



ISEE AFRICA

INNOVATION – SCIENCE
ENGINEERING – EDUCATION

30 January to 1 February 2019
Nairobi, Kenya

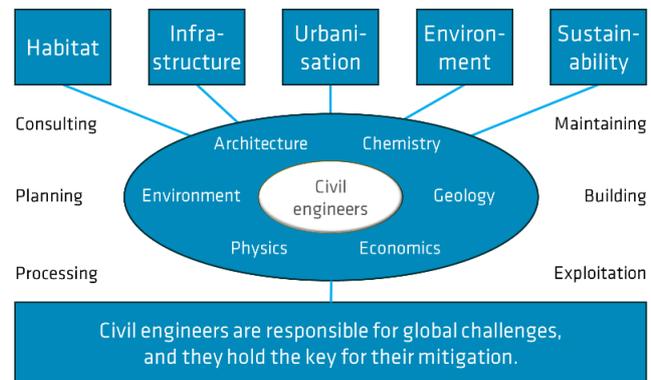


Objectives of the ISEE conference

ISEE stands for Innovation, Science, Engineering and Education. The conference aims at connecting multiple experts and change drivers linked to construction technology, society, and education. Topics of construction and sustainable materials will be linked to educational challenges and discussed jointly. The specific objective is to deliver credible solution strategies for enhanced education for a new generation of decision makers with higher awareness of global and environmental challenges as well as innovation potentials.

Challenges for civil engineers and architects in the future

By exploiting resources and defining the shapes and function of our structures and infrastructures, civil engineers and architects have been highly responsible for the global challenges of the 21st century. Conscious planning and responsible use of global resources is therefore key to a sustainable global future.



Global challenges of the 21st century.

Importance of education for a sustainable future

Civil engineers and architects today are exposed to a rapidly changing world. Due to the digital transformation, global value and supply chains, and the urgent need to build environmentally friendly, their professional specifications have little in common with their profiles in the past, and the future will bring additional and different challenges. Contemporary teaching content and educational tools are therefore the only way to adequately educate the next generation of engineers, architects, decision makers to the benefit of the entire world.

Africa's potentials

Africa is emerging rapidly, and construction activities are at the onset of a rapid incline. Africa has potential to develop and implement best practice solutions, avoid earlier mistakes, and skip technologies of a past era – the starting position is better than for any other region in the world. Thus, construction innovation from Africa, can spark innovation all over the world. However, for innovation driven and sustainable construction technologies to emerge, the next generation of civil engineers and architects need awareness of the challenges, alertness about innovative and sustainable technologies and deeper understanding of their fundamental backgrounds.

Therefore, the ISEE conference aims at developing strategies for the education of more science driven, conscious engineers.



Keynote speakers

Selected international keynote speakers provide comprehensive overviews of recent developments. The speakers come from fields of civil engineering, architecture, materials technology, environment, sustainability, education, politics, and social sciences. The keynotes provide the basis for the workshop discussions.

Dr. Andreas Rogge, BAM, Germany

Future challenges of construction engineering and perspectives for Africa

Namata Serumaga-Musisi, The Griot Introspect, Ghana

Democratisation of form

Prof. Karen Scrivener, EPFL, Switzerland

Eco-efficient carbon free cement and concrete industries

Prof. John Provis, University of Sheffield, UK

The right material for each job - the need for a toolkit of cements

Dr. Wolfram Schmidt, BAM, Germany

Engineering skill requirements to cope with the local and global challenges of the future

Prof. Ghada Bassioni, Ain Shams University, Egypt

The blue-sky research – applied science and engineering interrelationship in an African context

Prof. Mark Alexander, University of Cape Town, South Africa

International research networking and the role of Africa within the international research community

Prof. Daman Panesar, University of Toronto, Canada

Engineering design: an approach towards sustainable site-specific solutions with global considerations

Tina Nyamache, Village Capital's Associate, Operations - Partnerships Africa, Kenya

Identifying high potential investments

Busisiwe Legodi, Former CIMERWA Ltd CEO, South Africa

Migration from corporate social responsibility towards shared value creation

Dr. Kolawole Adisa Olonade, University of Lagos, Nigeria

Fostering innovation through research and education for infrastructure development: a call for synergy between town and gown

Prof. Yunus Ballim, Sol Plaatje University, South Africa

Reflections on the civil engineering curriculum for engaged social development in the 21st century

Prof. Ole Mejlhede Jensen, Danmarks Tekniske Universitet, Denmark

Knowledge transfer from universities: to students and to practice

Prof. Funso Falade, University of Lagos, Nigeria

Educational Tools and Curricula Development for the Advancement of Engineering Education in Africa

Prof. Robert Tchitnga, Université de Dschang, Cameroon

Appropriate high level physics solutions in developing countries - a cooperative approach to bridge scientific education and engineering

Prof. Mammo Muchie, Tshwane University of Technology, South Africa

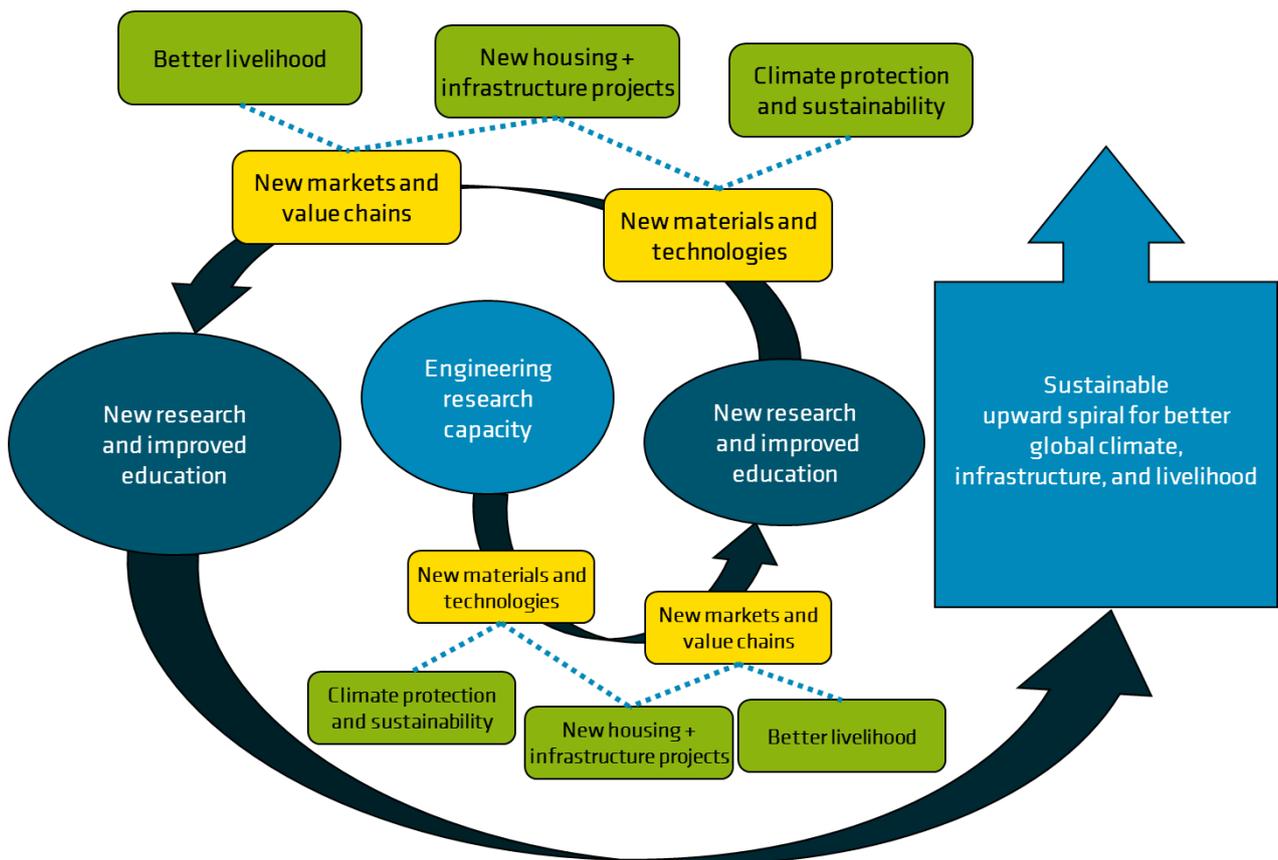
Networked and unified innovation system roadmap for African smart, green and integrated development in the 4th Industrial Revolution

Topics to be addressed in the workshops:

All participants are invited to actively contribute towards the conference topics. The workshops aim at creating a variety of opinions and solution strategies. The objective is to obtain a vivid picture of the global situation from a large variety of attendants from all over the world.

- Global and local challenges and/or potentials in construction
- Potentials for sustainable construction based on education
- Future skill requirements in civil engineering, architecture and materials
- Global research and education requirements
- African research and education requirements
- Contemporary teaching methods
- Gender issues in STEM education
- Language barriers in African/ international research/ education

Expected impact of ISEE



ISEE aims at triggering innovative research and education activities towards a better global future through Innovation, Science, Engineering, and Education.

Who should attend?

There is no restriction. Every person, who thinks can contribute towards the objectives of the conference, regardless of age, title, gender, or origin is invited to attend. Attendance is free up but the number of participants is limited. Please register with a short statement about your interest in the conference.

How to apply?

Please register via the registration form that can be found on the website:
<http://isee-africa.com/registration>

How to apply for travel and accommodation grants?

A limited number of around 30 travel grants are available. In order to apply for travel grant, please use the application form from the website (<http://isee-africa.com/travel-grant>). Candidates will be selected based on their suitability to contribute to the conference objectives. The grant will cover attendance, flight and accommodation.

Dates:

30 January 2019 to 1 February 2019

Venue:

Ole-Sereni Hotel
Off Mombasa Road, Nairobi, KENYA
Conference room rate: 160 USD

Contact:

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www.isee-africa.com

Under the patronage of:



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BAM**



**Prof. Funso Falade,
University of Lagos
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**Prof. Robert Tshitnga,
Université de Dschang,
University of Ulm**