**

1:15 p.m. – 2:15 p.m.

Luncheon

2:15 p.m. – 4:15 p.m.

Special Sessions and Workshops

SESSION 7A

Solid Waste Subcommittee of Chinese Ceramic Society

Characteristics of Ash and Slag from Coal Gangue Combustion in the Circulation Fluidized Bed Boiler at Different Conditions, *Zhibin Ma*, Shanxi University, *K. K. Chang*, *K. Z. Yan*, *Y. Y Guo*, *F. Q. Cheng*, **China**

The Mechanical Properties and Hydration Mechanism of High Strength and High Volume CFB Fly Ash Cement, *Dongmin Wang*, China University of Mining & Technology, *Da-peng Zheng*, *Duan-le Li*, *Cai-fu Ren*, *Jin-ge Yin*, **China**

The Adsorption Mechanisms of Pb by Wood Chars, *Changfu You*, Tsinghua University, *Qun Chen*, **China**

Synthesis and Utilization of Ca/Mg/Al/Fe Layered Double Hydroxides Using Steelmaking Slag as Raw Material, *Huiquan Li*, Institute of Process Engineering, Chinese Academy of Sciences, *C. Y. Wang*, *Y. Chen*, *X. R. Wang*, **China**

Hydrothermal Synthesis of Zeolite 13x from the Desilication Solution of High Alumina Fly Ash and Calcined Coal Gangue, *Xingrui Wang*, Institute of Process Engineering, Chinese Academy of Sciences, *H. Q. Li*, *Z. L. Yan*, *C. Y. Wang*, **China**

SESSION 7B

Professional Education Course (details will be posted in February)

SESSION 7C

Contaminated Sites 2

Polycyclic Aromatic Hydrocarbons (PAHs) Biodegradation Enhancement Potential of the Lipopeptidal Biosurfactant Produced by *Paenibacillus dendritiformis* CN5 Strain, *Fisseha Andualem Bezza*, University of Pretoria, *Evans MN Chirwa*, University of Pretoria, **South Africa**

Application of Biosurfactant Produced by *Ochrobactrum intermedium* CN3 for Enhancing Petroleum Sludge Bioremediation, *Fisseha Andualem Bezza*, University of Pretoria, *Mervyn Beukes*, University of Pretoria, *Evans MN Chirwa*, University of Pretoria, **South Africa**

Asbestos Landfills: Italian Data and Waste Management at Superfund, *Sergio Malinconico*, INAIL-Italian Workers' Compensation Authority, *Federica Paglietti*, INAIL-Italian Workers' Compensation Authority, *Beatrice Conestabile Della Staffa*, INAIL-Italian Workers' Compensation Authority, *Sergio Bellagamba*, *Paolo De Simone*, **Italy**

SESSION 7D

Innovative Technologies and Concepts 3

Cellulose Degradation Associated and Electricity Production by Mixed Cultures in Microbial Fuel Cell, *Zainab Ziad Ismail*, Baghdad University, *Ali Jwied Jaeel*, Wasit University, **Iraq**

Production and Performance Evaluation of Pedal Operated Pressed Briquettes, *Mohamed Ben Oumarou*, University of Maiduguri, *Lateef O. Onundi*, University of Maiduguri, **Nigeria**

Effect of Sulphur Concentration on Methane Biofiltration Technology, *Sonya Barzgar*, University of Calgary, *J. Patrick Hettiaratchi*, University of Calgary, **Canada**

Strategies for Enhancement of Sustainable Municipal Solid Waste Management in India, *Ketan Shah*, GUDC, *Dhawani Shah*, Silver Oak College of Engineering and Technology, **India**

Strategies for Enhancement of Sustainable Municipal Solid Waste Management in India, *Ketan Shah*, GUDC, *Dhawani Shah*, Silver Oak College of Engineering and Technology, **India**

4:15 p.m. – 4:35 p.m.

Break

6:30 p.m. – 7:30 p.m.

Closing Reception

WEDNESDAY APRIL 6

8:00 a.m. – 9:00 a.m.

Conference check-in and registration

8:00 a.m. – 9:00 a.m.

Coffee

9:00a.m. – 2:00 p.m.

Technical Field Trips (choose 1)

Details will be posted in early February