

**RT²⁰
ESE**

**4TH INTERNATIONAL CONFERENCE OF RECENT
TRENDS IN ENVIRONMENTAL SCIENCE AND
ENGINEERING (RTESE'20)**

**IC²⁰
CSTE**

**5TH INTERNATIONAL CONFERENCE ON CIVIL,
STRUCTURAL AND TRANSPORTATION ENGINEERING
(ICCSTE'20)**

November 13 - 14, 2020 | ~~Niagara Falls, Canada~~ | Virtual Conference

**RTESE'20 &
ICCSTE'20**

November 13

November 14

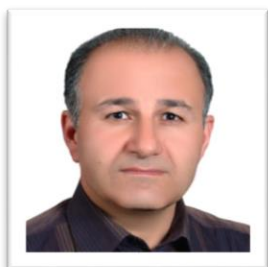
**OUR PROGRAM SCHEDULE IS BASED ON EASTERN TIME
(ET - OTTAWA TIME)**

RTESE'20 & ICCSTE'20

Registrants from the two conferences are permitted and encouraged to attend sessions from any of the two conferences.

10:00 AM – 12:00 PM Registrations

RTESE'20 Scientific Committee Chair



Dr. Mehrab Mehrvar

Ryerson University, Canada
Conference Chair

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Dr. Zhi Chen

Concordia University, Canada
Conference Co-Chair

[View Profile](#)

ICCSTE'20 Scientific Committee Chair



Dr. Khaled Sennah

Ryerson University, Canada
Conference Chair

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[**Return to Top**](#)

NOVEMBER 13

ROOM 1

8:30 AM - 9:00 AM	Registrations
9:00 AM - 9:10 AM	Official Opening
	Dr. Mehrab Mehrvar, Ryerson University, Canada and Dr. Khaled Sennah, Ryerson University, Canada
9:10 AM - 9:55 AM	ICCSTE'20 KEYNOTE LECTURE
	<u>Objective and Performance-Based Design in Structural Fire Engineering</u> Dr. Maged A. Youssef, University of Western Ontario, Canada
9:55 AM - 10:40 AM	ICCSTE'20 KEYNOTE LECTURE
	<u>An Emerging Paradigm for the Integration of Mechanics and Imaging for Material Characterization</u> Dr. Adil Al-Mayah, University of Waterloo, Canada
10:40 AM - 10:50 AM	Break

NOVEMBER 13

10:50 AM - 11:35 AM RTESE'20 KEYNOTE LECTURE

Elucidating the Underlying Physical, Chemical and Biological Mechanisms for the Altered Plant Uptake and Accumulation of Heavy Metals by Engineered Nanoparticles
Dr. Samuel Ma, Texas A&M University, USA

11:35 AM - 12:35 PM

Session
Environmental Protection

12:35 PM - 12:55 PM

Lunch

12:55 PM - 02:15 PM

Session
Earthquake And Structural Engineering

2:15 PM - 3:15 PM

Session
Geotechnical Engineering

3:15 PM - 3:25 PM

Break

3:25 PM - 4:30 PM

Session
Advanced Structural Materials

ICCSTE'20 KEYNOTE LECTURE

NOVEMBER 13 | 9:15 AM - 9:55 AM | SESSION CHAIR: DR. KHALED SENNAH, RYERSON UNIVERSITY, CANADA



Titles: Objective and Performance-Based Design in Structural Fire Engineering
Dr. Maged A. Youssef, University of Western Ontario, Canada

[View Abstract](#)

[Return to Top](#)

Dr. Maged A. Youssef is a Professor of Civil and Environmental Engineering at the University of Western Ontario. He received his PhD from McMaster University, Canada, in 2000, and then joined Murray Engineering P.C., New York City, as senior structural engineer. Dr. Youssef joined Western in August of 2002. He was promoted to the rank of Associate Professor in 2009 and to the rank of Professor in 2015. He also acted as the Associate Chair for Undergraduate Affairs from 2012 to 2015. Dr. Youssef received the 2007 R. Mohan Mathur Award for Excellence in Teaching. In addition to university teaching, he is actively involved in professional development of practicing engineers. Dr. Youssef's research focus on improving safety of our civil structures to natural and man-made disasters. His research covers areas in Earthquake Engineering, Structural Fire Engineering, and Smart Materials and Systems. He shared in publishing three standards. He also published 2 book chapters, 57 journal articles, 55 conference papers, and several technical reports. He presented his research as a keynote/expert speaker in national and international conferences. He was also invited to present his research at Tohoku University (Japan), Kyoto University (Japan), and South China University of Technology (China). Dr. Youssef supervised 12 PhD students, and 8 Master students to graduation. He is currently supervising 3 PhD students and 2 Master Students. He is an active member of the professional Committees of the Canadian Society of Civil Engineers and the American Concrete Institute. He is licenced professional engineer and is actively involved in structural engineering consulting activities.

ICCSTE'20 KEYNOTE LECTURE

NOVEMBER 13 | 9:55 AM - 10:40 AM | SESSION CHAIR: DR. KHALED SENNAH, RYERSON UNIVERSITY, CANADA



Titles: An Emerging Paradigm for the Integration of Mechanics and Imaging for Material Characterization
Dr. Adil Al-Mayah, University of Waterloo, Canada

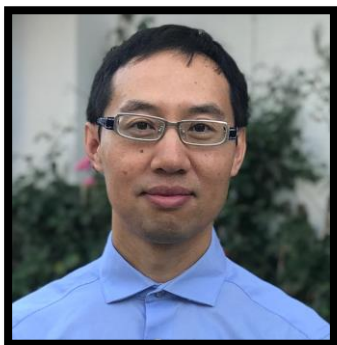
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[Return to Top](#)

Dr. Adil Al-Mayah has a unique blend of work experience in both the engineering and medical fields, resulting in the licensing of ground-breaking innovations in both areas. Professor Al-Mayah's expertise includes material characterizations, composite materials mechanics, image registration, biomechanical characterization of soft tissues, and cancer mechanics. He is the director of the Imaging-Mechanics Integration laboratory (IMI Lab) at the University of Waterloo that serves researchers from a wide range of fields including civil and mechanical engineering, environmental, earth science, and building science.

RTESE'20 KEYNOTE LECTURE

NOVEMBER 13 | 10:50 AM - 11:35 AM | SESSION CHAIR: DR. KHALED SENNAH, RYERSON UNIVERSITY, CANADA



Titles: Elucidating the Underlying Physical, Chemical and Biological Mechanisms for the Altered Plant Uptake and Accumulation of Heavy Metals by Engineered Nanoparticles

Dr. Samuel Ma, Texas A&M University, USA

[View Abstract](#)

[Return to Top](#)

Dr. Xingmao (Samuel) Ma is an associate professor in the Zachry Department of Civil and Environmental Engineering at Texas A&M University. He received his Ph.D. in Civil (Environmental) Engineering from the Missouri University of Science & Technology in 2004. Before he joined Texas A&M University in January 2015 as a tenured associate professor, he was an assistant and then associate professor at Southern Illinois University Carbondale for seven years. His current research interests include environmental fate and transport of engineered nanoparticles in plant-soil ecosystems and sustainable applications of nanotechnology in agriculture and environment. He is also interested in understanding the biogeochemistry of conventional and emerging environmental pollutants and how the biogeochemical processes of concerned environmental pollutants are affected by co-existing pollutants. His research efforts also extend to water reuse and membrane technologies. He has published over 75 journal articles and book chapters and delivered more than 80 presentations in national and international conferences. He has been a keynote speaker in several international conferences. He is an associate editor of *Environmental Chemistry Letters*, an editorial member of the *International Journal of Phytoremediation*, and a member of the Board of Directors of the International Phytotechnology Society. He has supervised and co-supervised 5 Ph.D students, 18 M.S students, 1 postdoctoral researcher, and 6 visiting scholars.

SESSION

ENVIRONMENTAL PROTECTION

NOVEMBER 13 | 11:35 AM - 12:35 PM | SESSION CHAIR: DR. ZHI CHEN, CONCORDIA UNIVERSITY, CANADA

Titles: Inoculation of Soil With Cadmium-Resistant Actinomycetes Flora Reduces Cadmium Accumulation in Rice (*Oryza Sativa* L.)

RTESE 132

Time: 11:35 - 11:50

Presenter: Shengping Xue, Hebei University of Economics and Business, China

Authors: Xue Shengping, Wang Xiaohuan

[View Abstract](#)

Titles: Reviewing the Trend in Image Processing Techniques Used in the Agriculture Industry

RTESE 163

Time: 11:50 - 12:05

Presenter: Smriti Sridhar, Graduate Student at University of Virginia, United States

Authors: Smriti Sridhar, Rajiv Gupta, Garrick Louis

[View Abstract](#)

Titles: Understanding the Effect of Oil on Phytoremediation of PCB Co-contamination in Transformer Oil Using *Chromolaena Odorata*

RTESE 151

Time: 12:05 - 12:20

Presenter: Raymond Oriebe Anyasi, University of South Africa, South Africa

Authors: R. O. Anyasi, H. I. Atagana

[View Abstract](#)

Titles: Recyclable Treatment of Cyanide in the Mining Industry: The Way Forward

RTESE 152

Time: 12:20 - 12:35

Presenter: Raymond Oriebe Anyasi, University of South Africa, South Africa

Authors: RO Anyasi, HI Atagana, JO Raymond Anyasi, CS Ajah

[View Abstract](#)

[Return to Top](#)

SESSION

EARTHQUAKE AND STRUCTURAL ENGINEERING

NOVEMBER 13 | 12:55 PM - 2:15 PM | SESSION CHAIR: DR. KHALED SENNAH, RYERSON UNIVERSITY, CANADA

Titles: Rate-Dependent Cyclic Lateral Load Test on a Single Pile in Sand

ICCSTE 231

Time: 12:55 - 1:10

Presenter: Naba Raj Shrestha, Saitama University, Japan

Authors: Naba Raj Shrestha, Masato Saitoh, Alok Kumer Saha, Chandra Shekhar Goit

[View Abstract](#)

Titles: Spectral Element Method for Damage Localization in Non-Uniform Structures with Parametric Uncertainty

ICCSTE 301

Time: 1:10 - 1:25

Presenter: Kumar Anjneya, IIT Kharagpur, India

Authors: Purushottam Kumar Chaudhary, Kumar Anjneya, Koushik Roy

[View Abstract](#)

Titles: A Model-Based Method for Damage Localization and Qualification in a Cable-Stayed Bridge

ICCSTE 304

Time: 1:25 - 1:40

Presenter: Maryam Montazeri, Master of Science, IUST, Iran

Authors: Mohammad Alikhani Dehaghi, Maryam Montazeri, Gholamreza Ghodrati Amiri, Ali Zare Hosseinzadeh

[View Abstract](#)

[Return to Top](#)

SESSION

EARTHQUAKE AND STRUCTURAL ENGINEERING

NOVEMBER 13 | 12:55 PM - 2:15 PM | SESSION CHAIR: DR. KHALED SENNAH, RYERSON UNIVERSITY, CANADA

Titles: Simulation of Spatially Varying Ground Motions at Site with Stochastic Soil Layers: A Case Study in Nw Algeria

ICCSTE 326

Time: 1:40 - 1:45

Presenter: Karim Afif Chaouch, Ecole Polytechnique d'Architecture et d'Urbanisme, Algeria

Authors: Karim Afif Chaouch

[View Abstract](#)

Titles: Seismic Indicators Based Earthquake Magnitude Prediction for Bangladesh Using Machine Learning Algorithms

ICCSTE 329

Time: 1:45 - 2:00

Presenter: Tanvir Mustafy, Military Institute of Science and Technology, Canada

Authors: Md Nafizul Islam, Md Abu Sufian Khan, Muhaimin Bin Munir, Md Abul Kalam Azad, Tanvir Mustafy

[View Abstract](#)

Titles: Evacuation Planning In Natural Disaster Using Multi Objective Optimization Approach: The Rohingya Refugee Crisis in Bangladesh

ICCSTE 331

Time: 2:00 - 2:15

Presenter: Tanvir Mustafy, Military Institute of Science and Technology, Canada

Authors: Md. Ridwanur Rahman, Samia Zakir Sarothi, Tanvir Mustafy

[View Abstract](#)

[Return to Top](#)

SESSION

GEOTECHNICAL ENGINEERING

NOVEMBER 13 | 2:15 PM - 3:15 PM | SESSION CHAIR: DR. KHALED SENNAH, RYERSON UNIVERSITY, CANADA

Titles: Performance of Pile Cap Foundation with Respect to Cap Thickness

ICCSTE 205

Time: 2:15 - 2:30

Presenter: Lan Lin, Concordia University, Canada

Authors: Soukayna El Hammouli, Adel Hanna, Lan Lin, Mahmoud Khalifa

[View Abstract](#)

Titles: Earthquake Induced Liquefaction Potential of Paste Tailings: Shaking Table Results

ICCSTE 159

Time: 2:30 - 2:45

Presenter: Fahad Alshawmar, University of Ottawa, Canada

Authors: Fahad Alshawmar, Mamadou Fall

[View Abstract](#)

Titles: Mechanical Properties and Behavior of Early-Age Fiber-Reinforced Cemented Paste Backfill

ICCSTE 193

Time: 2:45 - 3:00

Presenter: Liang Cui, Lakehead University, Canada

Authors: Jarley Loan Sampaio Libos, Liang Cui

[View Abstract](#)

Titles: Vibration Induced By Rapid Impact Compaction on Granular Soils

ICCSTE 272

Time: 3:00 - 3:15

Presenter: Omar El Khaled, Trevi Arabian Soil Contractors, Saudi Arabia

Authors: Omar El Khaled, Emmanouil Spyropoulos, Omar Maalej

[View Abstract](#)

[Return to Top](#)

SESSION

ADVANCED STRUCTURAL MATERIALS

NOVEMBER 13 | 3:25 PM - 4:40 PM | SESSION CHAIR: DR. LIANG CUI, LAKEHEAD UNIVERSITY, CANADA

Titles: Fresh and Hardened Properties of Engineered Geopolymer Composite with MgO

ICCSTE 244

Time: 3:25 - 3:40

Presenter: Khandaker M. Anwar Hossain, Ryerson University, Canada

Authors: M. A. Hossain, K. M. A. Hossain, T. Manzur, M. J. Hasan, D. Sood

[View Abstract](#)

Titles: Properties of Lightweight Self-consolidating Fibre Reinforced Concrete

ICCSTE 245

Time: 3:40 - 3:55

Presenter: Khandaker M. Anwar Hossain, Ryerson University, Canada

Authors: K.M. A. Hossain, I. N. Celasun, K.M. Y. Julkarnine, M.A. Hossain

[View Abstract](#)

Title: Mechanical Properties Of Geopolymer Concrete: Statistical Analysis And Prediction Models

ICCSTE 328

Time: 3:55 - 4:10

Presenter: Ahmed Hassan, Master Student at the university of Sharjah, United Arab Emirates

Authors: Ahmed Hassan, M Talha Junaid, Samer Barakat

[View Abstract](#)

Titles: Finite Element Analysis of Built-Up T Stub under Blast Loading

ICCSTE 330

Time: 4:10 - 4:15

Presenter: Tanvir Mustafy, Military Institute of Science and Technology, Canada

Authors: Sanjida Akter, Abdullah Al Azad Mamun, Samia Zakir Sarothi, Tanvir Mustafy

[View Abstract](#)

[Return to Top](#)

SESSION

ADVANCED STRUCTURAL MATERIALS

NOVEMBER 13 | 3:25 PM - 4:40 PM | SESSION CHAIR: DR. LIANG CUI, LAKEHEAD UNIVERSITY, CANADA

Titles: Non-conventional Building Technologies As A Panacea Against The Covid-19 Pandemic

ICCSTE 316

Time: 4:15 - 4:30

Presenter: Bruno Tayo, University of Johannesburg, South Africa

Authors: Bruno Tayo, Jeffrey Mahachi, Benson Wekesa

[View Abstract](#)

[Return to Top](#)

NOVEMBER 14

9:00 AM - 9:45 AM **ICCSTE'20 KEYNOTE LECTURE**

Recent Advances in Accelerated Bridge Replacement

Dr. Khaled Sennah, Ryerson University, Canada

9:45 AM - 10:30 AM **ICCSTE'20 KEYNOTE LECTURE**

An Innovative Bridge Inspection Technique through Drive-by Vehicles – A Special Application on Prestress Loss Identification

Dr. Mijia Yang, University of North Dakota, USA

10:30 AM - 10:40 AM **BREAK**

10:40 AM - 11:40 AM **SESSION**
NEW TECHNOLOGIES, METHODS AND TECHNIQUES IN CIVIL ENGINEERING

11:40 AM - 12:00 PM **Lunch Break**

12:00 PM - 1:00 PM **SESSION**
ENVIRONMENTAL SUSTAINABILITY AND DEVELOPMENT

Return to Top

NOVEMBER 14

1:00 PM - 1:45 PM

SESSION
BUILDING MATERIALS

1:45 PM - 1:55 PM

Break

1:55 PM - 2:25 PM

SESSION
WATER RESOURCES AND TREATMENT

2:25 PM - 2:55 PM

SESSION
TRAFFIC AND TRANSPORTATION ENGINEERING

2:55 PM - 3:25 PM

SESSION
BRIDGE ENGINEERING

3:25 PM - 4:10 PM

RTESE'20 KEYNOTE LECTURE

"SILENT SPRING" TO "THE LORAX":
ENVIRONMENTAL SCIENCE AND USING
ANSWERS FROM THE PAST TO FIND SOLUTIONS
FOR THE FUTURE
DR. LYNDA MCCARTHY, RYERSON UNIVERSITY,
CANADA

Return to Top

ICCSTE'20 KEYNOTE LECTURE

NOVEMBER 14 | 9:00 AM - 9:45 AM | SESSION CHAIR: DR. MEHRAB MEHRVAR, RYERSON UNIVERSITY, CANADA



Titles: Recent Advances in Accelerated Bridge Replacement
Dr. Khaled Sennah, Ryerson University, Canada

[View Abstract](#)

[Return to Top](#)

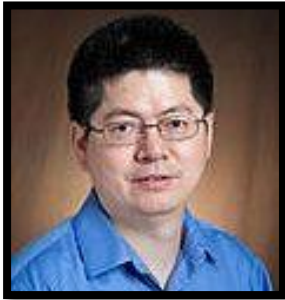
Dr. Khaled Sennah is a Professor of Structural Engineering and Chair of the Civil Engineering Department at Ryerson University, Toronto, Canada. He obtained his B.Sc. and M.Sc. degrees in civil engineering from Alexandria University of Egypt in 1985 and 1990, respectively, and his Ph.D. in structural engineering from University of Windsor in 1998. Dr. Sennah, core area of expertise includes design, evaluation and rehabilitation of bridges on which he has more than 260 publications and supervised over 75 graduate students. He has demonstrated numerous evidences of impact and contribution to economical design and sustainable construction that led to field applications and standards. In collaboration with Ontario Ministry of Transportation (MTO) and industry partners in USA, Canada and Germany, his research team conducted innovative research including (i) the development of prefabricated bridge elements and connection technologies to accelerate bridge construction, (ii) development of crashworthy and cost-effective, bridge barrier and deck slabs reinforced with glass fibre reinforced polymer (GFRP) bars for sustainable construction and (iii) cost-effective and accelerated FRP repair strategy to bridge girders damaged by vehicle impact.

For more information please visit:

<https://iccste.com/program>

ICCSTE'20 KEYNOTE LECTURE

NOVEMBER 14 | 9:45 AM - 10:30 AM | SESSION CHAIR: DR. MEHRAB MEHRVAR, RYERSON UNIVERSITY, CANADA



Titles: An Innovative Bridge Inspection Technique through Drive-by Vehicles – A Special Application on Prestress Loss Identification

[Dr. Mijia Yang, University of North Dakota, US](#)

[View Abstract](#)

[Return to Top](#)

Dr. Yang has practiced teaching and research broadly in structural and transportation engineering. He has taught Steel Design, Dynamic of Structures, and several others for the last 5 years. His research concentrates on impact and blast protection with advanced engineering materials, multi-scale modeling of composite and concrete materials, smart health monitoring in Civil Infrastructure, and self-healing concrete. His representative work included developing a systematic design method for impact barriers, a unified fatigue criterion for uniaxial Polyurethane E-Glass composite laminates, damage detection through guided wave, and a creep design methodology for Epoxy bonded anchor systems. Dr. Yang has participated in several state and national projects during his career, including “Effect of intermediate diaphragms on prestressed concrete bridge girders for over-height truck impacts” and “Testing of window connections specially designed for blast loading”. Dr. Yang also won several national and international awards, including the Philip E. Rollhaus, Jr. Roadway Safety Essay Contest held by Quixote in 2005, the faculty research award at the University of Texas at San Antonio in 2007, the ASCE travel award in 2005, and the ASCE Journal of Aerospace Engineering Outstanding Reviewer award in 2012 and 2018. Dr. Yang is currently serving as the associate editor of Journal of Materials in Civil Engineering, ASCE, and has more than 100 publications, including journal papers, conference papers, and reports in the field of composites, structural testing and characterization.

SESSION

NEW TECHNOLOGIES, METHODS AND TECHNIQUES IN CIVIL ENGINEERING

NOVEMBER 14 | 10:40 AM - 11:40 AM | SESSION CHAIR: DR. LIANG CUI, LAKEHEAD UNIVERSITY, CANADA

Titles: Performance of Steel I-Beams Strengthened by Fastening Hybrid FRP Strips

ICCSTE 240

Time: 10:40 - 10:55

Presenter: Omnia Ragab Abou El-Hamd, United Arab Emirates University, United Arab Emirates

Authors: Omnia AbouEl-Hamd, Amr Sweedan, Bilal El-Ariss

[View Abstract](#)

Titles: Application of Collaborative Management NEC and DAB to Improve Communication and Integration in Multi-Family Building Projects

ICCSTE 323

Time: 10:55 - 11:10

Presenter: Jair Oscar Mamani Zevallos, Universidad Peruana de Ciencias Aplicadas, Peru

Authors: Mario Aragon Gonzales, Jair Mamani Zevallos, Jorge de la Torre

[View Abstract](#)

Titles: Numerical Studies on the Effects of Mooring Configuration and line Diameter on the Restoring Behaviour of a Turret- Moored FPSO

ICCSTE 321

Time: 11:10 - 11:25

Presenter: Idris Ahmed Ja'e, Univerisiti Teknologi PETRONAS, Malaysia

Authors: Idris Ahmed Ja'e, Montasir Osman Ahmed Ali, Anurag Yenduri

[View Abstract](#)

Titles: Railway Tracks Detection Of Railways Based On Computer Vision Technique And Gnss Data

ICCSTE 269

Time: 11:25 - 11:40

Presenter: Mahmoud Adham, Cairo University, Egypt

Authors: Adham Mahmoud , Mohamed Mohamed G. and El Shazly

[View Abstract](#)

[Return to Top](#)

SESSION

ENVIRONMENTAL SUSTAINABILITY AND DEVELOPMENT

NOVEMBER 14 | 12:00 PM - 1:00 PM | SESSION CHAIR: DR. SAMUEL MA, TEXAS A&M UNIVERSITY, USA

Titles: Bacteria-Endophyte Enhanced Phytotreatment of Petroleum Hydrocarbon-Contaminated Soil by *Nicotiana Tabacum*

RTESE 146

Time: 12:00 - 12:15

Presenter: Raymond Oriebe Anyasi, University of South Africa, South Africa

Authors: Anyasi, Raymond Oriebe; Atagana, Harrison Ifeanyichukwu; Sutherland, Rene

[View Abstract](#)

Titles: Contributions to Keep the Atmosphere Balanced: How a Magnetic Minimizer of Emissions from Mobile Sources Should Be Designed

RTESE 145

Time: 12:15 - 12:30

Presenter: Raul Guerrero Torres, Universidad de Cartagena, Colombia

Authors: Raul Guerrero Torres, Mehrab Mehrvar

[View Abstract](#)

Titles: Rehabilitation Proposal for a Rural Settlement Affected By the Fundão Dam Tailings (Mariana-Brazil): A Study Case

RTESE 165

Time: 12:30 - 12:45

Presenter: Bárbara Carolina Soares Fortes, Escola de Arquitetura /UFMG Programa Pós, Brazil

Authors: Bárbara Carolina Soares Fortes, Maria Rita Scotti, Maria Cristina Villefort, Stael Alvarenga

[View Abstract](#)

Titles: Contributions to Keep the Atmosphere Balanced: How a Magnetic Minimizer of Emissions from Mobile Sources Should Be Designed

RTESE 149

Time: 12:45 - 1:00

Presenter: Raul Guerrero Torres, Universidad de Cartagena, Colombia

Authors: Raul Guerrero Torres, Mehrab Mehrvar

[View Abstract](#)

[Return to Top](#)

SESSION

BUILDING MATERIALS

NOVEMBER 14 | 1:00 PM - 1:45 PM | SESSION CHAIR: DR. MEHRAB MEHRVAR, RYERSON UNIVERSITY, CANADA

Titles: Early-Age Strength and Workability of Basalt Fiber Reinforced-Concrete Made with Recycled Aggregates – A Pilot Study

ICCSTE 226

Time: 1:00 - 1:15

Presenter: Hilal El-Hassan, United Arab Emirates University, United Arab Emirates

Authors: Shahrukh Shoaib, Hilal El-Hassan, Bilal El-Ariss, Tamer El Maaddawy

[View Abstract](#)

Titles: Development of a Life Cycle Inventory Dataset for Recycled Concrete Aggregates in the City of Abu Dhabi

ICCSTE 228

Time: 1:15 - 1:30

Presenter: Mohammed HH Alzard, United Arab Emirates University, United Arab Emirates

Authors: Mohammed Alzard, Hilal El-Hassan, Tamer El Maaddawy

[View Abstract](#)

Titles: Probabilistic Inference Approach for Predicting Concrete Compressive Strength - A Bayesian Network Algorithm

ICCSTE 238

Time: 1:30 - 1:45

Presenter: Hilal El-Hassan, United Arab Emirates University, United Arab Emirates

Authors: Omar Najm, Hilal El-Hassan, Amr El-Dieb, Hamad Aljassmi

[View Abstract](#)

[Return to Top](#)

SESSION

WATER RESOURCES AND TREATMENT

NOVEMBER 14 | 1:55 PM - 2:25 PM | SESSION CHAIR: DR. MEHRAB MEHRVAR, RYERSON UNIVERSITY, CANADA

Titles: Morphological Investigation of Cellulose Acetate Nanofibrous Membranes

RTESE 124

Time: 1:55 - 2:10

Presenter: Nasrin Attari, École de Technologie Supérieure/University of Québec, Canada

Authors: Nasrin Attari, Robert Hausler

[View Abstract](#)

Titles: Simulation of Water Supply in The City of Lima For the Period 2020-2050 Using the WEAP Platform

ICCSTE 305

Time: 2:10 - 2:25

Presenter: Jose Luis Reynaga Tejada, Universidad Peruana de Ciencias Aplicadas, Peru

Authors: José Reynaga, Jorge Cornelio, Manuel Collas

[View Abstract](#)

[Return to Top](#)

SESSION

TRAFFIC AND TRANSPORTATION ENGINEERING

NOVEMBER 14 | 2:25 PM - 2:55 PM | SESSION CHAIR: DR. KHANDAKER M. ANWAR
HOSSAIN, RYERSON UNIVERSITY , CANADA

Titles: Evaluating the Economic Benefits of Non-Motorized Transport Infrastructure (NMT) for Sustainable Development Case Study: Non-Motorized Transport Pilot Scheme for Kampala City

ICCSTE 148

Time: 2:25 - 2:40

Presenter: Kigozi Joseph, ENGINEERING, Innovations House, Uganda

Authors: Kigozi Joseph

[View Abstract](#)

Titles: Study of Delays to Evaluate the Sustainability over Time of Solutions for Urban Intersections

ICCSTE 322

Time: 2:40 - 2:55

Presenter: Burga Alvarez Llorca, Oswaldo, Universidad Peruana de Ciencias, Peru

Authors: F. Medina, A. Burga, A. Bravo

[View Abstract](#)

[Return to Top](#)

SESSION

BRIDGE ENGINEERING

NOVEMBER 14 | 2:55 PM - 3:25 PM | SESSION CHAIR: DR. KHANDAKER M. ANWAR
HOSSAIN, RYERSON UNIVERSITY , CANADA

Titles: Development of Graphical Computer Software for the Design of Composite Steel I-Girder Bridges per the Canadian Highway Bridge Design Code

ICCSTE 340

Time: 2:55 - 3:10

Presenter: Ahmed Diab, Ryerson University, Canada

Authors: Ahmed Diab, Khaled Sennah

[View Abstract](#)

Titles: Simplified Equations for Moment and Shear in Bridge Girders Resulting from AASHTO Truck Loading

ICCSTE 341

Time: 3:10 - 3:25

Presenter: Seyedshayan Barary, Ryerson University, Canada

Authors: Seyedshayan Barary, Ahmed Diab, Khaled Sennah

[View Abstract](#)

[Return to Top](#)

RTESE'20 KEYNOTE LECTURE

NOVEMBER 14 | 3:25 PM - 4:10 PM | SESSION CHAIR: DR. MEHRAB MEHRVAR, RYERSON UNIVERSITY, CANADA



Titles: “Silent Spring” to “The Lorax”:
Environmental Science and Using Answers
from the Past to Find Solutions for the
Future

[Dr. Lynda McCarthy, Ryerson University,
Canada](#)

[View Abstract](#)

[Return to Top](#)

Dr. Lynda McCarthy is a Professor in the Department of Chemistry and Biology at Ryerson University in Toronto. Her research includes aquatic ecotoxicology, Great Lakes pollution and remediation, and assessing the impact on organisms exposed to land-applied pulp mill and municipal biosolids.

In the past decade, she has received funding for her research from sources such as the Natural Sciences and Engineering Research Council (NSERC Discovery and Strategic Grants) and the National Centres for Excellence’s (NCE) Canadian Water Network (CWN). She attended Queen’s University and the University of Waterloo where she gained a BSc and a PhD respectively and was a Department of Fisheries and Oceans federal government scientist for many years at the Great Lakes institute Canada Centre for Inland Waters (CCIW).

At Ryerson University, Dr. McCarthy received the prestigious Dean’s Teaching Award for excellence in teaching and she is the founding visionary behind Ryerson Urban Water (RUW). She is also leading an initiative that brings Ontario school boards and the Ministry of Education together with education experts in an effort to develop a deep environmental literacy in our children. Her motto is: from the classroom to the boardroom to the legislature.