



ICCEFA
2020

**INTERNATIONAL CONFERENCE ON CIVIL
ENGINEERING FUNDAMENTALS AND
APPLICATIONS (ICCEFA'20)**

September 7 - 8, 2020 | Virtual Conference

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WELCOME MESSAGE FROM THE CONFERENCE CHAIR

On behalf of the International Academy of Science, Engineering and Technology (International ASET Inc.), the organizing committee would like to welcome you to the International Conference on Civil Engineering Fundamentals and Applications (ICCEFA'20).

The goal of ICCEFA'20 is to provide an online space for scholars from all over the world to present advances in the relevant fields and to foster a virtual environment conducive to exchanging ideas and information. This conference will also provide an ideal environment to develop new collaborations and meet experts on the fundamentals, applications, and products of the mentioned fields.

In the first meeting of this conference, three keynote speakers will share their expertise with the aim of exposing participants to a wide spectrum of applications, and to foster crosspollination of ideas and develop new research interests. In addition, approximately 5 papers will be presented from professors, students, and researchers across the world.

We thank you for your participation and contribution to the International Conference on Civil Engineering Fundamentals and Applications (ICCEFA'20). We wish you a very successful and enjoyable experience.

Dr. Zhi Chen
Concordia University, Canada
Conference Chair
ICCEFA'20

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ABOUT ICCEFA'20

The International Conference on Civil Engineering Fundamentals and Applications (ICCEFA'20) aims to become the leading virtual conference in fields related to Civil Engineering Fundamentals and Applications. The goal of ICCEFA'20 is to provide an online space for scholars from all over the world to present advances in the relevant fields and to foster a virtual environment conducive to exchanging ideas and information.

ICCEFA is an international conference will be held yearly. This conference focus on all aspects Civil Engineering Fundamentals and Applications. ICCEFA Will be held this year in Virtual conference

ICCEFA is an acronym for **International Conference, on Civil Engineering Fundamentals and Applications.**

The proceedings are published in Ottawa, Canada.

- All papers were peer-reviewed
- The conference proceedings is published under an ISSN and ISBN number
- Each paper is assigned a unique DOI number by [Crossref](#)
- The conference proceedings is indexed by [Google Scholar](#)
- The proceedings is permanently archived in [Portico](#) (one of the largest community-supported digital archives in the world)



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SCIENTIFIC COMMITTEE

We would like to thank the following for accepting to act as a member of the Scientific Committee for the ICCEFA'20 Conference:



Dr. Zhi Chen

Concordia University, Canada
Conference Chair

Scientific Committee Members

- **Dr. Muntasir Billah**, Lakehead University, Canada
- **Dr. Ahmed Fahmy**, AECOM, NJ, USA
- **Dr. Sean He**, Rensselaer Polytechnic Institute, USA
- **Dr. Fei Jin**, University of Glasgow, Singapore
- **Dr. Saber Moradi**, Ryerson University, Canada
- **Dr. Fadi Oudah**, Dalhousie University, Canada
- **Dr. Abdollah Shafieezadeh**, Ohio State University, USA
- **Dr. Grzegorz Sierpiński**, Silesian University of Technology, Poland
- **Dr. Wenxing Zhou**, University of Western Ontario, Canada

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KEYNOTE SPEAKERS

The keynote information for the International Conference on Civil Engineering Fundamentals and Applications (ICCEFA'20) is as follows:



Dr. Muntasir Billah
Lakehead University, Canada



Dr. Ahmed Fahmy
Senior Geotechnical Engineer at AECOM,
NJ, USA



Dr. Fei Jin
Cardiff School of Engineering, Cardiff
University, UK

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KEYNOTE LECTURE



Title: Performance-based Seismic Design Of Bridges: Challenges And Opportunities
[Dr. Muntasir Billah, Lakehead University, Canada](#)

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Dr. Muntasir Billah, P.Eng., is a tenure track assistant professor in The Department of Civil Engineering at Lakehead University, Thunder Bay, Canada. Before joining LU, he worked as a structural (bridge) engineer at Parsons, Vancouver, BC. He received his PhD and MASc in structural engineering from the University of British Columbia, Canada. He is the recipient of many awards and scholarships. He was awarded the 2016 UBC Governor General's Gold Medal—one of Canada's most prestigious academic awards. He has authored and co-authored 27 journal papers and 42 conference proceedings. He is the secretary of the Engineering Mechanics and Materials (EMM) division of CSCE, member of ACI Committee 341, Earthquake-Resistant Concrete Bridges, Associate Member of American Society of Civil Engineers and Structural Engineers Association of British Columbia. Dr. Billah's research is focused towards improving our understanding of the behaviour of civil infrastructures under various extreme load conditions. His research is drawn towards the development and application of advanced and novel materials in civil engineering structures and its experimental investigation, advances in numerical and experimental earthquake engineering along with development of advance modeling tools and techniques. His research interests include seismic design and retrofit of buildings and bridges, performance-based seismic design, application of high performance materials (e.g. shape memory alloys), and multi hazard analysis of bridges.

KEYNOTE LECTURE



Title: Battery Characterization and SOC/SOH Estimation

Dr. Ahmed Fahmy, Senior Geotechnical Engineer at AECOM, NJ, USA

[View Abstract](#)

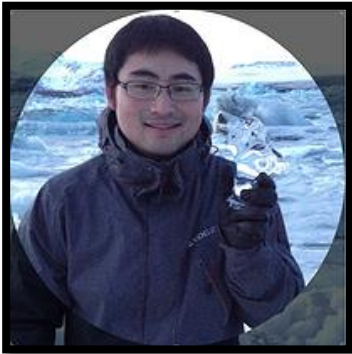
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Dr. Ahmed Fahmy is a Senior Geotechnical Engineer at AECOM, NJ. He has extensive practical experience working with several employers in Canada, the United States, and the middle east, including AECOM, 30 Forensic Engineering, Golder Associates Ltd., Geoterre Ltd., Dar Al Handasah Consultants, and Geo-Consultants Group. He has provided engineering support services on a wide variety of large scale projects, and was involved in numerous forensic investigations related to legal and insurance claims.

In addition to his practical experience, Dr. Fahmy served as assistant professor (LDA) and research associate at the University of Western Ontario where he taught graduate and undergraduate level geotechnical engineering design courses. He is also a former assistant professor at Dhofar University.

Dr. Fahmy is an active member of the executive education committee of the Canadian Geotechnical Society and the deep foundations committee of ASTM international. He has received several awards, has several publications, and has served as a reviewer for multiple geotechnical journals and conferences.

KEYNOTE LECTURE



Title: Assessing Long Term Performance Of Magnesia-based Binders In Contaminated Soil Remediation

[Dr. Fei Jin, Cardiff School of Engineering, Cardiff University, UK](#)

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Dr. Fei Jin is a Chartered Engineer (CEng) in the UK and joined the School of Engineering at Cardiff University in July 2020. He obtained his PhD degree from University of Cambridge in 2014 working on MgO-bearing cementitious materials. After that he continued to work as a research associate in Cambridge on the technical and commercial development of magnesia-bearing binders for land remediation and energy infrastructure. In 2017, he joined University of Glasgow as an Assistant Professor in its Singapore campus. As an Editorial Board Member for the ICE-Environmental Geotechnics and guest editor for Environmental Pollution, he has reviewed for more than 30 international journals covering material science, geotechnical engineering and environmental engineering. He is the recipient of the Canadian Geotechnical Journal Fredlund Award in 2019 and serves as Scientific Committee Member in a number of international conferences. His research interests include: 1. Sustainable binders and reuse of waste materials; 2. Magnesia cements; 3. Alkali-activated cements; 4. Soil/water remediation.

LIST OF PAPERS

The Following Papers Were Presented At The International Conference On Civil Engineering Fundamentals And Applications (ICCEFA'20) :

Civil Engineering

Title: Parametric Study of Energy Dissipating Steel Plate Fuses

ICCEFA 135

Authors: Ahmad Siar Mahmood Shah, Saber Moradi

[View Paper](#)

Title: Three-Dimensional Modeling of Concrete Reinforced with Randomly Distributed Fiber

ICCEFA 128

Authors: Sahar Ghanem

[View Paper](#)

Title: Spatial Differentiation And Influencing Factors Of Attended Collection And Delivery Points In Nanjing City, China

ICCEFA 129

Authors: Muhammad Sajid Mehmood, Gang Li, Shuyan Xue, Qifan Nie, Xueyao Ma, Zeeshan Zafar, Adnan Rayit

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LIST OF PAPERS

Civil Engineering

Title: More Sustainable Tomorrow's Transport Systems Based On Big Data Concerning Travel Preferences

ICCEFA 132

Authors: Grzegorz Sierpiński

[View Paper](#)

Title: Concept Of Mobile Measuring Station As An Element Of Smart Cities Of The Future

ICCEFA 136

Authors: Weronika Janc, Krzysztof Sitko, Kamil Kopeć, Grzegorz Sierpiński

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ETHICS & MALPRACTICE

Publication Ethics and Publication Malpractice Statement

The following statement is mainly based on the Code of Conduct and Best-Practice Guidelines for Journal Editors (Committee on Publication Ethics, 2011).

Scientific Committee

Scientific Committee

Scientific committees consisting of experts in the fields are established. The committees oversee the peer-review and publication process. To see the scientific committee members, please follow the link below.

Scientific Committee

Equality and Decisions

One or more reviewer, scientific committee member, or chair, (internal or external), are responsible for evaluating the relevance of the submitted manuscripts to the proceedings, technical and scientific merit, originality, and impact. These evaluations are to be carried out regardless of ethnicity, religion, gender, sexual orientation, political beliefs, and institutions. Successive to peer-review, the Chair has full authority and is solely responsible for the published content and the process thereof.

Confidentiality

Scientific committee member(s) and publishing staff may not disclose manuscripts or their content, directly or indirectly, to anyone other than individuals invited to review the manuscript (whether they accept or not), other reviewers of the same publications, and publishing staff.

Conflicts of Interest

Scientific committee member(s) and publishing staff may not utilize the contents of submitted manuscripts whether accepted or rejected, directly or indirectly for their own research purposes without prior written consent by the authors.

ETHICS & MALPRACTICE

Reviewers

Contribution to Decisions

In order for final decisions to be made regarding acceptance or rejection of papers, we rely on peer-review. Peer-review is the process of experts in the field reading, understanding, and objectively commenting on submitted papers. Through peer-review, scholars give back to the academic and scientific community by helping the chair(s) make decisions regarding manuscripts.

Promptness

Reviewers should promptly notify the chair(s) if they are unable or unqualified to carry out their reviewing duties. Reviewers should do their best to provide the reviews to the chair(s) as promptly as possible, and within the designated time-frame.

Confidentiality

Reviewers must not share the contents of the manuscripts they receive for review, regardless of their decision to review or contents of the review, directly or indirectly, with anyone other than the person who has assigned the review.

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Reviewers should review manuscripts fairly and objectively, with supporting evidence or arguments, regardless of personal feelings or biases.

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Conflicts of Interest

Invited reviewers should immediately inform the chair(s) in case of a conflict of interest based on competitive, collaborative, personal, family, and other relationships with the authors or people involved in the work.

ETHICS & MALPRACTICE

Authors

Authorship

Only persons who have significantly contributed to the work and the manuscript can be named authors on a paper. These contributions include the idea/concept, design, experiments, evaluation, analysis, drafting or revision of the manuscript, and others. Authors must all have agreed to be named as such and for the manuscript to be submitted. Anyone who has contributed based on the above, but the level of contribution is not significant, may appear in the acknowledgement section of the manuscript.

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ETHICS & MALPRACTICE

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Authors must notify the chair(s) at the time of submission, if any factor outside the scope of the research has influenced any step of the work and manuscript writing. Examples of such factors include but are not limited to funding, grants, advisory and consultancy, stock ownership, current or past employment, and memberships, among others. All funding sources should be disclosed in the manuscript.

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Unethical/plagiarism issues mostly result in a retraction, while unintended mistakes will mostly result in the publication of an erratum.

ETHICS & MALPRACTICE

Publisher

Errata and Retractions

The publisher takes the necessary steps to prevent mistakes, academic and scientific misconduct, and unethical behavior, both intended and unintended. When mistakes are reported, the publisher works with chair(s) and authors to publish an erratum clarifying the issue. In cases where the mistakes are severe and significant, the paper might be retracted. If unethical behavior, plagiarism, academic and scientific misconduct, or other such activities are proven to have taken place by an author or authors, the publisher will retract the paper.

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Schedule

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