



**5th International Conference on Transportation & 1st African - American International
Conference on Sustainable Infrastructure & Smart Innovations**

October 29 – 31, 2019

"Sustainable Infrastructure and Smart Innovations for Urban Development"



**At Morgan State University,
The Center for the Built Environment & Infrastructure Studies (CBEIS),
Baltimore, MD, USA**

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ABOUT THE AFRICAN - AMERICAN TRANSPORTATION PROFESSIONAL NETWORKING GROUP & INTERNATIONAL CONFERENCE ON TRANSPORTATION

The “**African-American Transportation Professional Networking Group**” is made up of transport professionals from the academic, business, and government sector with a commitment to proffer solutions to critical challenges facing transportation.

Mission of the group

The goal of the group is to organise transportation professional conferences such as “**International Conference on Transportation**” from country to country within Africa and America biennially to provide a platform for experts and scholars to exchange ideas with each other, and also share the development and products in the field of transportation. It is apparent from the above that there is a generally perceived link between the state of development of a country and the extent of technology usage and availability of technical information in that country. It follows, therefore, that *technology transfer*, both within and outside a country to boost technology usage, is necessary for that country’s development. In other words, *the extent and efficiency of a country’s technology transfer system could reveal the extent of that country’s development*.

Background

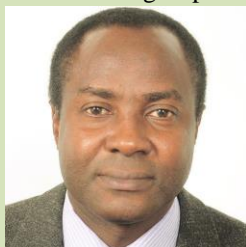
Globalization and rapidly evolving technologies are driving profound changes in the role of transportation in our society. Through research studies, publications on various disciplines, we continue to provide authoritative and non-partisan policy advice to decision makers in government, academia and the private sector. Although research in transportation is integral to our societies, there are persistent challenges to the vitality of this sector. Funding for scientific research is increasingly uncertain and, in my view, this calls for trans-disciplinary and trans-sector research collaboration in order to ensure that fundamental advances are made in the areas of focus for continuity and sustainability of transportation.

Despite the challenges facing the transport sector, there are many promising avenues to strengthen this sector. New models of cooperation among academia, industry and government can better enable transport experts to meet the formidable challenges ahead. The world is increasingly faced with complex problems that require the adoption of innovative researches and approaches that will bring about lasting and sustainable solutions. For instance, the challenges facing communities from climate change, to providing adequate transport for the world’s growing population are immense, urgent and intimately connected. With proper coordination, transport experts are poised to help solve problems at this level of complexity and importance.

Redesigning dated organizational structures and cultural attitudes within and across the sectors could dramatically accelerate the development of new approaches. I believe we now have the critical mass in academia, government and the private sector to achieve this. To attain global stature and tackle critical societal challenges in transport sector will depend on how we nurture the research and publication ecosystem.

Membership

Everyone in any way connected with transportation is invited. This professional networking group will be of interest to funding agencies, national government authorities, parastatals, policy and decision makers, academics, researchers, students and professionals active in the planning, construction, maintenance, logistics, operation and safety of passenger and freight transport, road traffic, rail, maritime and aviation. End-users will also find the group of interest.



International Coordinator-African/American Transportation Professional Networking Group (AFTRaP)

INTERNATIONAL STEERING COMMITTEE

International Coordinator:

Dr. A. Simon Oladele, *PhD, Pr.Eng (ERB), M.BIE, M.ASCE, A.M.SAICE, M.NSE, M.NIHTE, R.Eng (COREN)*
For African - American Transportation Professional Networking Group, ICTA Secretariat

Planning/ Organizing Committee

Dr. Simon Oladele, Ph.D., Pr.Eng., M.ASCE, C.Eng., (International Coordinator) & Professor (IUR Exchange Program), Department of Civil Engineering, Morgan State University, MD, USA

Prof. Glenn Robinson, MA. MM., Research Associate Professor, Institute of Urban Research, Morgan State University, MD, USA

Dr. Oludare Owolabi, D.Sc., P.E., MCIHT, REG Engr, COREN; Director, Center for Advanced Transportation and Infrastructure Engineering, Department of Civil Engineering, MSU

Dr. Celeste Chavis, Ph.D, P.E., Associate Professor, Department of Transportation & Urban Infrastructure Studies, Morgan State University, MD, USA

Dr. Robert Nettey, MD. Executive Director, Peace Corps-Prep Director/Coordinator, Centre for Global Studies and International Education, Morgan State University

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Ms. Joi Turner-Aybar, Assistant to the Dean, Clarence M. Mitchell School of Engineering, MSU

Ms. Venessa Branch, Administrative Assistant, Department of Civil Engineering, MSU

Ms. Evelyn Smith, Administrative Assistant, Institute for Urban Research, MSU

Ms. Alice Williams, Administrative Assistant, Transportation and Urban Infrastructure Studies, MSU

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Dr. Clement Anyadike, Ph.D, Research Associate Professor, Institute of Urban Research, MSU, USA

Eng. Alfred Logie, International Program Engineer, Federal Highway Administration, USA

Dr. Cesar Queiroz, Ph.D, Adjunct Professor/ Highway Consultant, The World Bank, USA

Prof. Nii Attah-Okine, Ph.D, Professor of Transportation, Civil Engineering Dept., University of Delaware

Prof. Samuel Labi, Ph.D, Professor of Transportation, Civil Engineering Dept., Purdue University, USA

Prof. Steven Jones, Ph.D, Professor of Transportation, Civil Engineering Dept., University of Alabama, USA

Prof. Owusu Ababio, Ph.D, Professor of Transportation, Civil Engineering Dept., University of Wisconsin,

Dr. Charles Adams, PhD, FGhIE, Kwame Nkrumah University of Science & Technology Kumasi, Ghana

Dr. Jerome Egwurube, Ph.D, Department of Civil Engineering, CQ University, Queensland, Australia

Prof. P. Paige-Green, PhD Extraordinary Professor, Tshwane University of Technology, South Africa

Prof. A.S. Adedimila, PhD Professor of Traffic & Highway Engineering, Nigeria

Prof. Theophil Rwebangira, PhD Professor of Transportation, Tanzania

Prof. Kweku Bentil, PhD Professor of Civil Engineering, USA

Prof. Joe Zietsman, PhD Division Head, Texas A & M transportation Institute, USA

Dr. B. Nkwae, PhD, Head of Civil Engineering Dept., University of Botswana, Botswana

Dr. Ignasio Ngoma, PhD Director, Malawi T2 Centre, University of Malawi, Malawi

Dr. A. Araya, PhD, Managing Director, ALERT Engineering Plc, Ethiopia

Dr. Sameh Zaghloul PhD Director, ITAMs Consultants, Egypt

Eng. Mike Pinard Managing Director, InfraAfrica, Botswana

Eng. Hagai K. Bishanga, Secretary, Association of Road Construction, Tanzania

Eng. Joe Odhiambo Managing Director, CSIR, South Africa

Robin Workman Senior International Consultant, TRL, UK

Eng. (Mrs) Sophia Tekie, Manager, Road Management System, Roads Authority, Namibia

Advisors

Dr. Raymond Winbush, Ph.D, Research Professor & Director, Institute of Urban Research, MSU

Dr. Jiang Li, Ph.D., Professor & Chair, Department of Civil Engineering, MSU

Dr. Anthony Saka, Ph.D., Professor & Chair, Department of Transportation & Urban Infrastructure Studies,

Dr. Yacob Astatke, D.Eng. Assistant VP for International Affairs, Morgan State University, USA

CONFERENCE TOPICS

Theme: "Sustainable Infrastructure and Smart Innovations for Urban Development"

The annual conference is to provide a platform for professionals, researchers, experts, engineers and scholars to exchange ideas on smart and sustainable infrastructure; share developments and publish papers in the field of transportation.

1. **Smart infrastructures and Intelligent Transportation Systems**
2. **Smart Transportation and Infrastructure Preservation and Rehabilitation Strategies**
3. **Pavement Management Systems; Data monitoring and performance assessment;**
4. **Life-cycle cost analysis and life-cycle assessment; PPP/ funding mechanism.**
5. **Road Safety and risk management;**
6. **Innovative design methods and materials;**
7. **Transformational Technologies and Innovations**
8. **Intelligent Transportation Systems and Management**
9. **Pavement Performance and Asset Management**
10. **Climate Change: Energy, Sustainability and Security**

All accepted peer reviewed papers are being published in the ICTA2019 Conference Proceedings with **ISBN: 978-99968-0-872-2**

WORKSHOP/ PANEL DISCUSSION

This will be conducted in the following area:

Smart City/ Smart Transport Infrastructure Workshop

STAKEHOLDERS

Institute for Urban Research, Morgan State University (MSU)

African Transportation Professional Networking Group (AfTraP), ICTA Secretariat, Africa

Dept. of Civil Engineering, Center for Advanced Transportation and Infrastructure Eng., MSU

Department of Transportation & Urban Infrastructure Studies, Morgan State University

Centre for Global Studies and International Education, Morgan State University

ACKNOWLEDGEMENT OF SPONSORS

1. Morgan State University, USA
2. African Transportation Professional Networking Group, Africa Secretariat
3. The Whiting-Turner Contracting Co, USA
4. LAFARGE, Baltimore, MD, USA
5. JLN Construction Services, USA
6. Institute for Urban Research, Morgan State University (MSU)

**5TH INTERNATIONAL CONFERENCE ON TRANSPORTATION & 1ST AFRICAN -
AMERICAN INTERNATIONAL CONFERENCE ON SUSTAINABLE
INFRASTRUCTURE & SMART INNOVATIONS**

**Morgan State University,
The Center for the Built Environment & Infrastructure Studies (CBEIS),
Baltimore, MD, USA**

October 29 – 31, 2019

Theme: "Sustainable Infrastructure and Smart Innovations for Urban Development"

Day 1: Tuesday, October 29, 2019

5:00pm Registration of Participants

5:30 – 7:00pm Welcome Reception – Morgan State University CBEIS Atrium

Time	Description	Speaker/Title	Organisation & Country
5:30-5:35	Meet and Greet Session: ICTA Coordinator	Dr. Simon Oladele Conference Co-Chair & ICTA International Coordinator	Morgan State University, USA (for AfTRaP Secretariat, Africa)
5:35-5:45	Co-host Remarks 1	Prof. Glenn Robinson Research Associate Professor	Institute of Urban Research, MSU, USA
5:45-5:55	Co-host Remarks 2	Dr. Li Jiang Professor & Interim Chair	Department of Civil Engineering, Morgan State University, USA
5:55-6:10	International Office Welcome Address	Dr. Yacob Astatke Assistant VP for International Affairs	Morgan State University, USA
6:10-6:30	Reception Speech	Dr. Lesia Crumpton-Young Provost & Senior Vice President (Academic Affairs)	Morgan State University, USA
6:30-6:50	Plenary Presentation 1: Promoting smart innovation and sustainability through advancing research commercialization	Dr. Willie E. May Vice President for Research and Economic Development	Morgan State University, USA
6:50-7:00	Closing Remarks	Dr. Oludare Owolabi Director - Center for Advanced Transportation & Infrastructure Engineering	Institute of Urban Research, MSU, USA
End of Day 1			



Keynote Speakers	Dr. David Wilson	Dr. Lesia Crumpton-Young	Dr. Willie E. May	Pete K. Rahn
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Day 2: Wednesday, October 30, 2019

Official Opening Ceremony – Morgan State University CBEIS Jury

8:00am Registration of Conference Participants

Time	Description	Speaker/Title	Organisation & Country
8:30-8:35	Opening Session: Conference Co-Chair	Dr. Oludare Owolabi Director - Center for Advanced Transportation & Infrastructure Engineering	Department of Civil Engineering, Morgan State University, USA
8:35-8:45	Introductory Remarks	Eng. Alfred Logie International Transportation Specialist	Office of International Programs, Federal Highway Administration, USA
8:45-8:55	Brief Remarks	Dean Craig Scott Professor & Interim Dean School of Engineering	Morgan State University, USA
8:55-9:10	Welcome Speech	President David Wilson Morgan State University	Morgan State University, USA
9:10-9:30	Keynote Speech & Official Opening	Pete K. Rahn Transportation Secretary of the Maryland Department of Transportation	Maryland Department of Transportation (MDOT) Maryland, USA
9:30-9:45	Research Brief: Overview of International Research Collaboration for Urban Development	Dr. Raymond Winbush , Research Professor & Director	Institute of Urban Research, MSU, USA
9:45-10:10	Plenary Presentation 2: Sustainable and Smart Transportation Innovations for better Interconnectivity	Dr. Anthony Saka Professor & Chair	Department of Transportation & Urban Infrastructure Studies, MSU, USA
10:10-10:20	Presentation of Token of Appreciation	Dr. Mary Anne A. Akers Professor & Dean	School of Architecture & Planning, Morgan State University, USA
10:20-10:30	Vote of Thanks & Announcement	Dr. Simon Oladele Conference Co-Chair & ICTA International Coordinator	Morgan State University USA (for AfTRaP Secretariat, Africa)
10:30-11:00	Group Photo & Coffee Break – Atrium		
11:00-1:00	Plenary Session 1 – Jury rooms 1-4: Smart Infrastructure and Intelligent Systems Chair: Henry B. Prenger , P.E., FACI, Technical Service Engineer, LAFARGE, Baltimore, MD, USA		
(20 minutes for each presentation and 10 minutes for discussions)	Decision Aid for Rehabilitation Techniques and Crack Assessment in Underwater Concrete Bridge Piles - Steve Efe, Mehdi Shokouhian and Mahmood Yahyai - Department of Civil Engineering, Morgan State University, USA A Machine Learning Distracted Driving Prediction Model - Samira Ahangari; Dr. Mansoureh Jeihani and Dr. Abdollah Dehzangi; Department of Transportation and Infrastructure Studies, Morgan State University, USA . Investigating the Performance of Automated Demand Responsive Feeder Bus Transit in Urban Areas: An Agent-Based Spatial Simulation Modeling Approach - Amirreza Nickkar and Dr Young-Jae Lee, Department of Transportation and Urban Infrastructure Studies, Morgan State University, USA Feasibility of Using Bike Lanes in Conjunction with Sidewalks for Ground Drone Applications in Last Mile Delivery for Dense Urban Areas - Neda Bazyar Shourabi, Kofi Nyarko, Department of Computer and Electrical Engineering and Mansoureh Jeihani, Department of Transportation and Urban Infrastructure Studies, Morgan State University, USA		
1:00-2:00	Lunch Break - CBEIS 235		
2:00-3:00	WORKSHOP ON SMART INNOVATION - Atrium Bike Lanes in Conjunction with Sidewalks for Ground Drone Applications in Last-Mile Delivery for Dense Urban Areas - Neda Bazyar Shourabi, Department of Computer and Electrical Engineering; Kofi Nyarko, Department of Computer and Electrical Engineering; Mansoureh Jeihani, Department of Transportation and Urban Infrastructure Studies, Morgan State University, USA		

3:00-4:00	EXHIBITION & POSTER COMPETITION - Atrium <i>1. Abiotic Stress Response-associated Proteins in a Salt Tolerant Strain of the Cyanobacterium Fremyella Diplosiphon, a Potential Biofuel Agent - Behnam Tabatabai and Viji Sither, Department of Biology, Morgan State University, USA; and all graduate students poster competition</i>		
4:00-5:30	Plenary Session 2: Jury rooms 1-4: Smart Transportation Infrastructure for Smart Cities Chair: Dr. Celeste Chavis, Ph.D, Associate Professor, Department of Transportation & Urban Infrastructure Studies, Morgan State University, USA		
(20 minutes for each presentation and 10 minutes for discussions)	Smart Innovation and Sustainable Transportation Technology Transfer Framework for Improved Professional Practices and Interconnectivity in Africa – Dr. Simon Oladele, Department of Civil Engineering, Morgan State University, USA. Multi-Objective Signal Optimization for Multi-Modal Corridor with High Freight Volume - Ijeoma Walter - Morgan State University, Department of Civil Engineering, USA Developing Transport Infrastructure Management System (TIMS) – Collaboration Case Study of Tanzania- Glenn Robinson, Institute for Urban Research, Morgan State University, USA Porterage Operation in Rural Markets: A Pivotal Link and Transformation in Agricultural Commodities Transportation System in South-western Nigeria; Torimiro, D. O.; Alabi, D. L. & Olawore, T.; Obafemi Awolowo University, Department of Agricultural Extension & Rural Development, Ile-Ife, Nigeria Development of Smart Road Transportation Sustainability Plan for Namibia - Dia-Maria Shivute and Palesa Hekandjo, Roads Authority of Namibia		
6:30 – 8:30	CONFERENCE DINNER Venue: Calvin and Tina Tyler Ballroom C, Morgan State University Student Centre		
	Agenda	Speaker	Organization
6:30-6:45	Arrival and Networking	All	Participants
6:45-6:55	Chairman's Address	Dr. Robert Nettey Executive Director	Division of International Office
6:55-7:40	Dinner is Served	All	Participants
7:40-8:00	Dinner Speech	Dr. Willie E. May Vice President for Research and Economic Development	Morgan State University, USA
8:00-8:20	Presentation of Awards	Dr. Solomon Alao Assistant Vice President for Outcome Assessment and Program Review	Morgan State University, USA
8:20-8:30	Closing Remarks	Dr. Bisi Oladipupo Vice President for Technology & CIO, Information Technology	Morgan State University, USA
KEYNOTE SPEAKERS/ CONFERENCE ADVISORS			

Day 3: Thursday, October 31, 2019

08:30-10:00	<p>Concurrent Session 4: Jury rooms 1-2: Pavement Management Systems; Data monitoring and performance assessment Chair: Dr. Yi Liu, Assistant Professor, Department of Civil Engineering, Morgan State University, USA</p>	<p>Concurrent Session 5: Jury rooms 3-4: Road Safety and risk management Chair: Dr. Clement Anyadike, Research Assistant Professor, Institute of Urban Research, Morgan State University, USA</p>
(20 minutes for each presentation and 10 minutes for discussions)	<p><i>Flexural Performance of RC Beams Strengthened by Carbon Fiber Reinforced Polymer (CFRP) Laminates - Steve Efe and Jacob Oluwoye - Department of Civil Engineering, Morgan State University, Baltimore Maryland, USA - Alabama A and M university, Huntsville, Alabama, USA</i></p> <p><i>Treatment of Distressed Urban Roads Using Ultrathin White-topping: A Case Study of Daman City India</i> Pradiptkumar J Gundaliya, L. D. College of Engineering, Ahmedabad, Gujarat, India; Hiteshkumar A Patel, Highway Designer, Fliegen Wissen Consulting LLP, ME Civil (Transportation) Engineering; Ahmedabad, Gujarat, India</p> <p><i>Assessment of Vulnerability of Road Networks against Targeted Attacks: Case Study of Houston Road Network during Hurricane Harvey;</i> Bahrulla ABDULLA; Bjorn BIRGISSON; Zachry Department of Civil Engineering, Texas A&M University, USA</p> <p><i>Using GIS to Develop Sustainable Road Management systems in Africa</i> Jessica Torres, Assistante marketing et commercial Immervis SAS, La Valsière - 44 rue Antoine Jérôme Balard, Grabels, France</p>	<p><i>Cyber Threats in Rail Transportation – Oludare Owolabi, Morgan State University; Ronald Keele, CH2M Hill; USA.</i></p> <p><i>Road crashes in Namibia: Challenges and opportunities for sustainable development - Steven Jones; Irina Riehle; Kofi Adanu, University of Alabama, USA; and Kenneth Odera, Namibia University of Science and Technology, Windhoek, Namibia</i></p> <p><i>P-TECH School in Transportation and Supply Chain Management Program at Baltimore City Community College - Yohannes Weldegiorgis and Quintin Davis, Baltimore City Community College, Department of Business and Technology, USA.</i></p> <p><i>Exploring Health and Safety Competency Attributes in the Delivery of Construction Projects: A study in South Africa - Innocent Musonda; Chioma Sylvia Okoro, University of Johannesburg, South Africa</i></p> <p><i>Transport Crashes Assessment through Knowledge and Attitude Towards Substance Use Disorder – Adewumi Oladele – Volunteer, Public Health Department, Morgan State University, USA</i></p>
10:00-10:30	Coffee Break - Atrium	
10:30-1:00	<p>Concurrent Session 6: Jury rooms 1-2: Innovative design methods and materials Chair: Dr. Mehdi Shokouhian, Assistant Professor, Department of Civil Engineering, Morgan State University, USA</p>	<p>Concurrent Session 7: Jury rooms 3-4: Climate Change, Energy, Sustainability and Security Chair: Dr. James G. Hunter Jr., Associate Professor, Morgan State University, Department of Civil Engineering, USA</p>
(20 minutes for each presentation and 10 minutes for discussions)	<p><i>Design, Fabricate, and Test a Lab-scale Hybrid Mobile Cooling System for Oyster Industry - Yulai Yang; Xuejun Qian; Marc J Louise Caballes & Seong Lee, Morgan State University, Industrial and Systems Engineering Department, USA.</i></p> <p><i>Comparative Study of a Sustainable Solar Heating System in a Green Infrastructural Building - Marc J Louise Orque Caballes; Samuel Oludayo Alamu; Xuejun Qian; Seong W. Lee and Ghassan A. Hammudah, Morgan State University, Department of Industrial and Systems Engineering, USA,</i></p> <p><i>Effect of Directional Flow on Road Vertical Profile Anomalous Capacity Loss - Fatukasi, S. Tope, Ben-Edigbe, J., Transportation and Road Safety Research Group, Department of Civil Engineering, University of KwaZulu-Natal, Durban, South Africa;</i></p> <p><i>Effect of Night Rainfall on Braking Distance of Dark Roadways - Makinde, O.O and Ben-Edigbe, J.E</i> Transportation Research Group, Department of Civil Engineering, University of KwaZulu-Natal, Durban, South Africa</p>	<p><i>Evaluation and Analysis of the Sustainable Waste-to-Energy System Performance for the Poultry Farm - Xuejun Qian; Yulai Yang; Raghulkumar Chandrasekaran; Seong Lee, Morgan State University, Industrial and Systems Engineering Department, USA.</i></p> <p><i>Urban Snow Removal - Just in Time Mathematical Model and Algorithm - Zeinab Bandpey, Ahlam Tannouri and Isabelle Kemajou Brown, Morgan State University, Department of computer science and Mathematics, USA</i></p> <p><i>Efficient Biomass Conversion Process to Sustainable Energy - Oludayo Samuel Alamu; Marc J Louise Caballes; Xuejun Qian, Morgan State University, Department of Industrial and Systems Engineering, and James Hunter Jr. Morgan State University, Department of Civil Engineering, USA</i></p> <p><i>Characterization of Vulnerability of Road Networks against Fluvial Flooding using Co-location Interdependency with Flood Control Infrastructure - Bahrulla ABDULLA; Bjorn BIRGISSON Zachry, Department of Civil Engineering, Texas A&M University, Texas, USA</i></p>

	<p><i>Trip Generation of Adult Workers in Ghana</i> - Marian Owiredua Ankomah and Sivaramakrishnan Srinivasan, Department of Civil & Coastal Engineering, University of Florida, USA.</p> <p><i>Monitoring Performance of Laterite Base Trial Section in Ethiopia</i> – Dr. Alemgena A. Araya, ALERT Engineering Plc, Addis Ababa, Ethiopia.</p>	<p><i>Solid Waste Transportation in Lagos Metropolis, Nigeria</i> - Oluwaseyi Joseph Afolabi; Oyesiku O.K and Solanke M.O., Department of Management of Technology, Bells University of Technology, Ota, Department of Transport Management, Olabisi Onabanjo University, Ago-Iwoye, Nigeria.</p>
1:00-2:00	Lunch Break - CBEIS 235	
2:00-3:00	<p>Plenary Session 8: Jury rooms 1-4: Life-cycle cost analysis and assessment; PPP/ funding mechanism. Chair: Dr. Gbekeloluwa B. Oguntimein, Associate Professor, Department of Civil Engineering, School of Engineering, Morgan State University, USA</p>	
(20 minutes for each presentation and 10 minutes for discussions)	<p><i>Strategies to Improve the Efficiency of a Multimodal Interdependent Transportation Systems in Disasters</i> - Francis Udenta and Oludare Owolabi; Department of Civil Engineering, Morgan State University, USA</p> <p><i>Improved Asset Management Systems for Namibia Road Networks</i> – Matheus Naboth and Sophia Tekie, Roads Authority, Namibia</p> <p><i>Sustainable Budgeting and Funding for Transport Infrastructure in Developing Countries through Private Public Partnership (PPP)</i> - Hon. Minister of State Budget and National Planning, Abuja, Nigeria.</p> <p><i>Impracticability of fixing Nigeria's Transportation Infrastructural deficiency within the Nigeria's peripheral capitalist Economy</i> - Dr Olatunji Olateju, School of Communication and Liberal Studies, Lagos State Polytechnic, Ikorodu. Nigeria</p> <p><i>Initiating Smart Public Transportation in Lagos: Setting the Tone for African Cities</i> – Dr. Desmond Amiegbebor, Boluwatife Popoola, Lagos Metropolitan Area Transport Authority/ Lagos State University, Lagos, Nigeria.</p>	
3:00-4:00	<p>Concurrent Session 9: Jury rooms 1-2: Chair: Ed Schlotterback, The Whiting-Turner Contracting Co, USA</p>	<p>Concurrent Session 10: Jury rooms 3-4: Chair: Yosef Kebede, City of Baltimore, USA</p>
	<p><i>A GIS-Based Optimization Model to Minimize Urban Flood Risk Due to Imperviousness and Storm Drain System Deficiencies</i> - James Ekeh and Oludare Owolabi, Department of Civil Engineering, Morgan State University, USA</p> <p><i>Development of Sustainable Roadway Embankment</i> - Natasha Nylons and Oludare Owolabi, Department of Civil Engineering, Morgan State University, USA</p> <p><i>An Enhanced Construction Project Scheduling Methodology Considering Risk Factors and Uncertainty</i> - Nicodeme Wanko and Oludare Owolabi - Department of Civil Engineering, Morgan State University, USA</p> <p><i>Evaluating the effects of Roadside Features on Injury Severity Level and Crash Frequency in the State of Maryland</i> - Sotonye Ikiriko, Steve Efe and Oludare Owolabi - Department of Civil Engineering, Morgan State University, USA</p> <p><i>Bridging the Gap in Transportation Revenue Generation Due to Increase in Demand of Fuel Efficient and Electric Vehicles</i> - Jordyn Alderman, Sotonye Ikiriko and Oludare Owolabi, Department of Civil Engineering, Morgan State University, USA</p>	<p><i>Experimental Investigation and Development of the Hybrid Mobile Cooling System for Oyster Industry</i> - Yulai Yang, Xuejun Qian, Marc J Louise Caballes and Seong Lee, Morgan State University, Industrial and Systems Engineering Department, USA</p> <p><i>Thermal Performance Evaluation and Analysis of the Efficient & Sustainability Shell and Tube Heat Exchanger System</i> - Raghulkumar Chandrasekaran, Xuejun Qian, Seong W. Lee, Morgan State University, Industrial and Systems Engineering Department, USA</p> <p><i>Comparative Study of a Sustainable Solar Heating System in a Green Infrastructural Building</i> - Marc J Louise Orque Caballes, Samuel Oludayo Alamu, Xuejun Qian, Seong W. Lee, Ghassan A. Hammudah Morgan State University, Department of Industrial and Systems Engineering, USA</p> <p><i>Planning and Designing standard of rural road construction in Lusaka province: An exploratory study</i> - Erastus M. Mwanaumo and Ephraim Sakala, Department of Civil and Environmental Engineering, School of Engineering, University of Zambia, Lusaka, Zambia.</p>
4:00-5:30	FIELD TRIP/ TECHNICAL SITE VISIT - JLN Construction Services, USA	
	End of Conference	

BOOK OF ABSTRACTS