Engineering a Better World – the Next 100 Years

Preliminary schedule of CAETS 2019

Organisation Committee
Veronika Aspvall, Former Chair of IVA’s Student Council
Hans Bergström, Member of IVA’s Division XI – Education and Research Policy
Anne-Marie Eklund Löwinder, Member of IVA’s Division XII – Information Technology
Magdalena Gerger, Member of IVA’s Division VI – Management
Pontus Johnson, Member of IVA’s Division II – Electrical Engineering
Åsa Söderström Winberg, Member of IVA’s Division III – Built Environment
Tuula Teeri, President of IVA, Member of IVAs Division IV – Chemical Engineering
Magnus Breidne, Vice President International Affairs IVA

International Programme Committee
Pere Brunet, Real Academia De Ingenieria, Spain
Ruth David, Secretary-Treasurer CAETS
Reinhard Hüttl, National Academy of Science and Engineering, Acatech
Kazuhide Ito, Engineering Academy of Japan
Inkyu Lee, National Academy of Engineering of Korea
Ulrich W. Suter, Swiss Academy of Engineering Sciences
Kayo Takahashi, Engineering Academy of Japan
Nick Tyler, Royal Academy of Engineering, UK
Siegfried Wu, Chinese Academy of Engineering
Magnus Breidne, Vice President International Affairs IVA
Tuesday June 25

Opening Session
09:00–09:30

Tuula Teeri, President of IVA
Ruth A David, Secretary General – Treasurer CAETS
Ibrahim Baylan, Minister for Enterprise

PROGRESS
09:30–12:30

The First and Next 100 Years
Johan Norberg, Author, lecturer and documentary filmmaker

Internet – Engineering for Society
Olaf Kolkman, Chief Internet Technology Officer, the Internet Society

LIGO – Engineering for Science
Dennis C. Coyne, Chief Engineer LIGO, California Institute of Technology

Lunch
12:30–14:00

CHALLENGES
14:00–17:00

Energy System of the Future – Evolution or Revolution
Marie-Noëlle Semeria, Chief Technology Officer of TOTAL

Unequal Cities
Edgar Pieterse, Director of African Centre for Cities

Antibiotic Resistance – a Multiple Systems Failure
Threatening Global Sustainable Development
Otto Cars, Senior Professor, Infectious Diseases, Senior Adviser – ReAct, Uppsala University

Water as Leverage – from Risk to Reward
Kaveh Madani, Environmental Scientist, Educator and Activist

Drink reception at the City Hall
19:00–21:00
Hosted by the City of Stockholm
Wednesday June 26

MORPHING

Creative Chaos
08:30–11:00

Engineering the Climate?
Stefan Schäfer, Scientific project leader, Institute for Advanced Sustainability Studies

Panel Discussion:
Future Health – are New Business Models Required?
Kevin Outersson, Executive Director and Principal Investigator, CARB-X
Anna Sandström, Science Policy and Relations Director Europe at AstraZeneca
Aled Edwards, Founder and current CEO of the Structural Genomics Consortium (SGC)

Sustainable Transition Pathways for Plastics
Rajni Hatti-Kaul, Professor in Biotechnology, Lund University

Digital Dawn
11:00–12:30

Productivity and Performance in a Digital Age
Erik Brynjolfsson, Professor at the Massachusetts Institute of Technology

The Future Company – Digitalized, Disrupted and Decentralized
Isabell M. Welpe, Chair for Strategy and Organization, Technical University of Munich

Lunch
12:30–13:30
Wednesday June 26

Effective Education
13:30–15:30

The Changing Face of Global Engineering Education
Ruth Graham, Higher education consultant, R H Graham Consulting

Logic and Landscape of the Knowledge System – Implications for the Educational System
Li Jinghai, President of National Natural Science Foundation of China

Inclusive Infrastructure
15:30–17:30

The All-Embracing Transportation System
Dan Work, Professor, Vanderbilt University

Design and Engineering for Sustainability Transitions
İdil Gaziulusoy, Professor of Sustainable Design, Aalto University

Society 5.0 – a Human-Centric Strategy
Yuko Harayama, Former Executive Member of the Council for Science, Technology and Innovation

Reflections – Morphing Engineering Sciences into the future
Wilhelm Krull, Secretary General VolkswagenStiftung

Dinner at Solliden, Skansen
19:00
Thursday June 27

CONCLUSIONS
09:00–12:00

Policy Advice for Engineering Futures

Darja Isaksson, Director General, Sweden’s Innovation Agency (VINNOVA)
Li Jinghai, President, National Natural Science Foundation of China
Robert-Jan Smits, Open Access Envoy, European Political Strategy Centre
Dan E Arvizu, Chancellor and Chief Executive of the New Mexico State University System

Industry-Academy Interaction

Names of participants will be added shortly

Open Discussion

This last part of the conference will be highly interactive. The idea is to, together with those among the participants that are interested, draw conclusions from the presentations and discussions of the two preceding days.

Throughout the conference a number of speakers will appear as an intermezzo, giving us a broader perspective on the discussed topic.

INTERMEZZI

Linda Liukas, Author and Illustrator
Brian Mwenda, Founder & CEO, Hope Tech Plus Limited
Yewande Akinola, Principal Engineer, Laing O’Rourke
Alexandra Ridderstad, Project Manager IVA
Friday June 28

Technical Tour
09:00–14:00

We welcome you to join us on a tour of Slussen and beautiful Stockholm

Slussen in the immediate centre of Stockholm city is one of the biggest and most startling ongoing projects in Stockholm at the moment. This €120 million project is a combined urban redevelopment and infrastructure project with high architectural ambitions. Slussen is located at the narrow strait between the world heritage site Old Town and the steep cliffs of Södermalm and therefore requires several complicated and unconventional technical solutions when building the new Slussen. Slussen is in every sense a historical site which gives the project an extra dimension with for example archaeological excavations.

End of CAETS 2019

Please note that this is a preliminary schedual of CAETS 2019.