

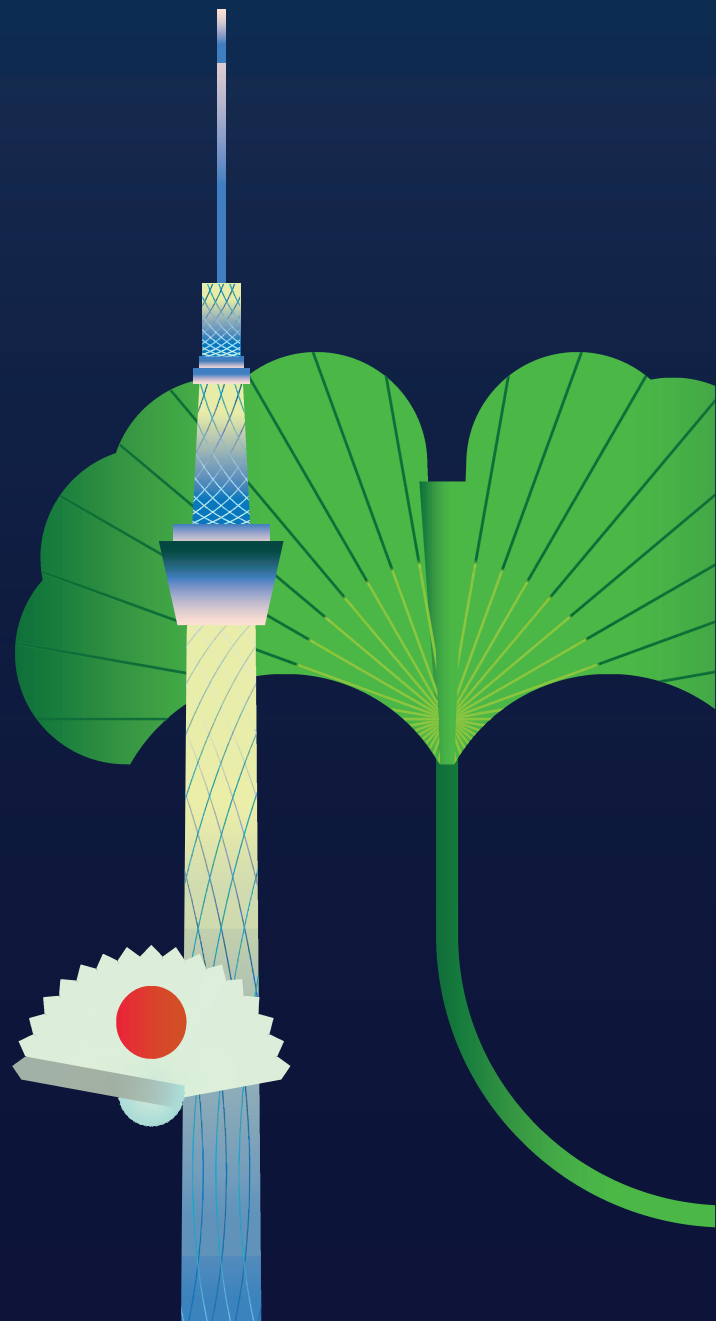
Applied Energy Symposium:

# LOW CARBON CITIES & URBAN ENERGY SYSTEMS

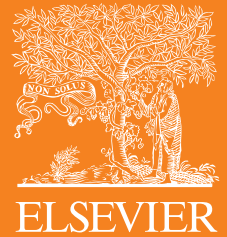
OCT 10 - 17, 2020 TOKYO/VIRTUAL CONFERENCE

**i<sup>o</sup>caae**

International Conference on Applied Energy



# Applied Energy



*Applied Energy* covers a broad range of subjects from innovative technologies and systems of both fossil and renewable energy to the economic industrial and domestic use of energy.

## Reasons why you should publish in *Applied Energy*

### Speed

As an online only journal, there are no print delays, so once accepted your article will be made available online and fully citable quickly

### Visibility

*Applied Energy* is available via ScienceDirect, one of the biggest academic publishing platforms, so your article will be accessible by more than 12 million researchers, scientists, students and professionals from around the world.

### Impact

*Applied Energy* has a Journal Impact Factor of **8.848\*** and a CiteScore **16.4\*\***

### Value

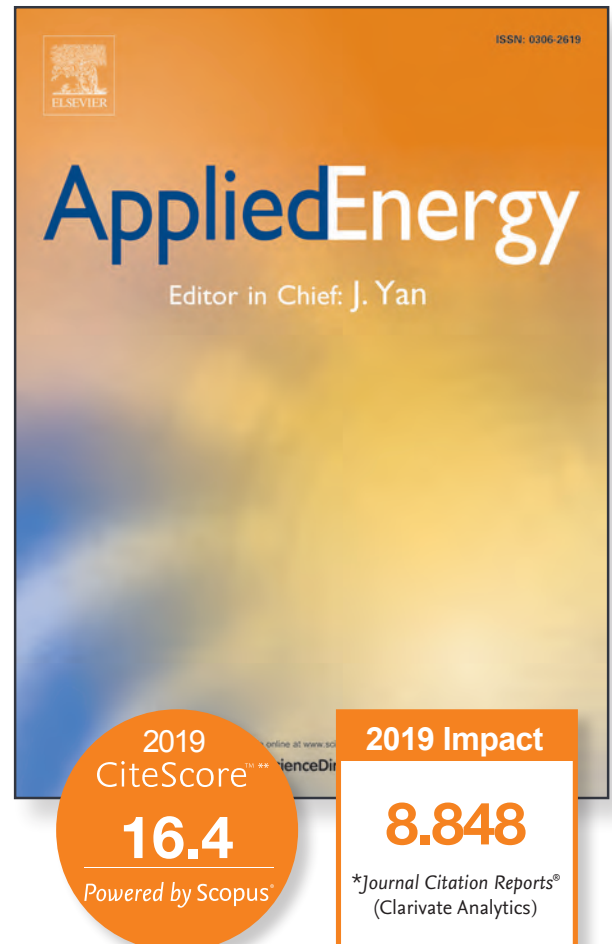
When you submit a manuscript to *Applied Energy* there are no submission fee, page charges or online colour costs

### Openness

*Applied Energy* supports open access, so you can choose to make your research freely available

### Reach

When your article has been published online, you will be sent a ShareLink which offers 50 days of complimentary online access to your article



Applied Energy Editors & Editorial Board Meetings: Virtual Meeting at IC AE2020

\*\*CiteScore is an indicator of journal citation impact based on Scopus data. It measures the average number of citations in a given year from documents published in 5 previous calendar years. See journalmetrics.scopus.com for more information on CiteScore™ metrics.

Submit your manuscript today: <http://bit.ly/ApEnergy>

- **Welcome to CUE2020**
- **Keynote Speakers**
- **Committees**
- **Practical Guide**
- **Acknowledgments**
- **Speaker's Guide**
- **About Sophia University**
- **Panel Sessions**
- **Program at a Glance**
- **Oral Presentations**
- **ICAE2020 Introduction**
- **Research Sharing Platforms**

# Welcome to CUE2020



**Welcome to CUE2020-Applied Energy Symposium 2020:** *Low carbon cities and urban energy systems.*

Cities are rapidly getting on top of the agendas of various initiatives worldwide aimed at decreasing the cost and carbon footprint of energy products, services and activities. The demands and pressure on energy infrastructure and resources obliges city infrastructure and consumers to adapt intelligently to ensure efficient, affordable and sustainable solutions.

Developing intelligent energy solutions for resilient urban systems is a global and complex challenge which involves interdisciplinary fields. With this as theme of the conference, CUE2020 aims to provide a premier international forum for all stakeholders including academia, industry and policy decision makers to present and share latest findings in all aspects across this domain, discussing how smart technologies and services can integrate the production and use of energy to support a more sustainable and resilient urban system.

CUE2020 is organized by the international journal, Applied Energy and Applied Energy Innovation Institute (AEii), hosted by Sophia University. Due to the COVID-19, the event will be held in virtual symposium with the new dates on Oct 10-17, 2020 for sharing the most recent progress of research RD&Ds in urban energy systems.

The conference will include keynotes and invited speeches, plenary sessions, oral presentations and poster sessions. All accepted papers will be published in Energy Proceedings, see [www.energy-proceedings.org](http://www.energy-proceedings.org). Selected best papers from the conference will be considered for publication in a special issue of Applied Energy (<https://www.journals.elsevier.com/applied-energy>) (IF=8.848).

We are looking forward to meeting you.

Prof. Tielong Shen  
Sophia University

Prof. Jinyue Yan  
Editor-in-chief of Applied Energy

# Keynote Speakers



**Dr. Yoshiki Yamagata**

Principal Researcher, Center  
for Global Environmental  
Research

National Institute for  
Environmental Studies

## ***Sustainable Urban Systems Design Approach Integrating Building, Transport and Human Energy Use Models***

### **Abstract:**

World's major cities need to be decarbonized to mitigate the climate change by 2050. Over 150 cities in Japan have already announced to decarbonize the cities. Now, their additional new challenge is how COVID-19 heavily impacted cities can be recovered to realize sustainable cities in the After-Corona era. For that purpose, we are developing a new urban systems design approach for sustainable cities in the after-corona situations. We simulate and visualize the future cities considering human behavior changes regarding building and mobility energy uses in the cities.

### **Short Bio:**

YOSHIKI YAMAGATA graduated from the University of Tokyo (PhD in System Science) in 1985. Since 1991, he works at the National Institute for Environmental Studies (NIES). He is also afflicted as a visiting scholar at International Institute for Applied Systems Analysis (IIASA, Vienna) and Institute of Statistical Mathematics (ISM, Tokyo). His recent research topics include: Land use scenario analysis, Urban resilience modeling, Urban systems design for smart communities.



**Prof. Markus Kraft**

Department of Chemical  
Engineering and  
Biotechnology  
Churchill College Cambridge

## ***Intelligent Decarbonisation of Cities***

### **Abstract:**

Cities are rapidly changing as they strive to accommodate the further 2.5 billion people that will be living in urban areas by 2050. Managing this dynamic means harmonising internal conflicting demands – be it for housing, business, leisure, mobility, energy, or ecology – as well as managing external shocks. Data on every aspect of everyday city life is rapidly growing in volume (generating ‘big data’), diversity of sources (from mobile phone to satellite) and variety of types (demographic, spatial, temporal). New ways of managing that data are needed to improve city planning knowledge.

In my talk I shall investigate how such diverse kinds of data can be made mutually legible by developing a semantic, extendible representation of relationships between them, what is known as a knowledge graph. This process, if demonstrated, will help planners and designers generate more reliable information and knowledge about cities – sites, neighbourhoods, areas or systems – and how they change. The knowledge graph we are currently developing together with a team from ETH Zurich builds on the J-Park Simulator (JPS) which is the signature project in the C4T programme of CARES at the University of Cambridge and part of the <http://www.theworldavatar.com/> project. JPS consists of a network of IRIs comprising domain ontologies, a knowledge base and different types of agents. One important application is the modelling and optimisation of eco-industrial parks. This includes the electrical grid, various networks of materials, for example, waste heat network along with a detailed model of each industrial process. In my talk, I shall explain how JPS works, show a couple of use cases, and explain how we shall use Knowledge Graph technology for the planning of future cities.

# Keynote Speakers

## Short Bio:

Prof. Markus Kraft is a Fellow of Churchill College Cambridge and Professor in the Department of Chemical Engineering and Biotechnology. He is the director of CARES, the Singapore-Cambridge CREATE Research Centre, and Principle Investigator of C4T the "Cambridge Centre for Carbon Reduction in Chemical Technology", which is a CARES research programme. Professor Kraft obtained the academic degree 'Diplom Technomathematiker' at the University of Kaiserslautern in 1992 and completed his Doctor rerum naturalium in Chemistry at the same University in 1997. Subsequently, he worked at the University of Karlsruhe and the Weierstrass Institute for Applied Analysis and Stochastics in Berlin. In 1999 he became a lecturer in the Department of Chemical Engineering, University of Cambridge. In 2012 he obtained a ScD form the same University. He has a strong interest in the area of computational modelling and optimisation targeted towards developing CO2 abatement and emissions reduction technologies for the automotive, power and chemical industries.

## *Optimization modeling of Energy and environmental systems: A*

### *Canadian case*

#### Abstract:

Canada has committed to reduce its carbon emissions by 30% below 2005 level by 2030 under the Paris Agreement. This commitment is resulting in severe socio-economic impacts, and exacerbated the vulnerability of energy sectors in emission-intensive provinces and territories (e.g. Alberta and Saskatchewan). Previously, many efforts were made in examining how Canada, especially western provinces, could meet the national target without seriously damaging the country's socio-economic systems. A systematic approach would be vital to achieve desired compromises among multiple regions and sectors, as well as cost-effective actions for emission mitigation. Therefore, this study aimed at developing non-deterministic energy systems optimization models within Canadian contexts. Approaches of stochastic and fuzzy programming were integrated into the modeling framework, and thus uncertainties and risks in various energy and environmental activities were tackled. Trade-offs between minimized abatement costs and maximized socio-economic benefits were reflected. Interactive relationships among multiple jurisdictions and socio-economic sectors were addressed to support multidimensional co-operations in emission reductions. Specifically, GHG emissions from various sectors within multiple jurisdictions were investigated, and the associated constraints, targets and embedded risks were examined. Scenarios involving carbon tax, abatement means, efficiency expectation and technology alternative were designed to reflect the uncertainties and risks among multiple policy options. The modeling results would help support the management of Canadian energy systems with enhanced resilience to the national commitment to the Paris Agreement. Thus, desired policies could then be formulated.

#### Short Bio:

Gordon Huang is Tier 1 Canada Research Chair and Executive Director of Institute for Energy and Environment at University of Regina, Canada. He holds BSc from Peking University, and PhD from McMaster University (Canada). He has led over 200 energy- and environment-related projects, produced over 1000 SCI journal papers with an SCI-based H-index of 70, and supervised over 100 graduate students with Over 40 of them appointed as university faculty members (in Canada, USA, China, UK, Singapore, Hongkong). He is Fellow of Canadian Academy of Engineering, President of ISEIS, and editor-in-chief or board member for over 10 SCI journals.



**Prof. Gordon Huang**

Tier 1 Canada Research  
Chair and Executive Director  
of Institute for Energy and  
Environment

University of Regina

# Committees

## CONFERENCE CHAIRS

Prof. T. Shen (Co-Chair)

Prof. J. Yan (Co-Chair)

## ORGANIZING COMMITTEE

Prof. H. Li (Co-Chair)

Dr. F. Wallin (track chair)

Dr. X. Yang (track chair)

Dr. H. Zhang

Dr. Y. Ding

Dr. J. Peng

Dr. X. Wang

Dr. Y. Zhao

Dr. W. Zheng

Dr. P. Campana

Ms. W. Nookuea

Mr. M. Jiang

Ms. Y. Yang

Prof. G. Huang (Sophia Univ.)

Dr. Y. Zhang (Sophia Univ.)

Dr. F. Xu (Sophia Univ.)

## SECRETARIAT

Prof. H. Li

Ms. W. Nookuea

Ms. Y. Yang

Mr. M. Jiang

## INTERNATIONAL SCIENTIFIC COMMITTEE

Prof. J. Yan (Chair), Editor-in-Chief, Applied Energy

Prof. S.K. Chou (Co-Chair), Editor, Applied Energy

Prof. U. Desideri (Co-Chair), Editor, Applied Energy

Prof. Y. Yang (Co-Chair), Editor, Applied Energy

M. Beer, USA

T.B. Johansson, Sweden

C. Rakopoulos, Greece

Y. Yamagata, Japan

S. Campanari, Italy

S.A. Kalogirou, Cyprus

A.P. Roskilly, UK

H.X. Yang, Hong Kong

B. Chen, China

L. Kazmerski, USA

J. Schoonman, Netherlands

K. Yoshikawa, Japan

W.H. Chen, Taiwan

M. Kraft, UK

T. Shamim, USA

D.K. Zhang, Australia

D. Chiaramonti, Italy

A. Lecuona-Neumann, Spain

M. Sorrentino, Italy

S. Cordiner, Italy

D.J. Lee, Taiwan

R. Span, Germany

E. Dahlquist, Sweden

M.K. H. Leung, Hong Kong

B. Stigson, Switzerland

S. Deng, Hong Kong

Y.C. Leung, Hong Kong

N. Zhou, USA

N. Duic, Croatia

H.L. Li, Sweden

G. Strbac, UK

N. Fromer, USA

N. Li, China

F.C. Sun, China

S.V. Garimella, USA

X.G. Li, Canada

H. Sun, China

A.K. Gupta, USA

B.Q. Lin, China

E. Thorin, Sweden

D. Guan, China

P. Linga, Singapore

S.T. Tu, China

G. Hammond, UK

Z. Luo, China

O. Veneri, Italy

Y. He, China

H. Lund, Denmark

C.S. Wang, China

N. Hedin, Sweden

P. Lund, Finland

C.H. Wang, Singapore

J. Hetland, Norway

R. Madlener, Germany

J. Whalen, Canada

T. Hong, South Korea

C. Marnay, USA

Y.M. Wei, China

K. Hubacek, Netherlands

A.F. Massardo, Italy

J.Z. Wu, UK

N. Jenkins, UK

M. Obersteiner, Austria

X.H. Xia, South Africa

H.G. Jin, China

S. Pincetl, USA

H.M. Xu, UK

## Organized by

Asian Development Bank

Applied Energy

Applied Energy Innovation Institute (AEii)

## Hosted by

Sophia University

## Co-organized by

Mälardalen University Sweden

## Supported by

Asian Development Bank (ADB)

## Date

October 10-17, 2020

## Time Difference

GMT + 8 hours



# Acknowledgements



上智大学  
SOPHIA UNIVERSITY



Applied Energy  
Innovation Institute



ASIAN DEVELOPMENT BANK



**MÄLARDALEN UNIVERSITY**  
**SWEDEN**



International Conference on Applied Energy

# Speaker's Guide

## Presentation

Length of presentation material should be in accordance with your allocated time. You are requested to load your presentation files before the session starts. Each oral presentation at the breakaway venues is limited to 15 minutes, which include 3 minutes questions and answers. Please refer to this program booklet for actual presentation times. You are kindly requested to be present in the relevant online room at least 10 minutes before the session starts.

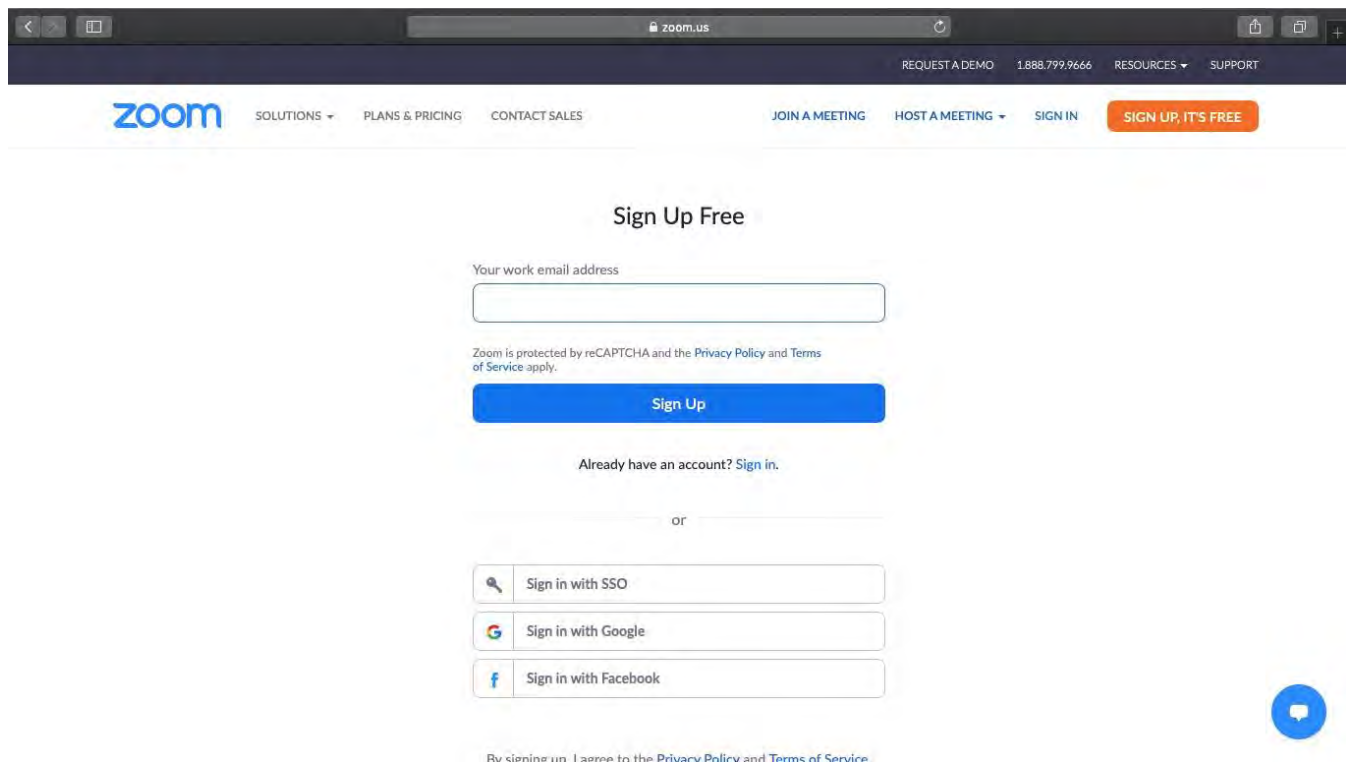
Please join in CUE 2020 by ZOOM (<https://zoom.us/>). The ZOOM IDs are shown in the schedule. We will send the password of ZOOM meetings to the attendees through Email on Oct. 9. You can choose either do the live presentation or play the pre-recorded video. If you choose video, please contact with the corresponding session chair. There is no requirement or template for the material for presentation. Please feel free to make your presentation material. You can use the following ZOOM room to test your devices and network (room ID: 844 7537 6327; Password: 798489). If you also want to publish your poster or presentation material, you could choose EnerarXiv (EnerarXiv Poster and EnerarXiv Presentation: <http://www.enerarxiv.org/index.html>). We will help to apply for the DOI link for each submission.

**Note: If you still have not received the password after 5:00 PM Oct. 9 (Beijing time), please contact us ASAP ([cue2020@applied-energy.org](mailto:cue2020@applied-energy.org)).**

## A. How To Get Started With Zoom

**Note: If you are in China, please skip this step and go to step B directly.**

**Step 1:** To get started with Zoom, head to <https://zoom.us/>, and click on the “SIGN UP” button that’s at the top-right corner of the screen.



The screenshot shows the Zoom website's sign-up page. At the top, there is a navigation bar with links for "REQUEST A DEMO", "1.888.799.9666", "RESOURCES", and "SUPPORT". Below this, the main navigation includes "zoom", "SOLUTIONS", "PLANS & PRICING", "CONTACT SALES", "JOIN A MEETING", "HOST A MEETING", "SIGN IN", and a prominent orange "SIGN UP, IT'S FREE" button. The main content area is titled "Sign Up Free" and contains a form for creating a new account. The form asks for a "Your work email address" and has a "Sign Up" button. Below the form, there is a link for "Already have an account? Sign in." and three options for signing in with SSO, Google, or Facebook. At the bottom, there is a small checkbox for "By signing in, I agree to the Privacy Policy and Terms of Service." and a blue chat bubble icon.

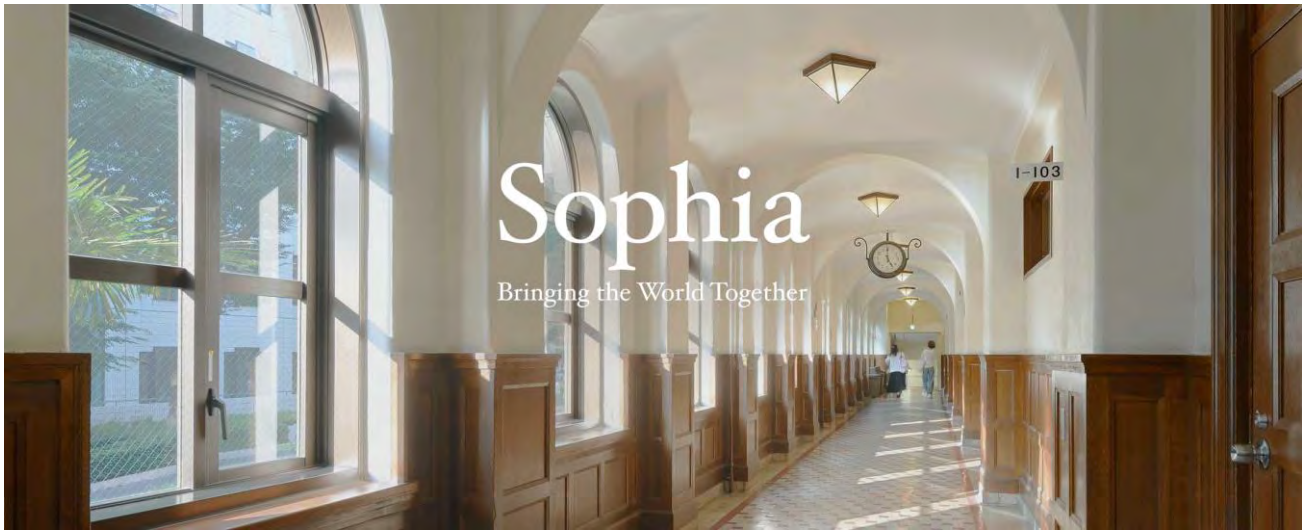
**Step 2:** You have two options when it comes to creating a Zoom account.

You can either:

- Create a new account using your work email address.
- Sign in using SSO (Single Sign-On) or your Google or Facebook account.

If you're using Zoom for work purposes, it's best to sign up using your work email address.

# About Sophia University



Sophia University, (also known by its Japanese name, 上智大学, Jōchi Daigaku) is considered one of the top private research universities in Japan. According to the Times Higher Education, Sophia, 2020 Japan University Rankings, and is placed in the 3rd position among all private universities in Japan. Founded by the Roman Catholic religious order of the Society of Jesus in 1913, the University has grown from its 3 original academic departments of Philosophy, German Literature, and Commerce to 9 undergraduate Faculties and 10 Graduate Schools, with over 1,800 foreign students.

Ever since Sophia was established, the University has been a leader in the internationalisation of Japanese universities. It had been conducting classes both in English and Japanese, and welcoming students from abroad from China, Korea, and even from Europe. Soon afterward, Sophia gained national repute as the leading institution in globalisation, foreign languages, and literature in Japan. As a prominent institution for research and higher learning in the fields of the social sciences, humanities, and natural sciences, the University has been selected by the Japanese Ministry of Education to be one of 37 universities to receive funding for its internationalisation efforts through the "Top Global University Project".

Today, Sophia has international students from 77 countries. It also has forged agreements with 298 overseas universities in 59 countries. It also possesses student exchange programs with several other top universities throughout the world, including Georgetown University, Yale University, The University of Georgia, Sogang University, Hong Kong University, and the University of Cologne. Before 1957, the university only admitted male students to degree programs, but the numbers of male and female students are now more or less equal. Sophia's alumni are referred to as "Sophians"; they include the 79th Prime Minister of Japan, Morihiro Hosokawa, several politicians represented in the National Diet of Japan, and professors at various institutions.

The University has 9 undergraduate faculties with 29 departments as well as 10 graduate schools with 25 programmes. With over 14,021 students as of 2019, the University provides academic opportunities for students from Japan and overseas to study in Japan. Sophia also possesses a wide-variety of English-taught academic programmes, such as Green Science Programme.





# Future Energy Center

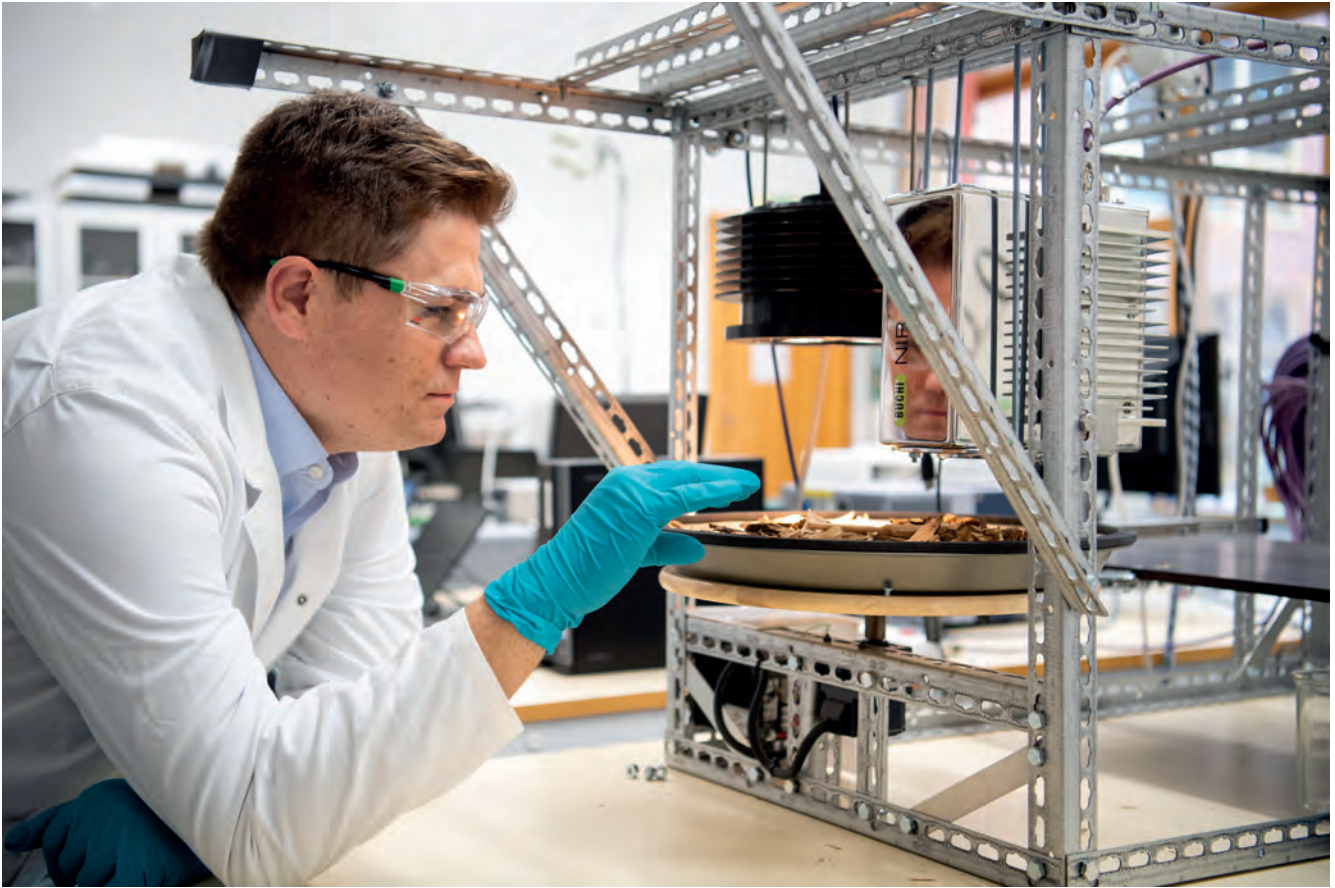
The Future Energy Center (FEC) is an internationally competitive research environment at Mälardalen University (MDH), Sweden. FEC focus on renewable energy, resource efficiency and digitalisation – towards a sustainable future, in co-production with industry and society.

FEC meets the future challenges in energy and environmental systems by investigating and developing processes and systems for increased resource efficiency and digitalisation in the transition towards a renewable energy system. A core area is enhancing the flexibility, to accommodate intermittent renewable energies such as solar and wind, and to meet the growing need of capacity. Resource efficiency includes utilizing bioenergy sources and at the same time enabling recovery of other resources, as for example nutrients. Another important area is investigating possible process integrations for both increased flexibility and resource efficiency. Further, digitalisation concerns developing new mathematical methods for model based diagnostics, decision support, optimization and control. Different simulation tools and soft sensors built on e.g. spectral measurement techniques are

used in combination to develop new systems for optimization and control. Interdisciplinary work and the integration of research approaches from engineering and natural sciences with those in social sciences and humanities perspectives, as for example markets, big data handling and behaviour, are important to consider.

FEC conducts education within energy, building and environmental engineering at bachelor, master and postgraduate levels. Strategic collaboration with industry is an important part of the education. On-going activities include development of modern web-based education, which extends to the international market. Moreover, FEC participates in several research schools in collaboration with industry and the public sector.

**THE FUTURE ENERGY CENTER PRODUCES OVER 100** publications per year, including in the top ranked journals Nature Energy and Nature Climate Change. FEC Professors are active in leading international communities and organises several international conferences together with other partners. FEC has 40+ ongoing projects, of which most are carried out in collaboration with industry and the public sector.



Today, the center comprises 8 professors, 20 senior researchers and about 30 graduate students. The research environment is characterised by a high level of cross-collaboration and communication that drives synergies in interdisciplinary work. International exchange including visiting professors and other researchers at FEC has been highly active over the past 10 years, with visiting professors from Canada, South Africa, Norway, India, and China etc. The Future Energy Center has an annual research budget of about 40 million SEK of which around 70% is external funding.

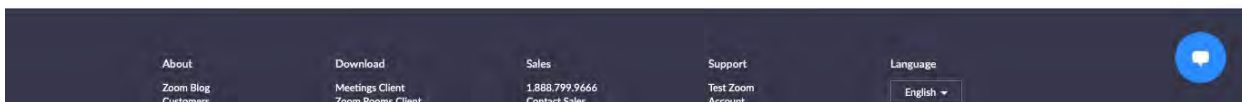
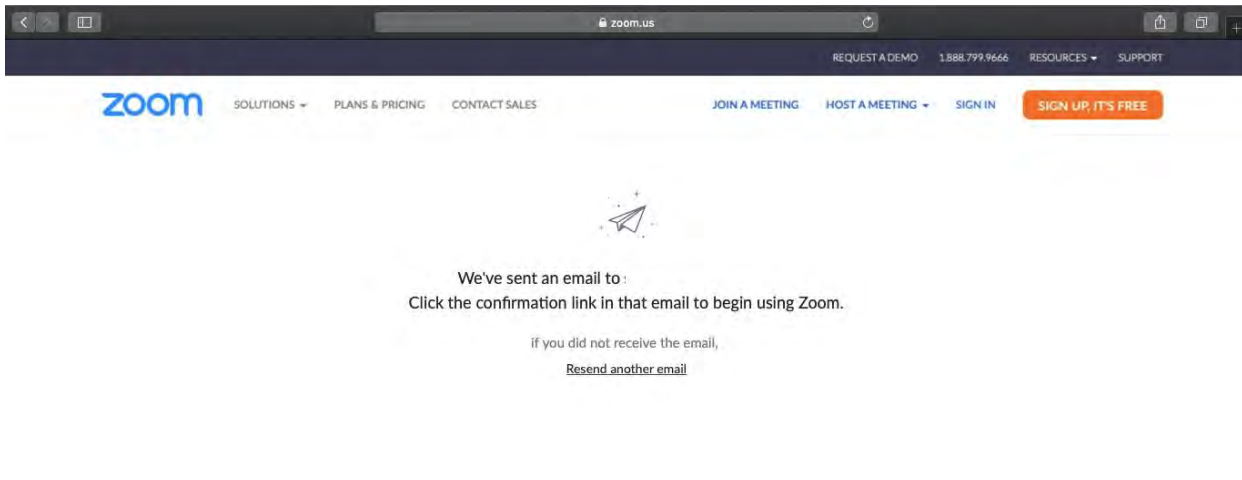
**FEC HAS STRONG RELATIONSHIPS WITH INDUSTRY** as well as with recognized national and international centers, including universities across the world. The collaborations with other international partners are carried out through international platforms, where activities connected to the ICAE conference is one important part. The research within FEC is an important part of the development of MDH's strategic collaboration with both private and public sector, partly based on strategic agreements with for example ABB and Bombardier Transportation. In addition, cooperation is carried out with several regional small and medium sized companies. There is also a strong development of energy related interests in industry in the Mälardalen region as for example the establishment of Northvolt Labs and Hitachi ABB Power Grids.



# Speaker's Guide

**Step 3:** Zoom will now send you an email with a confirmation link.

Click on that link to go to Zoom's Sign Up Assistant and sign in using your credentials.

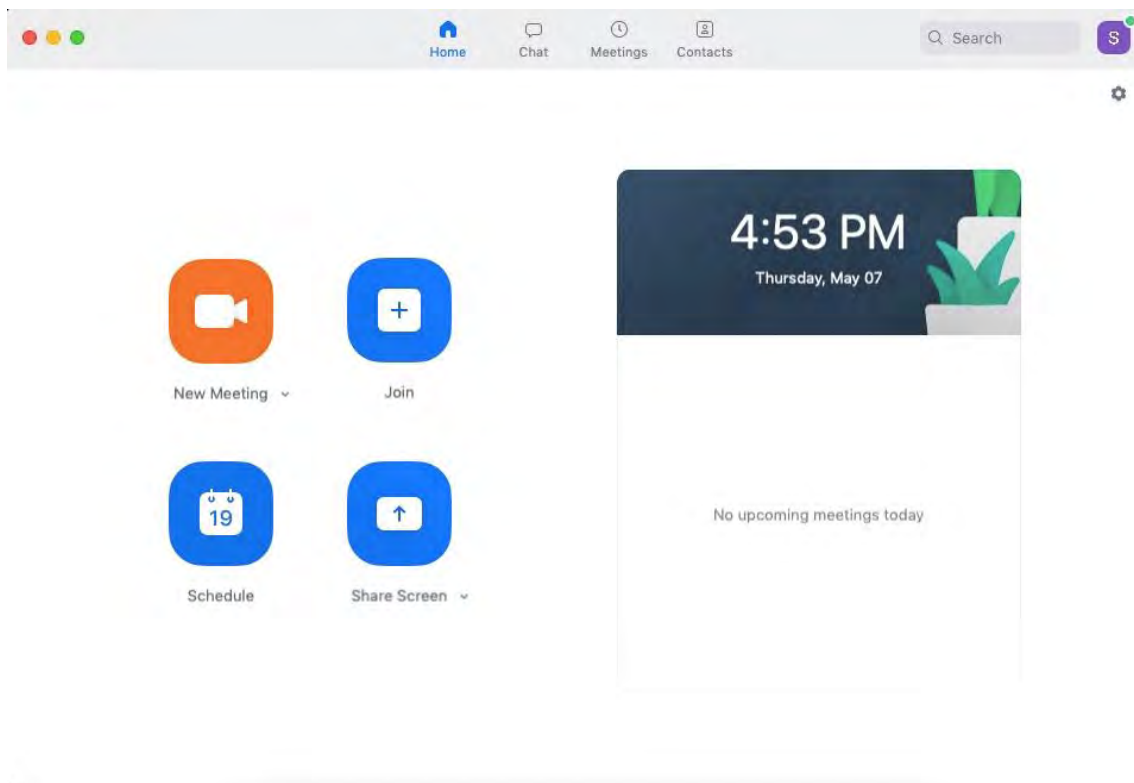


**Step 4:** Download the desktop app/ Zoom client from the Zoom website for easy access.

## B. How To Join A Zoom Meeting

**Note:** The same steps apply to both your desktop and your phone.

**Step 1:** Open the Zoom app and click on the “Join” icon.



**Step 2:** Paste the Meeting ID in the CUE2020 Schedule provided and the password in our email to you, add your display name for the meeting and click on the “Join” button.



UNiLAB

## **UNiLAB**

An international virtual lab of collective intelligence in Applied Energy.

**RESEARCH &  
INNOVATION  
WITHOUT BORDERS**



## **MISSION/OBJECTIVES**

Unlock the world's creativity to remove the traditional barriers to research and innovation.

Empower ever-growing Applied Energy's community of researchers and innovators to find success through the UNiLAB platform.

Maximize the win-win benefits through international cooperation in focused topics.



[www.applied-energy.org](http://www.applied-energy.org)

# Panel Sessions

## Panel Discussion: Low-carbon transitions of urban energy infrastructure and the role of climate investment and finance

2:00 PM – 4:15 PM, Oct 12

**Session chair:** Dabo Guan (Chair, Tsinghua University); Xi Liang (University of Edinburgh Business School)

**Participants:** D'Maris Coffman (Bartlett School of Construction and Project Management); Mike Lindfield (Urban Infrastructure Services Limited); Li Jin (Assistant General Manager, Shanghai Environment and Energy Exchange); Mr. Sun Yiting (Senior Advisor to CECEP Consultancy Limited and Standing Committee Member of CIFA).

To meet the Paris agreement's goal of limiting the temperature rise within 2 Degree Celsius, the OECD has estimated that annual investment in low-carbon infrastructure will need to increase by 1.5 times from now through 2050. There will be more than \$85 trillion in low-carbon infrastructure investment needed over the next 30 years and the gap remains significant in the energy sector.

An urgent action is required to direct climate investment and finance for energy infrastructure. The panel discussion invite experts from academia and industry to discuss about how to encourage institutional investors to release more capital into urban energy transition, what are potential strategies to clear and solve the barriers to climate investment and finance for urban energy infrastructure.

---

### Name

### Affiliation



**Prof.  
D'Maris Coffman**

---

#### Head of Bartlett School of Construction and Project Management

*Professor D'Maris Coffman PhD FRHistS FSA SFHEA is the Director (Head of Department) of the Bartlett School of Construction and Project Management. She is the Professor in Economics and Finance of the Built Environment at the Bartlett. She is a Managing Editor of Elsevier's Structural Change and Economic Dynamics and on the honorary editorial boards of The Journal of Cleaner Production, Economia Politica, and the Chinese Journal of Population, Resources and Environment. For 2019-2022, she is a Visiting Professor at the University of Milan (Statale). She is also a Guest Professor at Beijing Institute of Technology (2018-) and a Visiting Professor of Renmin University of China (2017-2023). Professor Coffman has published widely across the disciplines of climate change economics, infrastructure economics, economic geography and economic history. She has 90 academic publications (journal articles, books and contributed chapters), including journal articles in a range of outlets including Nature Human Behaviour, Nature Communications, Journal of Cleaner Production, Environmental Research Letters, Global Environmental Change, Geophysical Research Letters (including a Wiley Top Cited Article in 2018-19), and Natural Hazards, among others. She is also a senior editor of a book series with Palgrave Macmillan. She is also a fellow and member of several learned societies in the UK and Italy.*

---



# Panel Sessions



**Prof.**  
**Dabo Guan**

## **Department of Earth System Science, Tsinghua University**

*Dabo Guan FAcSS is a Distinguished Professor of Climate Change Economics at Department of Earth System Science, Tsinghua University, Chair at the Bartlett School of Construction and Project Management, University College London. He is a Senior Member at St Edmund's College, University of Cambridge, and the Fellow of Academy of Social Sciences, UK. He was elected as a Fellow of Royal Geographical Society in 2018. He serves as a Subject Editor of Applied Energy and board editor for Nature Sustainability, Scientific Data, One Earth and ERL. He is a council member of the Rockefeller Foundation Economic Council on Planetary Health. He served as a Lead Author for the 5th Assessment Report of Working Group III, IPCC.*

*Dabo has published over 160 articles, including 30+ articles published in Nature, Science, PNAS and Nature research journals. His h index is 57 and has over 12,000 times citations. He won the Leontief Prize 3 times and my paper at Environmental Science & Technology won the "Top Policy Paper 2007" and the PNAS Cozzarelli Prize 2014. He won the Philip Leverhulme Prizes (to award outstanding scholars who have made a substantial and recognised contribution to their particular field of study, recognised at an international level). Dabo is a Highly Cited Researcher for 2018 and 2019. His paper about climate change and beer drought received the 2018 Altmetric Top 100 award and was the most "talked about" climate change-related paper in media and social media.*



**Mr.**  
**Mike Lindfield**

## **Director of Urban Infrastructure Services Limited**

*Michael Lindfield has over 30 years of experience in international sustainable urban development. He previously served as chair of the Asian Development Bank's Urban Community of Practice and program manager of the Cities Development Initiative for Asia. He holds a doctorate in Economics from Erasmus University Rotterdam in the Netherlands.*



**Dr.**  
**Li Jin**

## **Assistant General Manager, Shanghai Environment and Energy Exchange**

*Ms Li Jin holds Ph.D. in economics, senior economist, with 10 years of experiences in carbon market, environmental and low-carbon market mechanism design, carbon financial products development, green financial products and business innovation. She joined Shanghai Environment & Energy Exchange in the very beginning when Shanghai Exchange established, and has deeply involved in the whole process of Shanghai ETS pilot scheme policy framework design, ETS management regulation, the construction of trading platform and other work. She was responsible for the design of carbon pledge loans, carbon repo, carbon lending trading and other innovative business models of carbon finance, and promoted the implementation and promotion among enterprises. Cooperated with Shanghai Clearing House, she led Shanghai Exchange team develop the first carbon financial derivative with CCP clearing in China, the Shanghai Emission Allowance Forward, which was launched in the end of 2016. She has been hosted several international cooperative projects, such as World Bank, ADB, UN, SPF, Energy Foundation and so on. She has also hosted many important projects from central and local governments. She has more than 20 papers published in various journals, covering carbon market, environmental finance, environmental policy, climate change economics and*

# Panel Sessions

other related fields. She has published seven professional works independent or participated in the compilation.



**Mr.  
Sun Yiting**

---

**Senior Advisor to China Energy Conservation and Environment Protection (CECEP) Consultancy Limited and Standing Committee Member of China's Climate Investment and Finance Association (CIFA)**

---

*Mr. Sun is a senior advisor in climate finance to China Energy Conservation and Environment Protection (CECEP) Consultancy Limited and Standing Committee Member of China's Climate Investment and Finance Association (CIFA). Sun is also appointed as a visiting fellow at the University of Edinburgh Business School. Prior to the current post, Yiting has been the vice secretary general of the International Financial Forum (IFF) and the director of the Center for Green Development at IFF. Sun has been actively supporting China's different government and financial regulatory departments in finding ways to develop a policy response to reduce the country's carbon footprint. Sun has been investigating the role of China's financial institutions and regulatory authorities in creating financial mechanisms that would encourage businesses to become genuinely green.*



**Dr.  
Xi Liang**

---

**Senior Lecturer in Energy Finance, University of Edinburgh Business School**

---

*Xi Liang CFA FRM has a Ph.D. in Energy Policy and Finance from the University of Cambridge Judge Business School, two Masters Degrees (in management research and process technology), a Diploma of Imperial College (DIC) (in Energy Technology for Sustainable Development) and a Bachelor's Degree (in electrical and electronic engineering). Dr Liang is the Secretary General and co-founder of the UK-China (Guangdong) CCUS Centre, a deputy director of China's Carbon Capture Utilisation and Storage Committee, and a standing committee member in the China's Climate Investment and Finance Association (CIFA), an honorary professor in the Bartlett School of Architecture at the University College London. Dr Liang has been leading on a total of GBP 4.3 million in research grants and on the USD 20 million China Resources Power Haifeng carbon capture pilot project.*

---

# Panel Sessions

## Panel Discussion: How to publish in an international journal

2:00 PM – 4:00 PM, Oct 14

Session chair: Jinyue Yan (Mälardalen University)

Participants: Hongxing Yang (The Hong Kong Polytechnic University); S.K. Chou (National University of Singapore); Sun Yan (Elsevier);

Several honored guests are deliberately invited to discuss about how to publish in an international journal. The live audience is warmly welcomed to raise questions and join the discussion. We focus on future publishing issues, including, but not limited to:

- Scholarly Publishing –before writing your paper
- Why to publish in an international journal
- Structuring your article
- Role of Reviewer
- Publishing Ethically
- Q&A

---

### Name

### Affiliation



Prof.  
Jinyue Yan

---

#### Mälardalen University

*Prof. Yan is chair professor of Energy Engineering at Mälardalen University & Royal Institute of Technology, Sweden. He is director of Future Energy Profile. Prof. Yan's research interests include advanced energy systems, renewable energy, advanced power generation, climate change mitigation technologies and related environment and policy etc. He is the Chair of International Conferences on Applied Energy. He is an academician of European Academy of Sciences and Arts, and serves as the advisory expert to the UN, EU, & ADB etc. Founder of ICAE, AEii, UNiLAB, iCET.*



Prof.  
Hongxing Yang

---

#### Hong Kong Polytechnic University

##### **Title of talk: Typical questions raised by reviewers**

*This talk will present a brief summary of typical questions and comments raised from reviewers and recommended proper responses to the questions during peer review process of a paper publication for young authors to write quality journal papers for publications. Some review comments are very critical and some are not, but proper responses from authors to the comments must be provided and relevant papers must be revised according to the comments if the comments are reasonable. Some comments might not be justified, but authors should also give explanations to persuade the reviewers to accept the justifications.*

*Prof. Yang is now leading the Renewable Energy Research Group (RERG) in the Department of Building Services Engineering, The Hong Kong Polytechnic University. His research interests cover a number of R&D topics in renewable energy applications and energy saving in buildings including solar photovoltaic integration in buildings, wind power generation, indirect evaporative cooling, ground-coupled heat pumps. He has over 480 academic papers and 6 professional books published. According to Elsevier, he has been listed as "Highly Cited*

---

# Panel Sessions

*Researcher” from 2016 to 2020. He is serving the International Journal of Applied Energy as editor and the Solar Energy Society of Hong Kong as president.*



**Prof.  
S.K. Chou**

## **National University of Singapore**

*S.K. Chou is chairman of the Technical Committee of the Cooling Energy Science and Technology Singapore (CoolestSG) Consortium at NUS. Between 1998 and 2007, he held positions as Head of the Department of Mechanical Engineering and Vice-Dean of the Faculty of Engineering at NUS. Professor Chou was the founding executive director of the Energy Studies Institute from 2007 to 2017. He is Honorary Fellow of the Institution of Engineers, Singapore (IES), and a Fellow of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, the Singapore Academy of Engineering, the ASEAN Academy of Engineering and Technology, and the Energy Institute, UK.*



**Dr.  
Yan Sun**

## **Elsevier**

*Yan Sun is an Executive Publisher at Elsevier. She graduated from School of Environment of Tsinghua University, China, and has also studied in UK, Sweden, the Netherlands and Poland. With more than 10 years' experience in STM publishing industry, Yan has taken various positions including Publisher for Environmental Sciences journals, Health and Medical Sciences journals as well as Senior Manager of Elsevier's Publishing Content Department. Currently Yan is responsible for a portfolio of international energy journals with over 30,000 yearly submissions, including global leading journals such as Applied Energy, Energy, Energy Conversion and Management, and also newly launched journals like eTransportation, Energy and AI, Advances in Applied Energy, etc.*

---

# Program at a Glance

Date	Oct. 10	Oct. 12	Oct. 14	Oct. 16
14:00-16:00-P	Opening Keynotes	Panel: Low-carbon transitions of urban energy infrastructure and the role of climate investment and finance	Panel: Scientific publication	
16:30-17:30-S1	Environment - Nexus of energy-water in urban system (1)	Integration - Big data, AI and smart cities (2)	Industry - Distributed energy system & blockchain (3)	Integration - Energy management, policy and economics (5)
16:30-17:30-S2	Environment - Nexus of energy-water in urban system (2)	Environment - Climate change & low carbon & ecological city indicators (2)	Industry - Energy storage (3)	Transport-EV and eco-traffic (1)
16:30-17:30-S3	Building - Demand response management & control	Industry - Energy storage (1)	Integration - Energy management, policy and economics (1)	
Date	Oct. 11	Oct. 13	Oct. 15	Oct. 17
14:00-15:00-S1	Integration - Big data, AI and smart cities (1)	Building - Energy efficiency in buildings (3)	Integration - Energy management, policy and economics (2)	Integration - Energy management, policy and economics (6)
14:00-15:00-S2	Environment - Urban wastes to energy and resources (1)	Environment - Climate change & low carbon & ecological city indicators (3)	Integration - Integrated energy networks and Microgrids (1)	Transport-EV and eco-traffic (2)
14:00-15:00-S3	Environment - Nexus of energy-water in urban system (3)	Industry - Distributed energy system & blockchain (1)		
15:15-16:15-S1	Industry - Materials for renewable and sustainable energy	Building - Energy efficiency in buildings (4)	Integration - Energy management, policy and economics (3)	Integration - Energy management, policy and economics (7)
15:15-16:15-S2	Environment - Urban wastes to energy and resources (2)	Environment - Climate change & low carbon & ecological city indicators (4)	Integration - Integrated energy networks and Microgrids (2)	Transport-EV and eco-traffic (3)
15:15-16:15-S3	Environment - Climate change & low carbon & ecological city indicators (1)	Industry - Energy storage (2)	Integration - Urban energy systems (1)	
16:30-17:30-S1	Building - Energy efficiency in buildings (1)	Building - Energy efficiency in buildings (5)	Integration - Energy management, policy and economics (4)	Building - District heating and CCHP)
16:30-17:30-S2	Environment - Negative emission technologies	Industry - Distributed energy system & blockchain (2)	Integration - Integrated energy networks and Microgrids (3)	Transport-EV and eco-traffic (4)
16:30-17:30-S3	Building - Energy efficiency in buildings (2)	Environment - Climate change & low carbon & ecological city indicators (3)	Integration - Urban energy systems (2)	

ZOOM Meeting ID: 838 2547 7968 (P); 823 7298 0742 (S1); 838 2547 7968 (S2); 858 0905 0844 (S3)

Time Zone: 14:00 (Beijing); 15:00 (Tokyo); 23:00 -1day (Los Angeles); 1:00 (Mexico City); 2:00 (New York); 7:00 (London); 8:00 (Sweden)

# Oct.10

# Oral Presentations

**Open Meeting ZOOM ID: 838 2547 7968 Password: 470346**

**Session Name: Opening Keynotes**

14:00-16:15	<b>Opening Keynotes</b>
-------------	-------------------------

16:15-16:30	<b>TEA/COFFEE BREAK</b>
-------------	-------------------------

**ZOOM ID: 823 7298 0742**

**Session Name: Environment - Nexus of energy-water in urban system (1)**

**Session Chair: Yamin Yan (China University of Petroleum Beijing); Guotao Wang (China University of Petroleum Beijing)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-116	CHUYU XIA, BIN CHEN	SPATIAL URBAN WATER-ENERGY NEXUS IN BEIJING
16:45-17:00	CUE2020-D-125	DELIN FANG, BIN CHEN	ECOLOGICAL NETWORK ANALYSIS FOR WATER-LAND RESOURCE IN URBAN SOCIO-ECONOMIC SYSTEM: A NEXUS PERSPECTIVE
17:00-17:15	CUE2020-D-132	JINZHU ZHANG, YU LIU, MEIFANG ZHOU, BOYANG CHEN, WEI ZHANG	THE ADJUSTMENT EFFECT OF IMPROVING ENVIRONMENTAL INFORMATION DISCLOSURE QUALITY ON ENVIRONMENTAL TAX: BASED ON THE PERSPECTIVE OF TIME AND INDUSTRY HETEROGENEITY
17:15-17:30	CUE2020-D-015	BOQIANG LIN, RUNQING ZHU	MINING INDUSTRY'S ENERGY AND CARBON PERFORMANCE IMPROVEMENT IN CHINA : EVIDENCE DURING 11TH AND 12 <sup>TH</sup> FIVE-YEAR PLAN

**ZOOM ID: 858 0905 0844**

**Session Name: Environment - Nexus of energy-water in urban system (2)**

**Session Chair: Grafilo, Laumar Alan Dave R. (University of the Philippines Diliman); Peran Li (University of Tokyo)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-113	ALI SAADON AL-OGAILI, AHMED N. AL-MASRI, ALI Q. AL-SHETWI	BUS-TO-GRID INTEGRATION OF BATTERY ELECTRIC BUSES CHARGING BY PHOTOVOLTAIC-GRID NETWORK
16:45-17:00	CUE2020-D-150	LIAN YE, GUANGWEI WANG, CHEN WANG, JIANLIANG ZHANG, XIAOMING MAO, HAIPENG TENG, CHUAN WANG	VALORISATION OF MUNICIPAL ORGANIC WASTE AS INJECTED FUEL FOR THE BLAST FURNACE IRONMAKING PROCESS

**ZOOM ID: 822 5061 2160**

**Session Name: Building - Demand response management & control**

**Session Chair: Chunyan Dai (Chongqing Technology & Business Institute); Rui Jing (Institute of Urban Environment, Chinese Academy of Sciences)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-055	YUECHEN, HUIHOU, XIANQIANGLI, XIXIU WU, MEIFANG WEI, AIHONG TANG	EVALUATION OF THERMOSTATICALLY CONTROLLED RESIDENTIAL LOAD DEMAND RESPONSE POTENTIAL BASED ON SMART METER DATA
16:45-17:00	CUE2020-D-056	FEIHU SUN, BIYING YU	RESEARCH ON OPTIMIZATION OF SMART HOME PARTICIPATING IN POWER DEMAND RESPONSE IN THE CONTEXT OF INTERNET OF THINGS
17:00-17:15	CUE2020-D-149	RUNYAO HUANG, JIN XU, HONGTAO WANG, YIDI ZHANG, SHIKE ZHANG	EVALUATION ON THE EFFICIENCY OF WASTEWATER TREATMENT PLANTS WITH DATA ENVELOPMENT ANALYSIS FROM A WATER-ENERGY NEXUS PERSPECTIVE

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

# Oct.11

# Oral Presentations

<b>ZOOM ID: 823 7298 0742</b> <b>Session Name: Integration - Big data, AI and smart cities (1)</b> <b>Session Chair: Xuan Song (Southern University of Science and Technology); Yuanjun Li (Stanford University)</b>			
Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-021	RUCONG LAI, LINGJUN QIAN, JINDONG TIAN, YONG TIAN	A MACHINE LEARNING-BASED METHOD FOR PARKING SLOT FEATURE DETECTION AT EXTREME CONDITIONS
14:15-14:30	CUE2020-D-032	XING LUO, DONGXIAO ZHANG, XU ZHU	THEORY-GUIDED LSTM FOR DAY-AHEAD FORECASTING OF PHOTOVOLTAIC POWER GENERATION
14:30-14:45	CUE2020-D-047	CHEN ZHIJIE, XIAO FU	DYNAMIC PERFORMANCE PREDICTION OF VEHICLE VARIABLE SPEED AIR CONDITIONER BASED ON LSTM RECURRENT NEURAL NETWORK
14:45-15:00	CUE2020-D-051	ZHAOYANG TENG, YI SUI	POTENTIAL TAXI RIDE-SHARING ANALYSIS BASED ON GPS TRAJECTORY DATA: A CASE OF QINGDAO
<b>ZOOM ID: 858 0905 0844</b> <b>Session Name: Environment - Urban wastes to energy and resources (1)</b> <b>Session Chair: Xingying Lan (China University of Petroleum Beijing); Xin Su (Dalian Institute of Chemical Physics, Chinese Academy of Sciences)</b>			
Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-085	WEI GUO, YAOWU LI, YAN SONG, ZHIQIANG WU	CHEMICAL LOOPING CONVERSION OF COAL WITH LIQUID OXYGEN CARRIER: THERMODYNAMIC RESEARCH
14:15-14:30	CUE2020-D-022	GRAFILO, LAUMAR ALAN DAVE R, MENANDRO, BERANA S	PROCESS AND EQUIPMENT MODELLING AND DESIGN OF A COFFEE HUSKS GASIFIER FOR DRYING OPERATION
14:30-14:45	CUE2020-D-033	BAUYRZHAN BIAKHMETOV, SIMING YOU, ABAY DOSTIYAROV	THE COMPARISON OF CENTRALIZED AND DECENTRALIZED CATALYTIC PYROLYSIS SYSTEMS FOR COMINGLED POST-CONSUMER WASTE PLASTIC MIXTURES VIA LCA AND ECONOMIC ANALYSIS
<b>ZOOM ID: 822 5061 2160</b> <b>Session Name: Environment - Nexus of energy-water in urban system (3)</b> <b>Session Chair: Xiaonan Wang (National University of Singapore); Saige Wang (Beijing Normal University)</b>			
Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-025	JIAHUI LU, JIAHONG LIU, YINGDONG YU	URBAN WATER-ENERGY NEXUS A REVIEW ON THE PERSPECTIVES OF ACCOUNTING AND METHODOLOGIES
14:15-14:30	CUE2020-D-030	SAIGE WANG, BIN CHEN	THE TEMPORAL CHARACTERISTICS AND DECOMPOSITION ANALYSES OF ENERGY CONSUMPTION FOR INDUSTRIAL WASTEWATER TREATMENT IN THE BEIJING-TIANJIN-HEBEI REGION
<b>ZOOM ID: 823 7298 0742</b> <b>Session Name: Industry - Materials for renewable and sustainable energy</b> <b>Session Chair: Yijin Feng (Chinese Academy of Sciences); Salman Ahmed (Shanghai Jiaotong University); Lei Liu (National Institute of Advanced Industrial Science and Technology)</b>			
Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-043	SALMAN AHMED, TAO MA	PERFORMANCE COMPARISON OF DIFFERENT EMISSIVE LAYERS IN A COMBINED PHOTOVOLTAIC-THERMAL AND RADIATIVE COOLING SYSTEM
15:30-15:45	CUE2020-D-082	JIANQING LIN, XING JU, CHAO XU, WENZHI LI	EXPERIMENTAL STUDY ON OPTICAL PROPERTY AND STABILITY OF AG-GLYCOL NANOFLUID FOR SPECTRAL SPLITTING PHOTOVOLTAIC/THERMAL SYSTEM
15:45-16:00	CUE2020-D-172	LV ZHENHUI, TIAN PENGFEI, PENG CHONG	PROBING THE ROLE OF CARBON IN THE REACTIVITY OF MOLYBDENUM-BASED HYDROTREATING CATALYSTS
<b>ZOOM ID: 858 0905 0844</b> <b>Session Name: Environment - Urban wastes to energy and resources (2)</b> <b>Session Chair: Rui Qiu (China University of Petroleum Beijing); Qiong Zhang (University of Tokyo)</b>			
Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-093	CHUNXING LI, JIE LI, SHENGYU XIE, XINYU ZHU, XIAONAN WANG, YIN WANG, IRINI ANGELIDAKI	ENHANCEMENT OF ENERGY RECOVERY FROM SYNERGETIC TREATMENT OF SEWAGE SLUDGE AND FOOD WASTE
15:30-15:45	CUE2020-D-011	BOQIANG LIN, YUNMING KUANG	URBAN GARBAGE CLASSIFICATION AND ENVIRONMENTAL POLLUTION: SURVEY EVIDENCES FROM CHINESE CITIES
15:45-16:00	CUE2020-D-171	MAJA PERČIĆ, NIKOLA VLADIMIR, AILONG FAN, MARIJA KORIČAN, IVANA JOVANOVIĆ	TOWARDS ENVIRONMENTALLY FRIENDLY SHORT-SEA TRANSPORTATION VIA INTEGRATION OF RENEWABLE ENERGY SOURCES IN THE SHIP POWER SYSTEMS
<b>ZOOM ID: 822 5061 2160</b> <b>Session Name: Environment - Climate change &amp; low carbon &amp; ecological city indicators (1)</b> <b>Session Chair: Minoru FUJII (University of Tokyo); Lu Sun (University of Tokyo)</b>			

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

# Oct.11

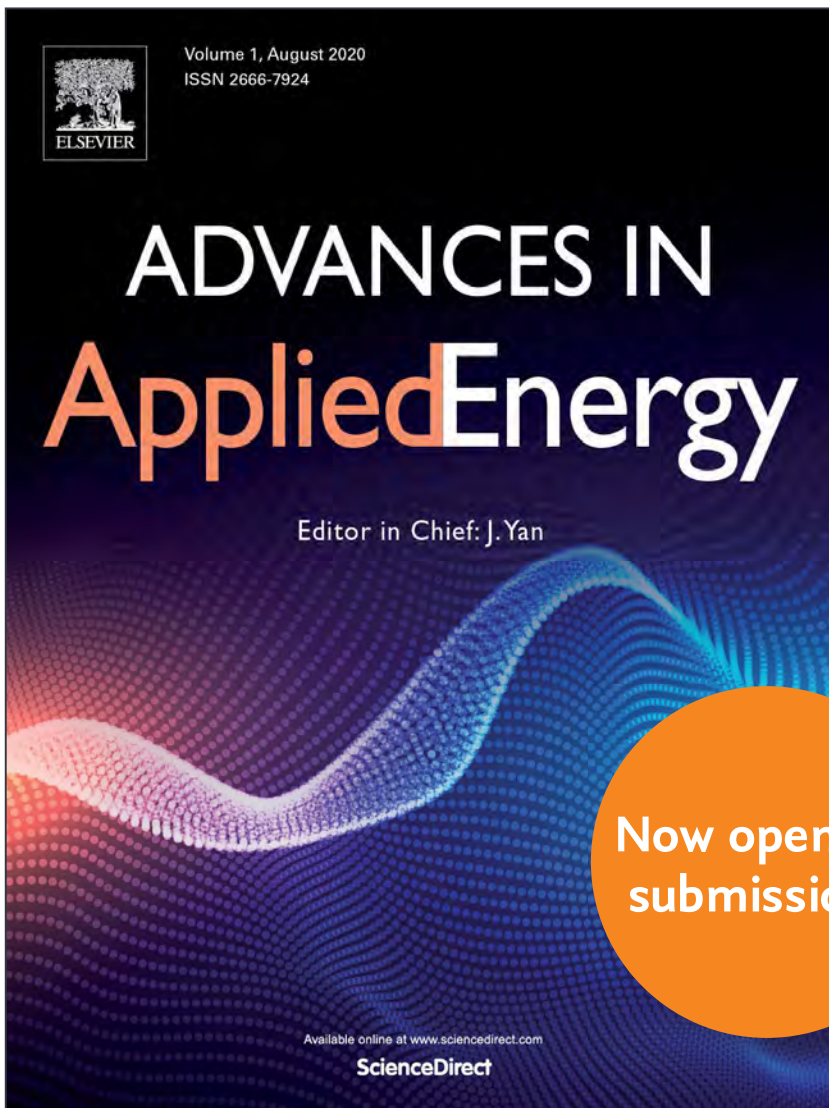
# Oral Presentations

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-006	MENGMENG XU, BOQIANG LIN	LEVERAGING CARBON LABEL TO ACHIEVE LOW-CARBON ECONOMY: EVIDENCE FROM A SURVEY IN CHINESE FIRST-TIER CITIES
15:30-15:45	CUE2020-D-007	BOQIANG LIN, JIAMIN GE	DOES INSTITUTIONAL FREEDOM MATTER FOR GLOBAL FOREST CARBON SINKS IN THE FACE OF ECONOMIC DEVELOPMENT DISPARITY?
15:45-16:00	CUE2020-D-026	BAOCHENG YU, SHUPEI HUANG, SIYAO LIU, XIANGYUN GAO	CHINESE REGION AIR POLLUTION SPILLOVER'S SPATIAL AND SEASON CHARACTERISTIC
16:00-16:15	CUE2020-D-028	LONG YIN, LI PEIRAN, GASPARATO ALEXANDROS, LOSSIFOVA DELJANA, DONG NANNAN	UNEQUAL CITY RESIDENT'S EXPOSURE TO PM 2.5 - A CASE STUDY OF SHANGHAI
<b>ZOOM ID: 823 7298 0742</b> <b>Session Name: Building - Energy efficiency in buildings (1)</b> <b>Session Chair: Worrada Nookuea (Mälardalens högskola); Guangcai Gong (Hunan University)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-001	XI FANG, GUANGCAI GONG, LIANG CHUN, WENQIANG LI, PEI PENG	A TRANSFER LEARNING METHOD FOR BUILDING ENERGY PREDICTION USING LONG SHORTTERM MEMORY AND DOMAIN ADVERSARIAL NEURAL NETWORK
16:45-17:00	CUE2020-D-002	WENQIANG LI, GUANGCAI GONG	A CLUSTERING-BASED APPROACH FOR "CROSS-SCALE" LOAD PREDICTION ON BUILDING LEVEL
17:00-17:15	CUE2020-D-018	YUNRAN MIN, HONGXING YANG, WENCHAO SHI	PERFORMANCE ENHANCEMENT OF INDIRECTIVE EVAPORATIVE COOLER TREATED BY HYDROPHOBIC COATING UNDER DEHUMIDIFYING CONDITIONS
<b>ZOOM ID: 858 0905 0844</b> <b>Session Name: Environment - Negative emission technologies</b> <b>Session Chair: Hailong Li (Mälardalen University); Fu Wang (Ningbo University)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-095	KUNPENG LI, HUI HU, SHICHENG YUAN, HAO HUANG	THE REMOVAL OF HGO FROM COAL-FIRED FLUE GAS BY WET OXIDATION
16:45-17:00	CUE2020-D-124	WENYUE ZHAO, LEKUN ZHAO, GANGGANG HOU, PENGXIANG DIWU, WANLI KANG, TONGJING LIU	IMPLEMENTATION MODE AND FIELD APPLICATION OF SYNERGISTIC CO2 HUFF AND PUFF IN COMPLEX FAULT-BLOCK RESERVOIR
17:00-17:15	CUE2020-D-159	WORRADA NOOKUEA, BEIBEI DONG, KÅRE GUSTAFSSON, HAILONG LI, JINYUE YAN, EVA THORIN	DIFFERENCES ON CAPTURING CO2 FROM THE COMBUSTION OF BIOMASS AND COAL BY USING CHEMICAL ABSORPTION
17:15-17:30	CUE2020-D-077	WENPING LUO, ZHONGXU TAI, DONGYING JU, AND JIANTING CAO	A GRID-CONNECTED PHOTOVOLTAIC POWER GENERATION AND ENERGY STORAGE SYSTEM BASED ON DEEP REINFORCEMENT LEARNING
<b>ZOOM ID: 822 5061 2160</b> <b>Session Name: Building - Energy efficiency in buildings (2)</b> <b>Session Chair: Jinqing Peng (Hunan university); Wandong Zheng (Tianjin university)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-059	JIAOJIAO ZHUANG, HAO YU, NING MAO	AN EXPERIMENTAL STUDY ON EFFECTS OF STEADY AND UNSTEADY HEAT FLUX ON FLOW BOILING IN STRAIGHT MICROCHANNEL
16:45-17:00	CUE2020-D-062	ZHIYAO XU, SHEN CHENG, JIAN ZHANG, JINWU GAO	STUDY ON A CHP PLANT USING SOFC-ICE INTEGRATED SYSTEM: ANALYSIS, MODELING AND CONTROL
17:00-17:15	CUE2020-D-067	LIN ZHENG, MARKUS MUELLER, CHUNBO LUO, XIAOYU YAN	A REVIEW OF DATA-DRIVEN APPROACHES FOR OCCUPANT'S BEHAVIOUR IN BUILDING ENERGY CONSERVATION

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.



# Advances in Applied Energy



A brand new,  
peer-reviewed  
open access  
journal.

Editor-in-Chief:

**Jinyue Yan**

*Royal Institute of Technology and  
Mälardalen University, Sweden*

Now open for  
submissions

 @ElsevierEnergy

 Elsevier Energy



Find out more and submit  
your manuscript online:  
**[elsevier.com/locate/adapen](http://elsevier.com/locate/adapen)**



# Advances in Applied Energy

*Advances in Applied Energy* is a new, open access journal for publishing cutting-edge research in the field of applied energy. This new, fully peer-reviewed journal is a companion journal to the highly regarded journal *Applied Energy*.

With an expert editorial team, led by Editor-in-Chief Professor Jinyue Yan (Royal Institute of Technology and Mälardalen University, Sweden) this exciting new journal aims to provide authors and the community with a quality open access outlet for significant and impactful research.

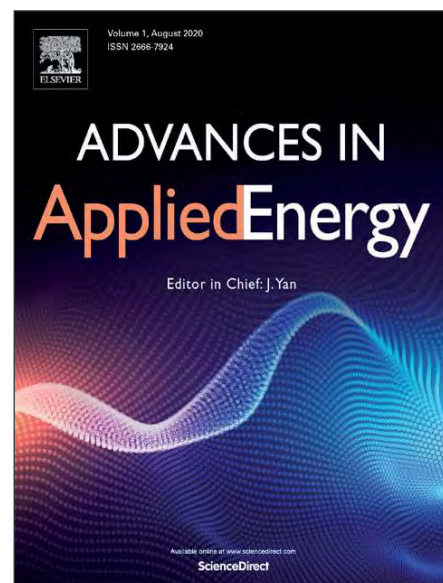
Covering a broad scope of topics, *Advances in Applied Energy* will publish applied research on all aspects of energy innovation that bridge the gaps between research, development, and implementation. Topics include, but are not limited to:

- New development trends: advances in cutting-edge applied energy areas, including renewable energy, clean energy conversion and utilization, smart and flexible system integration and optimization, energy storage, climate change mitigation, and energy sustainability;
- Systems characteristics: integrated energy systems such as industry, transport, and buildings; renewable energy; advanced conversion technologies; energy storage; emission mitigations; smart grids and mini/micro grids; distributed energy systems; e-mobility; and sustainability of energy systems;
- Energy nexus and synergy with other critical global issues: energy-water, energy-emissions, power-to-x, waste-to-energy, flexibility of renewable energy systems.

The journal considers full length articles, reviews, letters, commentaries, perspectives, forums and news & views for publication.



Read the full Aims & Scope:  
[elsevier.com/locate/adapen](https://www.elsevier.com/locate/adapen)



@ElsevierEnergy



Elsevier Energy



# Oct.12

# Oral Presentations

**Open Meeting ZOOM ID: 838 2547 7968 Password: 470346**

**Session Name: Low-carbon transitions of urban energy infrastructure and the role of climate investment and finance**

14:00-16:15	<b>Low-carbon transitions of urban energy infrastructure and the role of climate investment and finance</b>
16:15-16:30	<b>TEA/COFFEE BREAK</b>

**ZOOM ID: 823 7298 0742**

**Session Name: Integration - Big data, AI and smart cities (2)**

**Session Chair: Yuntian Chen (Pengcheng Laboratory, Shenzhen); Dou Huang (University of Tokyo)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-087	TENG ZHONG, KAI ZHANG, MIN CHEN	DEEP LEARNING-BASED ASSESSMENT OF NOISE BARRIER SOLAR PHOTOVOLTAIC POTENTIALS USING STREET-VIEW IMAGES
16:45-17:00	CUE2020-D-105	YUNTIAN CHEN, DONGXIAO ZHANG	THEORY GUIDED DEEP-LEARNING FRAMEWORK FOR LOAD FORECASTING
17:00-17:15	CUE2020-D-115	D.TAN, M.SUVARNA, J.LI, Y.S TAN AND X.WANG	MACHINE LEARNING FRAMEWORK FOR ENERGY MANAGEMENT IN SMART MANUFACTURING

**ZOOM ID: 858 0905 0844**

**Session Name: Environment - Climate change & low carbon & ecological city indicators (2)**

**Session Chair: Gal Hochman (Rutgers, The State University of New Jersey);Kangyin Dong (University of International Business and Economics)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-054	KE WANG, MEI LU	THE EFFECT OF CARBON EMISSION TRADING ON CHINA'S INDUSTRY
16:45-17:00	CUE2020-D-068	YIZE LI, SIMING YOU	DESIGN OF BIOCHAR YIELD PREDICTION MODEL VIA ADAPTIVE NUERO-FUZZY INFERENCE SYSTEM FOR ECONOMICALLY VIABLE AND ENVIRONMENTALLY FRIENDLY ASSESMENT
17:00-17:15	CUE2020-D-070	YATING LIU, BIN CHEN	PROVINCIAL WATER SCARCITY RISK FLOW AND FOOTPRINT ACCOUNTING FRAMEWORK
17:15-17:30	CUE2020-D-024	YI FANG, SIMING YOU	FORECAST OF RENEWABLE WIND POWER GENERATION IN SCOTTISH FARMS FOR OPTIMAL RENEWABLE ENERGY MANAGEMENT

**ZOOM ID: 822 5061 2160**

**Session Name: Industry - Energy storage (1)**

**Session Chair: Francesco CIUCC (California Institute of technology);Juan Fang (Chinese Academy of Sciences)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-012	BOQIANG LIN, RONGXIN WU	INDUSTRIAL AGGLOMERATION AND EFFECTIVE ENERGY SERVICE: PANEL THRESHOLD ANALYSIS FOR CHINA'S IRON AND STEEL INDUSTRY
16:45-17:00	CUE2020-D-020	XUQING YANG, ZHENZHU YU, ZHAN LIU, XIAOHU YANG	PROPOSAL AND THERMODYNAMIC ANALYSIS OF A NOVEL COMBINED THERMAL AND COMPRESSED AIR ENERGY STORAGE SYSTEM INTEGRATED WITH AN ABSORPTION POWER CYCLE
17:00-17:15	CUE2020-D-040	ZHONGXU TAI, SUSUMU, SATO, WENPING LUO, OSAMU HAMAMOTO, KENZO HANAWA, DONGYING JU	IMPROVEMENT OF CHARGE-DISCHARGE PERFORMANCE OF VANADIUM REDOX FLOW BATTERY BY THERMAL COATING OF CNT ON THE SURFACE OF POSITIVE ELECTRODE CARBON MATERIAL
17:15-17:30	CUE2020-D-089	HUAJING ZHANG, XUAN GU, DING LI	CCUS'S RESEARCH PROGRESS IN THE PAST 30 YEARS AND HOT SPOT FORECAST IN NEXT 30 YEARS ----CITATION NETWORK ANALYSIS BASED ON WOS DATABASE

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

# Oct.13

# Oral Presentations

**ZOOM ID: 823 7298 0742**

**Session Name: Building - Energy efficiency in buildings (3)**

**Session Chair: Haoran Ji (Tianjin University); Mengxue Zhao (City University of Hong Kong)**

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-078	HUANG HAILONG, ZHU JINFU	ANALYSIS OF HEATING SYSTEMS IN THE COAL-TO-ELECTRIC POWER PROCESS IN HEBEI PROVINCE, CHINA
14:15-14:30	CUE2020-D-107	ZHIHAO HE, LIN ZENG, JINGYU HAO, JIAOJIAO ZHUANG, NING MAO	AN EXPERIMENTAL STUDY ON FLOW AND HEAT TRANSFER CHARACTERISTICS OF OILY WATER FALLING FILM ON HORIZONTAL TUBES
14:30-14:45	CUE2020-D-083	MENGBING DU, MENGXUE ZHAO; XIAOLING ZHANG	DOES URBANIZATION LEAD TO MORE CARBON EMISSIONS? EVIDENCE FROM CHINA

**ZOOM ID: 858 0905 0844**

**Session Name: Environment - Climate change & low carbon & ecological city indicators (3)**

**Session Chair: Xiangping Hu (Norwegian University of Science and Technology); Yu Qiu (Central South University)**

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-090	PENGFEI JIN, DELIN FANG, SAIGE WANG, BIN CHEN	URBAN-RURAL DISPARITIES OF HOUSEHOLD CARBON FOOTPRINT IN CHINA
14:15-14:30	CUE2020-D-102	WENBO GU, XING LIU, ZHENWU CHEN, XIAOCHUN, ZHANG, TAO MA	EXPERIMENTAL INVESTIGATION ON THE PERFORMANCE EVALUATIONS OF THE BIFACIAL PHOTOVOLTAIC MODULES

**ZOOM ID: 822 5061 2160**

**Session Name: Industry - Distributed energy system & blockchain (1)**

**Session Chair: Santanu Bandyopadhyay (Indian Institute of Technology Bombay); Yufei Wang (China University of Petroleum Beijing)**

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-111	MIAO SHI, XIAOLING YU, YOUBO TAN, JIAWEI ZHANG, XIANGJU ZENG	STUDY ON ELECTROMAGNETIC-THERMAL COUPLING HEATING PROCESS OF ELECTROMAGNETIC INDUCTION HEATING DEVICE OF CIRCULATING OIL
14:15-14:30	CUE2020-D-131	DANDAN WANG, YEZE DAI, YALOU LI	EFFICIENT POWER-TO-GAS SYSTEM BASED ON RENEWABLE HYDROGEN AND BIOMASS GASIFICATION
14:30-14:45	CUE2020-D-138	TAO ZHANG, HUA BAI, SHUYU SUN	AUTOMATED CONTROL ON NATURAL GAS PIPELINES USING DEEP LEARNING ALGORITHMS

**ZOOM ID: 823 7298 0742**

**Session Name: Building - Energy efficiency in buildings (4)**

**Session Chair: Shuang Gao (Tianjin University); Minda Ma (Tsinghua University)**

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-110	MINDA MA, WEIGUANG CAI	TOWARDS LOW CARBON PATHWAY OF THE COMMERCIAL BUILDING SECTOR FOR 2070: LESSONS FROM CHINA
15:30-15:45	CUE2020-D-128	ZHIXIN ZHANG, TENG ZHONG, MIN CHEN, ZIXUAN ZHOU, YIJIE WANG, KAI ZHANG	ESTIMATION OF ROOFTOP SOLAR POTENTIAL USING PUBLICLY AVAILABLE GEODATA AND DEEPING LEARNING
15:45-16:00	CUE2020-D-136	SHAN LIU, SHIJUN YOU, HUAN ZHANG, WANDONG ZHENG, WENJIE ZHANG	INFLUENCE OF OUTDOOR AIR ON ENERGY CONSUMPTION OF RESIDENTIAL BUILDINGS IN NORTHERN CHINA WITH PASSIVHAUS TECHNOLOGY
16:00-16:15	CUE2020-D-140	YIAN LIN, ZIYANG ZHU, JIE LI, XIAOQIN SUN	INTEGRATED DESIGN OPTIMIZATION OF DISTRIBUTED PHOTOVOLTAIC SYSTEMS IN BUILDINGS WITH PHASE CHANGE MATERIALS

**ZOOM ID: 858 0905 0844**

**Session Name: Environment - Climate change & low carbon & ecological city indicators (4)**

**Session Chair: Dan Yan (Tsinghua University); Cuncun Duan (Beijing Normal University)**

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-109	CUNCUN DUAN, BIN CHEN	DRIVING FACTOR ANALYSIS OF GLOBAL CARBON EMISSIONS AND REDUCTION STRATEGIES BASED ON THE DYNAMIC TIME WARPING
15:30-15:45	CUE2020-D-139	ZHENKUN TAN, WENCONG YUE, XUMING JIANG, ZHIXIN SU, MENG XU	A HYBRID APPROACH OF OPTIMIZATION MODEL AND LIFE CYCLE ANALYSIS OF DIETARY PATTERNS FOR MITIGATING GREENHOUSE GAS EMISSIONS
15:45-16:00	CUE2020-D-161	MEI WANG, PENG ZHOU	WHEN AND HOW DOES EMISSION PERMIT ALLOCATION AFFECT THE COST-EFFECTIVENESS OF ETS?
16:00-16:15	CUE2020-D-066	Feng Ji, John Xu	ENHANCED VIRTUAL SYNCHRONOUS GENERATOR CONTROL STRATEGY FOR THERMOELECTRIC GENERATOR SYSTEM

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

# Oct.13

# Oral Presentations

**ZOOM ID: 822 5061 2160**

**Session Name: Industry - Energy storage (2)**

**Session Chair: Bo Yu (Beijing Institute of Petrochemical Technology); Jingfa Li (Beijing Institute of Petrochemical Technology)**

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-097	JIANXIAO ZHU, XUELING LIU, YUANMING WANG	INFLUENCE OF OPERATION PARAMETERS ON HEAT EXTRACTION PERFORMANCE OF DRY HOT ROCK
15:30-15:45	CUE2020-D-103	JUAN FANG, AMANJ KHERADMAND, HAIMEI XU, SHENGSHEN GU, WENWEN ZHANG, XIAOXIA YANG, QIBIN LIU	PHOTO-THERMO CATALYTIC HYDROGEN PRODUCTION FOR SOLAR FULL-SPECTRUM STORAGE OVER NON-METAL CARBON NITRIDE CATALYST
15:45-16:00	CUE2020-D-121	ZHAN LIU, ZIHUI LIU, XIAOHU YANG	MELTING PERFORMANCE ANALYSIS OF PHASE CHANGE MATERIAL IN LATENT HEAT STORAGE UNIT WITH Y-SHAPED FINS
16:00-16:15	CUE2020-D-122	XINYI WANG, BO YANG, PAN WEI, XIAOHU YANG, YA-LING HE	EFFECT OF FIN NUMBER ON THE MELTING PHASE CHANGE IN A HORIZONTAL FINNED SHELL-AND-TUBE THERMAL ENERGY STORAGE UNIT

**ZOOM ID: 823 7298 0742**

**Session Name: Building - Energy efficiency in buildings (5)**

**Session Chair: Petar Sabev Varbanov (Brno University of Technology); Bohong Wang (Brno University of Technology)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-148	SHI JIACHENG, XIE HUI, LIANG WEI, ZHENG YAWEN	ENERGY CONSUMPTION ANALYSIS OF AIR CONDITIONING SYSTEM IN CLEAN OPERATION DEPARTMENT: A CASE STUDY OF A HOSPITAL IN BEIJING
16:45-17:00	CUE2020-D-160	XIN WU, WEI ZHANG, LINGZHI XIE, OUFAN ZHAO, MO CHEN, ZIHAO LI, JIANHUI LI	STUDY ON THE PERFORMANCE OF PHOTOVOLTAIC ELECTROCHROMIC WINDOW SYSTEM AND IMPACT ON INDOOR LIGHTING ENVIRONMENT
17:00-17:15	CUE2020-D-168	SIHUI LIA, JINQING PENG, BOJIA LI, CHUJIE LU, YIMO LU, TAO MA	ZERO ENERGY POTENTIAL ANALYSIS OF PHOTOVOLTAIC DIRECT-DRIVEN AIR CONDITIONERS BASED ON THERMAL COMFORT USING MACHINE LEARNING METHODS

**ZOOM ID: 858 0905 0844**

**Session Name: Industry - Distributed energy system & blockchain (2)**

**Session Chair: Jie Yan (North China Electric Power University); Pei Huang (Dalarna University, Sweden); Shurkalov Petr (National Research University "Moscow Power Engineering Institute")**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-016	PEI HUANG, XINGXING ZHANG, MARCO LOVATI	A HIERARCHICAL DESIGN OF DISTRIBUTED BATTERY SYSTEM IN PV POWER SHARED BUILDING COMMUNITY
16:45-17:00	CUE2020-D-037	PENGFEI ZHU, JING YAO, ZAOXIAO ZHANG, JIANWEI REN, ZHEN WU	BIOMASS-FUELED SOFC-ENGINE HYBRID POWER GENERATION SYSTEM: ENERGY, EXERGY AND THERMO-ECONOMIC EVALUATIONS
17:00-17:15	CUE2020-D-098	JINGHANG SHI, BO QIU, LINQIAN WANG	A SHORT OVERVIEW OF BLOCKCHAIN USED FOR SPATIO-TEMPORAL DATA

**ZOOM ID: 822 5061 2160**

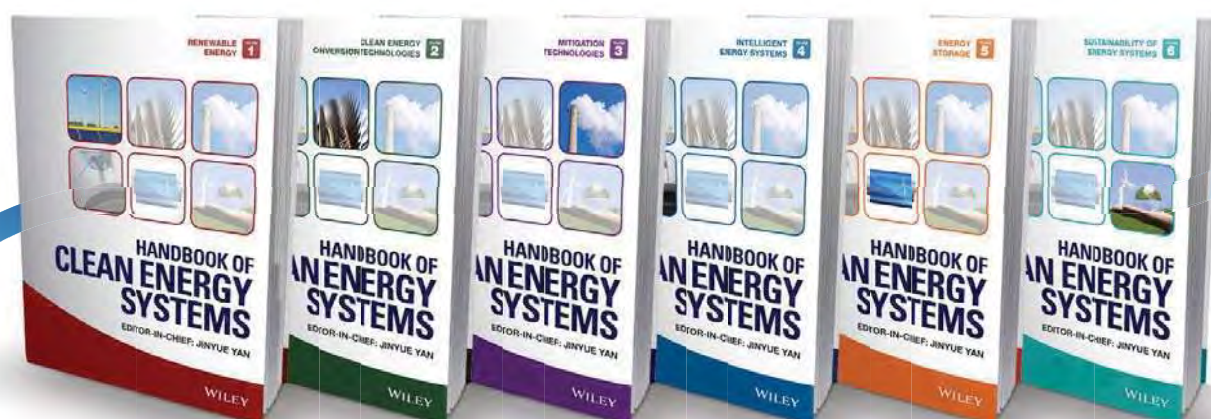
**Session Name: Environment - Climate change & low carbon & ecological city indicators (3)**

**Session Chair: Yin Long (University of Tokyo); Alexandros Gasparatos (University of Tokyo)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-029	XIAODAN HAN, WEI FANG	THE HETEROGENEITY EFFECT OF SO <sub>2</sub> ON DEPRESSION IN CHINA: FROM INDIVIDUAL, FAMILY AND PROVINCE PERSPECTIVES
16:45-17:00	CUE2020-D-034	MAITREYEE DEY, SOUMYA PRAKASH RANA, CLARKE V. SIMMONS, SANDRA DUDLEY	HIGH-RESOLUTION DATA-DRIVEN ANOMALOUS EVENT DETECTION FROM SOLAR DATA USING CLUSTERING LARGE APPLICATIONS BASED UPON RANDOMIZED SEARCH
17:00-17:15	CUE2020-D-052	PANYU ZHU, THOMAS WILKEN, VANESSA MIRIAM CARLOW, ELISABETH ENDRES	A PRELIMINARY RESEARCH ON THE BENCHMARK OF BUILDING RESOURCE CONSUMPTION AND SUSTAINABLE STRATEGIES IN CHINESE EASTERN CITIES – QINGDAO AS A CASE STUDY

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

Are you working  
on the challenging  
issues associated  
with the development  
of our future  
energy systems?



See how this  
new reference  
can help!

Find news, sample content and more at:  
[wileyonlinelibrary.com/ref/hces](http://wileyonlinelibrary.com/ref/hces)

WILEY-VCH

WILEY

# Oct.14

# Oral Presentations

**Open Meeting** ZOOM ID: 838 2547 7968 Password: 470346  
Session Name: Panel Scientific publication

14:00-16:15	Panel Scientific publication
16:15-16:30	TEA/COFFEE BREAK

ZOOM ID: 823 7298 0742

Session Name: Industry - Distributed energy system & blockchain (3)  
Session Chair: Zhou Wu (Chongqing University); Reza Malekian (Malmo University)

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-144	CHANGCHUN LIU, WEI HAN, ZEFENG WANG, NA ZHANG	A HIGH-EFFICIENCY POWER GENERATION SYSTEM BASED ON SELF-SUSTAINING SUPERCRITICAL WATER COAL GASIFICATION
16:45-17:00	CUE2020-D-167	LINQIAN WANG, BO QIU, JINGHANG SHI	RESEARCH PROGRESS OF ENCRYPTED KEYWORD SEARCH BASED ON BLOCKCHAIN

ZOOM ID: 858 0905 0844

Session Name: Industry - Energy storage (3)  
Session Chair: Menglian Zheng (Zhejiang University); Changchun Liu (Institute of Engineering Thermophysics, Chinese Academy of Sciences)

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-123	JUNFEI GUO, BO YANG, XIAOHU YANG, YA-LING HE	THERMAL PERFORMANCE OF A NOVEL SHELL-AND-TUBE LATENT HEAT THERMAL ENERGY STORAGE UNIT WITH ANGLED FINS
16:45-17:00	CUE2020-D-134	LI WEI, XINTONG BAI, MING WU	An H $\infty$ and ANN joint method for online supercapacitor temperature estimation
17:00-17:15	CUE2020-D-147	JUNYI TAO, ZHICHAO CHEN, LIMIN QI, MENGLIAN ZHENG	ONE-DIMENSIONAL ANALYTICAL MODEL FOR OPTIMIZING POROSITY DISTRIBUTION OF MULTI-LAYERED ELECTRODE IN REDOX FLOW CELLS

ZOOM ID: 822 5061 2160

Session Name: Integration - Energy management, policy and economics (1)  
Session Chair: Enrico Zio (Polytechnic University of Milan); Huai Su (China University of Petroleum Beijing)

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-071	YIWEI YANG, FENGYING YAN, HUA TIAN, XUAN WANG	LAND USE BASED METHOD EVALUATING AND RESTRAINING CARBON EMISSIONS FOR URBAN PLANNING
16:45-17:00	CUE2020-D-074	MENGYU ZHAI, GUOHE HUANG, YONGPING LI	DEVELOPMENT OF AN INTERACTIVE ENVIRO-ECONOMIC EQUILIBRIUM MODEL FOR GUANGDONG PROVINCE, CHINA
17:00-17:15	CUE2020-D-080	HONGQING CHU, HAoyun SHI, TIELONG SHEN	OPTIMAL ENERGY MANAGEMENT STRATEGY FOR HEVS WITH CONSIDERATION OF THERMAL DYNAMICS

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

# Oct.15

# Oral Presentations

**ZOOM ID: 823 7298 0742**

**Session Name: Integration - Energy management, policy and economics (2)**

**Session Chair: Qi Liao (China University of Petroleum Beijing); Xueqing Zou (China University of Petroleum Beijing)**

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-003	NAN SHANG, XIANG ZHANG, GUO-RI HUANG, WEI-DE GU, YI-HANG SONG	OPTIMAL STRATEGY ANALYSIS OF A LARGE-SCALE CONSUMER CONSIDERING DAY-AHEAD AND REAL-TIME POWER MARKET COUPLING
14:15-14:30	CUE2020-D-005	BOQIANG LIN, ZHENG LI	WHAT MATTERS IN THE DISTRIBUTIONS OF CLEAN DEVELOPMENT MECHANISM PROJECTS? A PANEL DATA APPROACH
14:30-14:45	CUE2020-D-008	BOQIANG LIN, ZHENSHENG L	CAN NATURAL GAS PRICING REFORM ESTABLISH AN EFFECTIVE MECHANISM EMPIRICAL EVIDENCE FROM CHINA
14:45-15:00	CUE2020-D-009	BOQIANG LIN, XIA WANG	FACTORS AFFECTING LOW-CARBON TRAVEL BEHAVIOR OF URBAN RESIDENTS: BASED ON THE THEORY OF PLANNED BEHAVIOR AND STRUCTURAL EQUATION MODEL

**ZOOM ID: 858 0905 0844**

**Session Name: Integration - Integrated energy networks and Microgrids (1)**

**Session Chair: Vincenzo Liso (Aalborg University); Yingru Zhao (Xiamen University)**

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-027	JIA LIU, HONGXING YANG, XI CHEN, KUI SHAN	STUDY ON HYBRID RENEWABLE ENERGY WITH BATTERY AND HYBRID VEHICLE STORAGE APPLICATIONS IN A ZERO-ENERGY BUILDING COMMUNITY IN HONG KONG
14:15-14:30	CUE2020-D-048	FANQI KONG, XINGTAO TIAN, LIANGTING WEI, XIAOJIE LIN	QUANTIFICATION OF MULTI-ENERGY COUPLING EFFECT IN INTEGRATED ENERGY SYSTEMS
14:45-15:00	CUE2020-D-065	HAO XU, JIANHUA JIANG, HAO WANG, PING WU, XI LI, JIAN LI	OPTIMAL SIZING AND OPERATION STRATEGY OF A SOFC BASED MICROGRID

**ZOOM ID: 823 7298 0742**

**Session Name: Integration - Energy management, policy and economics (3)**

**Session Chair: Yongtu Liang (China University of Petroleum Beijing); Liqiao Huang (China University of Petroleum Beijing)**

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-010	BOQIANG LIN, YUFANG CHEN	RETHINKING WILLINGNESS TO PAY FOR RENEWABLE ENERGY ELECTRICITY IN CHINA
15:30-15:45	CUE2020-D-013	BOQIANG LIN, JUNPENG ZHU	RESOURCE ENDOWMENT, MARKET-ORIENTED REFORM, AND INDUSTRIAL TRANSFORMATION: EMPIRICAL EVIDENCE FROM CHINESE CITIES
15:45-16:00	CUE2020-D-041	ZHAO LIU, LAN-YE WEI, YUE-JUN ZHANG	HOW DOES AIR POLLUTION AFFECT TECHNOLOGICAL INNOVATION OF CHINESE CITIES?

**ZOOM ID: 858 0905 0844**

**Session Name: Integration - Integrated energy networks and Microgrids (2)**

**Session Chair: Ali Saadon (University Tenaga Nasional); Tao Jiang (Northeast Electric Power University)**

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-133	ZHIBIN LIU, YUNFEI MU, HONGJIE JIA, KUIHUA WU, YI SONG, KAI YUAN	MULTI-ENERGY FLOW CALCULATION METHOD FOR REGIONAL INTEGRATED ENERGY SYSTEM BASED ON INTELLIGENT RECOGNITION ENERGY HUB
15:30-15:45	CUE2020-D-049	JING XU, YU HUANG, DONGFENG WANG, LI SUN	OPTIMAL SCHEDULING OF MULTI-ENERGY HUB SYSTEMS WITH INCOMPLETE INFORMATION
15:45-16:00	CUE2020-D-099	XUEYONG TANG, SHENG WANG, BIN SUN, QINGSHENG LI, YI DING	CONTINGENCY MANAGEMENT IN INTEGRATED ELECTRICITY AND GAS SYSTEMS CONSIDERING GAS FLOW DYNAMICS
16:00-16:15	CUE2020-D-158	TING LIANG, PAUL A. WEBLEY, XIAOHUI SHE, YONGLIANG LI, YI-CHUNG CHEN, YULONG DING	OPTIMAL DESIGN AND OPERATION OF A HYBRID RENEWABLE MICRO-GRID WITH DECOUPLED LAES

**ZOOM ID: 822 5061 2160**

**Session Name: Integration - Urban energy systems (1)**

**Session Chair: Fredrik Wallin (Mälardalen University); Lanyu Li (National University of Singapore)**

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-129	JIAN LIN, YUAN HUANG, XUETAO BAI, LI LI, NIANYUAN WU, MEINA XIE, JINGZHI HUANG, SHAN XIE, CHAO MENG, YINGRU ZHAO	MULTI-OBJECTIVE OPTIMIZATION OF RENEWABLE URBAN ENERGY SYSTEM PLANNING COMBINED WITH WASTE TO ENERGY TECHNOLOGIES FOR OFF-GRID ISLAND
15:30-15:45	CUE2020-D-151	MIN GUO, YIMING XIAN, MINGCHAO XIA	A REVIEW OF REGIONAL ENERGY INTERNET MODELS CONSIDERING COMPLEX DYNAMIC EVOLUTION WITH TIME DELAY

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

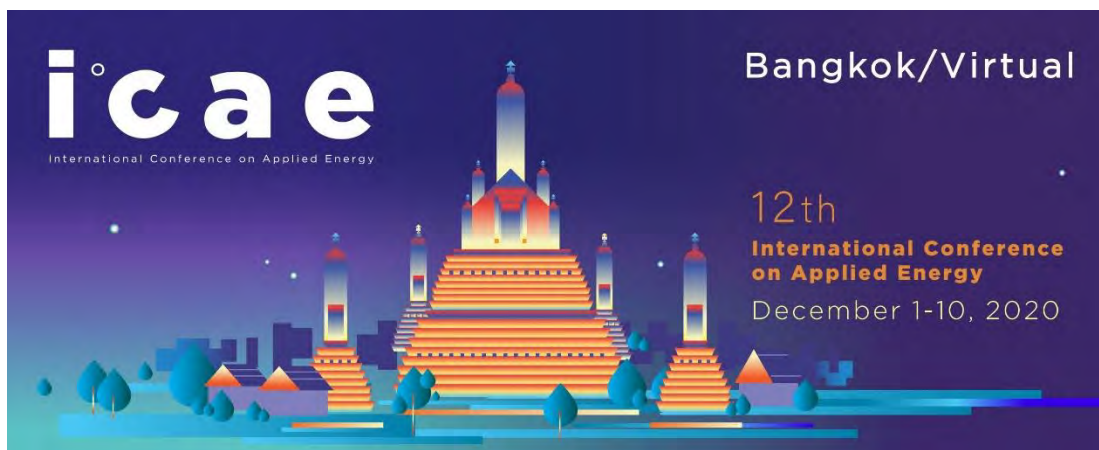


Oct.15

## Oral Presentations

15:45-16:00	CUE2020-D-169	YANG YE, WEILONG WANG, JIANFENG LU, JING DING	PERFORMANCE IMPROVEMENT OF METAL HYDRIDE HYDROGEN STORAGE REACTORS BY USING PHASE CHANGE MATERIALS
<b>ZOOM ID: 823 7298 0742</b> <b>Session Name: Integration - Energy management, policy and economics (4)</b> <b>Session Chair: Qiang Wang (China University of Petroleum Huadong); Zuming Liu (National University of Singapore)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-042	L.Y. ZHANG, L.C WEI, X. CUI, Z. LU, X. YANG, L.W. JIN	STUDY ON THE THERMAL AND FLUID BEHAVIORS IN A CONVENTIONAL WAVY CHANNEL AND A CURVE-WAVE CHANNEL
16:45-17:00	CUE2020-D-044	RUI QIU, QI LIAO, DONGHUI ZHAO, XIAO YU, XINTONG WEI, YONGTU LIANG, HAORAN ZHANG	LIQUID BIOFUEL PARTICIPATES IN THE REFINED OIL MARKET COMPETITION: INTEGRATED SUPPLY CHAIN OPTIMIZATION
17:00-17:15	CUE2020-D-46	ZUMING LIU, SHUKUN WANG, XIAONAN WANG	GAME THEORY-BASED MODELING AND OPTIMIZATION OF RENEWABLE MULTI-ENERGY SYSTEM DESIGN
17:15-17:30	CUE2020-D-057	ZIHAO ZHAO, BIYING YU	PROVINCIAL RENEWABLE ENERGY DISPATCH PLANNING AND ASSESSMENT BASED ON RPS POLICY IN CHINA
<b>ZOOM ID: 858 0905 0844</b> <b>Session Name: Integration - Integrated energy networks and Microgrids (3)</b> <b>Session Chair: Xiaohu Yang (Xi'an Jiaotong University); Quan Zhou (The University of Birmingham)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-162	WENYA WANG, ZHENFU LI, PENG ZHOU	MEASURING DYNAMIC COMPETITIVE RELATIONSHIP AND INTENSITY AMONG THE GLOBAL COAL IMPORTING TRADE
16:45-17:00	CUE2020-D-170	FENG HAN, HONG GUO, XIAO-FENG DING	DESIGN OF INTEGRATED LIQUID COOLING SYSTEM FOR AN ALL SIC 650 V, 116 A SILICON CARBIDE MOSFET POWER MODULE
<b>ZOOM ID: 822 5061 2160</b> <b>Session Name: Integration - Urban energy systems (2)</b> <b>Session Chair: Pietro Campana (Mälardalen University); Jie Li (University of Singapore)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-004	RUI JING, JIANYI LIN	MULTI-OBJECTIVE ENERGY PLANNING OF XIAMEN CITY CONSIDERING TRADE-OFF BETWEEN COST, EMISSIONS, AND RESILIENCE
16:45-17:00	CUE2020-D-031	YAMIN YAN, QI LIAO, HAORAN ZHANG, YONGTU LIANG	LOGISTIC AND SCHEDULING OPTIMIZATION OF MOBILIZED AND DISTRIBUTED BATTERY FOR MAXIMIZING THE RENEWABLE PENETRATION
17:00-17:15	CUE2020-D-045	ANG XUAN, XINWEI SHEN, HONGBIN SUN, QINGLAI GUO	A CVAR-BASED PLANNING METHOD FOR INTEGRATED ENERGY SYSTEM CONSIDERING ENERGY STORAGE SYSTEM
17:15-17:30	CUE2020-D-075	CHUNYAN DAI, MIN TANG, YING LIU, JIJIANG HE, ZHONGQING YANG, YING YANG, RUI JING, JIANGYI HUANG	BUILDING A SMART ENERGY INTERCONNECTION ECOSYSTEM FOR SMART AND SUSTAINABLE CITY

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.



## ICAE2020: Virtual Conference

The 12th International Conference on Applied Energy (ICAE2020) was originally planned to be held during Nov. 29 – Dec. 2, 2020, in Bangkok, Thailand with the theme as “Sustainable energy solutions for changing the world”. The venue of ICAE2020 is at the United Nations Conference Centre (UNCC).

Due to the COVID-19, the event will be held in a virtual conference with the new dates on Dec. 1-10, 2020.

ICAE2020 will include keynotes and invited speeches, plenary sessions, dedicated workshops, oral and video presentations on different topics:

- » Renewable Energy
- » Mitigation Technologies
- » Energy Storage
- » Energy Management, Policy, Economics & Sustainability
- » Clean Energy Conversion Technologies
- » Intelligent Energy Systems
- » Energy Sciences
- » Geoenergy

A special workshop/symposium in cooperation with UN ESCAP (United Nations Economic and Social Commission for Asia and the Pacific) will be organized on the topic of energy connectivity, universal access to modern energy services, renewable energy, energy efficiency and cleaner use of fossil fuels.

Participants of the ICAE2020 are kindly invited to submit a paper. All papers will be peer-reviewed and the accepted papers are required to be presented at the Conference orally or by poster. Selected papers from the ICAE2020 will be recommended by the Scientific Committee for the further consideration of publication in prestigious journals including Applied Energy, or other renowned international journals.

### Key dates:

- » Deadline for draft paper: Oct. 15, 2020
- » Notification of acceptance: Oct. 25, 2020
- » Online registration close: Nov 20, 2020
- » Review: Oct. 15 – Oct. 25, 2020
- » Deadline for final paper: Nov. 25, 2020
- » Conference: Dec. 1 – Dec. 10, 2020

For more information, please visit [www.applied-energy.org](http://www.applied-energy.org), or contact: [icae2020@applied-energy.org](mailto:icae2020@applied-energy.org)

Please contact us if you would like to propose and organize a session, a panel, a workshop, or a special forum in the Conference.

# Oct.16

# Oral Presentations

**ZOOM ID: 823 7298 0742**

**Session Name: Integration - Energy management, policy and economics (5)**

**Session Chair: Sui Yi (Qingdao University); Mei Sun (Jiangsu University)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-086	XIE HUI, SONG YUANYUAN, LIAN LINWEN, SHEN XIAODONG, HAO BIN	MULTI-AGENT BASED MODEL FOR SIMULATING ENERGY CONSUMPTION IN COLLEGE DORMITORIES
16:45-17:00	CUE2020-D-101	DAN FANG, JIN YANG	POLYCENTRIC SPATIAL STRUCTURE AND CARBON DIOXIDE EMISSION: AN EMPIRICAL ANALYSIS BASED ON NIGHTTIME LIGHT DATA
17:00-17:15	CUE2020-D-106	YANZI GUO, MEI SUN, YANCHAO ZHANG, CUIXIA GAO, PEIPEI ZHANG	DOES USER CONSUMPTIVE AND PURCHASING POWER IMPACT ON ELECTRICITY DEMAND? AN OPTIMIZATION MODELING BASED ON CREDIT MECHANISM

**ZOOM ID: 858 0905 0844**

**Session Name: Transport-EV and eco-traffic (1)**

**Session Chair: Fuguo Xu (Sophia University); Shixue Wang (Tianjin University)**

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-014	BOQIANG LIN, YU CHEN	PUBLIC OR PRIVATE CHARGING INFRASTRUCTURE? - EVIDENCE FROM THE MICRO SURVEY DATA OF CONSUMER CHOICE
16:45-17:00	CUE2020-D-035	LIKE YUE, SHIXUE WANG, LINJUN LI	EFFECT OF CATHODE CATALYTIC AND MICRO-POROUS LAYER CONTACT PRESSURE DISTRIBUTION ON PROTON EXCHANGE MEMBRANE FUEL CELL COLD-START PERFORMANCE
17:00-17:15	CUE2020-D-036	RUNSEN ZHANG, JUNYI ZHANG, YIN LONG	ASSESSING THE CONTRIBUTION OF ROAD TRANSPORT ELECTRIFICATION TO LOW-CARBON CITY DEVELOPMENT USING A LAND USE-TRANSPORT MODEL
17:15-17:30	CUE2020-D-038	QUAN ZHOU, JI LI, YINGLONG HE, BIN SHUAI, HUW WILLIAMS, HONGMING XU, YANFEI LI, FUWU YAN	K-FOLD FUZZY LEARNING FOR IMPLEMENTATION OF DYNAMIC PROGRAMMING RESULTS IN REAL-TIME ENERGY MANAGEMENT OF THE PLUG-IN HYBRID VEHICLE

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

Oct.17

## Oral Presentations

ZOOM ID: 823 7298 0742

Session Name: Integration - Energy management, policy and economics (6)

Session Chair: Wendong Wei (Shanghai Jiaotong University); Jiří Jaromír KLEMEŠ (Brno University of Technology)

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-114	GUANGYONG ZHANG, LIXINTIAN, MIN FU, WENBIN ZHANG	RESEARCH ON THE INTERDEPENDENT NETWORK OF THE THERMAL COAL PRICE BASED ON DIRECTED LIMITED PENETRABLE VISIBILITY GRAPH
14:15-14:30	CUE2020-D-117	YUFEI REN, GUANGDONG LI, BIN CHEN	THE CONVERGENCE OF CARBON INTENSITY IN CHINA AT THE PREFECTURE-LEVEL

ZOOM ID: 858 0905 0844

Session Name: Transport-EV and eco-traffic (2)

Session Chair: Yahui Zhang (Yanshan University); Huicui Chen (Tongji University)

Time	Paper ID	Author	Paper Title
14:00-14:15	CUE2020-D-050	HUICUI CHEN, WANCHAO SHAN, TONG ZHANG, PUCHENG PEI	STUDY ON THE INFLUENCE OF SEGMENTED FUEL CELL ON INTERNAL PARAMETER DISTRIBUTION
14:15-14:30	CUE2020-D-060	BO ZHANG, TIELONG SHEN	OPTIMAL POWER MANAGEMENT STRATEGY FOR PARALLEL HEVS IN ACCELERATION MODE
14:30-14:45	CUE2020-D-072	YUPO MA, YU FENG, ZHENG ZHANG, ZENGBIN WU, TONGZHOU LIAO, CHANGCHENG WANG, ZHANYU ZHAN, ZHENYU ZUO, GUONING SHI	EXPERIMENTAL STUDY ON THE MATCH BETWEEN ELECTRONIC UNIT PUMP (EUP) AND DIESEL ENGINE
14:45-15:00	CUE2020-D-076	XIAOFENG DING, PENG LU	ANALYTICAL SWITCHING LOSS MODELING FOR SIC MOSFETS BASED TRACTION SYSTEMS FOR ELECTRIC VEHICLES

ZOOM ID: 823 7298 0742

Session Name: Integration - Energy management, policy and economics (7)

Session Chair: Zhiling Guo (University of Tokyo); Delin Fang (Beijing Normal University)

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-141	XIAN ZHANG, MAO XU, SHIJIE WEI, JING-LI FAN	TECH-ECONOMIC EVALUATION OF CO <sub>2</sub> -ECBM TECHNOLOGY—A CASE STUDY OF CHINA
15:30-15:45	CUE2020-D-143	ZHOU MEIFANG, LIU YU, YANG SHUNXIANG, ZHANG JINZHU, LI XINBEI, ZHANG WEI	RETHINKING ENVIRONMENTAL TAX AND CARBON TAX: A COMPARISON BASED ON COSTBENEFIT ANALYSIS IN CHINA
15:45-16:00	CUE2020-D-145	YAJING LI, BIN CHEN, DELIN FANG	DRIVERS OF ENERGY-RELATED PM <sub>2.5</sub> EMISSIONS IN THE JING-JIN-JI AGGLOMERATION DURING THE 2002-2015 PERIOD
16:00-16:15	CUE2020-D-152	GE ZHAO, PENG ZHOU	INEQUALITY OF RENEWABLE ENERGY TECHNOLOGY INNOVATION IN CHINA

ZOOM ID: 858 0905 0844

Session Name: Transport-EV and eco-traffic (3)

Session Chair: Jinyu Chen (University of Tokyo); Wenjie Liao (Sichuan University)

Time	Paper ID	Author	Paper Title
15:15-15:30	CUE2020-D-079	QIONG ZHANG	A COMPARATIVE ANALYSIS OF THE ADOPTION POTENTIAL OF HYDROGEN FUEL CELL VEHICLE IN TOKYO
15:30-15:45	CUE2020-D-081	LINWEN CHEN, ZUOYING JIANG, XING LIU, XUOXIAN WANG, SENYOU YANG, GIUSEPPE IOPPOLO, LU FENG, WENJIE LIAO	ANALYSIS OF THE EFFECT OF CHINA'S NEW ENERGY VEHICLE INDUSTRY POLICIES ON A TYPICAL ENTERPRISE
15:45-16:00	CUE2020-D-094	ZHANG BAI, JIYING CHEN, SHENGAO JIANG, YU YUAN, WENXIN HU, BO ZHENG	MULTI-OBJECTIVE OPTIMIZATION OF A WIND-SOLAR MICROGRID SYSTEM BASED ON THE IMPROVED NSGA-II METHOD
16:00-16:15	CUE2020-D-108	ZHAO LU, LIYU ZHANG, LICHUAN WEI, XIN CUI, XIAOHU YANG, LIWEN JIN	EXPERIMENTAL AND NUMERICAL INVESTIGATION ON THERMAL CHARACTERISTICS OF CYLINDRICAL 18650 LITHIUM-ION BATTERY PACK WITH LONGITUDINAL AIRFLOW

ZOOM ID: 823 7298 0742

Session Name: Building - District heating and CCHP

Session Chair: Yi Wang (China University of Petroleum Beijing); Amgad Salama (University of Regina, Canada)

Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-039	JIANAN SUN, ZETING YU	COMPREHENSIVE ANALYSIS OF A COMBINED ABSORPTION POWER AND COOLING COGENERATION CYCLE
16:45-17:00	CUE2020-D-064	JIKANG WANG, YU QIU, QING LI, YUCONG XU, MINGPAN XU, YUANTING ZHANG	EFFICIENCY ENHANCEMENT OF THE PARABOLIC TROUGH RECEIVER BY EMPLOYING HOT MIRRORS FOR URBAN ENERGY SUPPLY

Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

# Oct.17

# Oral Presentations

17:00-17:15	CUE2020-D-073	SCHARRER D, EPPINGER B, BAZAN P, ZIGAN L, WILL S, GERMAN R	A MODEL FOR TRIPLE GENERATION OF COOLING, HEATING AND POWER WITH A SEASONAL PUMPED THERMAL ENERGY STORAGE
<b>ZOOM ID: 858 0905 0844</b> <b>Session Name: Transport-EV and eco-traffic (4)</b> <b>Session Chair: Wenlong Shang (Beijing University of Technology); Song Lan (National University of Singapore)</b>			
Time	Paper ID	Author	Paper Title
16:30-16:45	CUE2020-D-119	SONG LAN, SHUKUN WANG, RICHARD STOBART, XIAONAN WANG	A COMBINATION OF THERMOELECTRIC GENERATOR AND ORGANIC RANKINE CYCLE FOR BOTH WASTE HEAT RECOVERY AND ENGINE OIL WARM-UP IN A PASSENGER CAR
16:45-17:00	CUE2020-D-142	LJING ZHU, JINGZHOU WANG	GAME THEORY ANALYSIS OF ELECTRIC VEHICLES ADOPTION IN BEIJING UNDER LICENSE PLATE CONTROL POLICY
17:00-17:15	CUE2020-D-163	SHUO YANG, PENG ZHOU, WEN WEN	CONSUMER HETEROGENEITY AND ELECTRIC VEHICLE DIFFUSION IN THE CITY LEVEL: A SYSTEM DYNAMICS STUDY BASED ON EMPIRICAL DATA

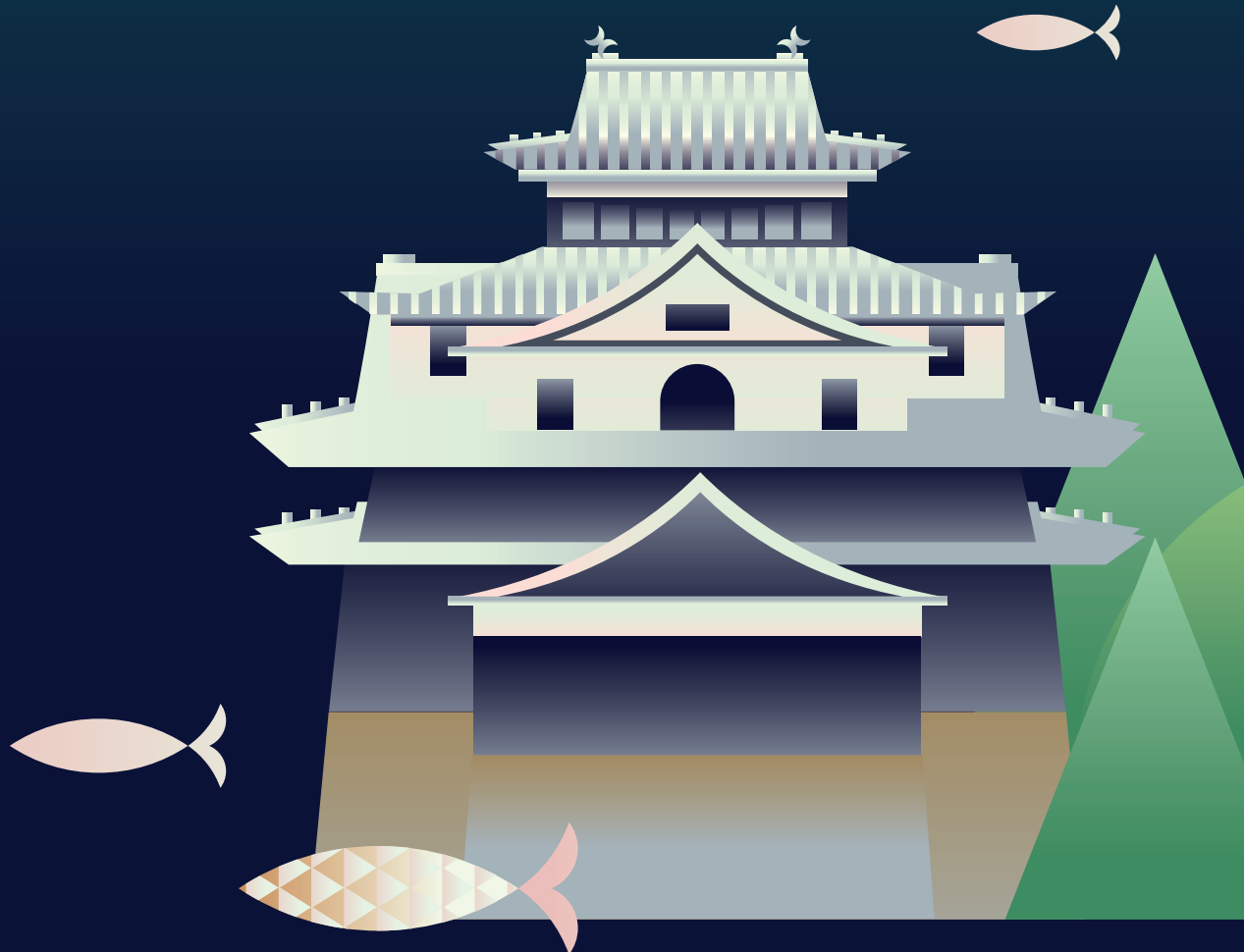
Note: We follow GMT+8 time zone (Beijing time); Please join in CUE 2020 by ZOOM (<https://zoom.us/>); We will send the password of ZOOM meetings to the attendees through Email on Oct. 9.

Applied Energy Symposium:

# LOW CARBON CITIES & URBAN ENERGY SYSTEMS

SEPT 4-8, 2021 in MATSUE, JAPAN

# Call for Papers



**i<sup>o</sup>caae**

International Conference on Applied Energy

## Organizing Committee

### General Chair

Tielong Shen (Japan)

### Vice-General Chair

Yudai Yamasaki (Japan)

### IPC Chair

Lars Eriksson (Sweden)

### IPC Vice-Chair

Ikuro Mizumoto (Japan)

### Industry Chairs

Junichi Kako (Japan)

Yui Nishio (Japan)

### Workshop Chair

Masaki Yamakita (Japan)

### Invited Session Chairs

Mitsuo Hirata (Japan)

Tatsuya Kubota (Japan)

Yuhu Wu (China)

Mingxin Kang (China)

### Special Session Chairs

Edyta Dzueminska (Japan)

Jinwu Gao (China)

### Student Activity Chair

Fuguo Xu (Japan)

### Finance Chairs

Masato Ehara (Japan)

Yahui Zhang (Japan)

### Local Arrangement Chairs

Wenjing Cao (Japan)

Xun Shen (Japan)

### Registration Chair

Jiangyan Zhang (China)

### Editor

Carlos Guardolia (Spain)

## The 6th IFAC Conference on Engine and Powertrain Control, Simulation and Modeling, 23-25 August, 2021, Tokyo, Japan

### First Announcement and Call for Papers

The 6th Conference on Engine and Powertrain Control, Simulation and Modeling, E-COSM 2021, will be held at Sophia University, Tokyo in Japan. The conference dates are:

Welcome reception:	August 22, Sunday
Banquet:	August 24, Tuesday
Farewell reception:	August 25, Wednesday

In addition to the main conference there will be a pre-workshop covering both basics and frontier areas in Automotive Control and will be organized at Sophia University, August 22, Sunday. *Student Competition of Benchmark Challenging* to powertrain control of connected vehicles will be organized (will be announced soon).

### Submission of Papers

Prospective authors are requested to submit their contributions as a pdf file in IFAC paper format through IFAC Papercept conference manuscript management system plaza <http://ifac.papercept.net>. The templates for manuscripts are available at the website and important dates for submission are as below

Submission open:	February 1, 2021
Deadline for submission:	March 12, 2021
Acceptance notification:	May 1, 2021
Final papers:	May 31, 2021
Early registration:	June 15, 2021

Information will be announced on <http://shenlab.jp/ecosm2021/index.html>

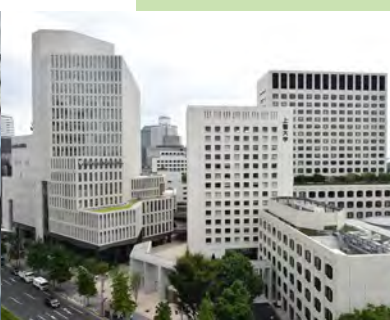
### Scope of the Conference

The conference topics include, but not limited to:

1. System modeling and simulation frameworks for engine and powertrain control design, validation and calibration.
2. Model-based control, estimation and diagnostics for the new generations of CI and SI engines and their exhaust gas after-treatment.
3. Modeling, optimization and control for hybrid and electrified vehicles and their components (renewable energy storage systems, electric motors, power electronics, transmissions).
4. Connected and automated vehicle control.
5. Thermal management for next generation vehicles.
6. Applications of intelligent technologies to vehicle powertrains for supervision, energy management, diagnostics (telematics services, remote sensing, smart grid).

Copyright Conditons:

<https://www.ifac-control.org/publications/copyright-conditions>



# Journal of Pipeline Science and Engineering

ISSN: 2667-1433

Editor-in-Chief: Dr. Frank Cheng

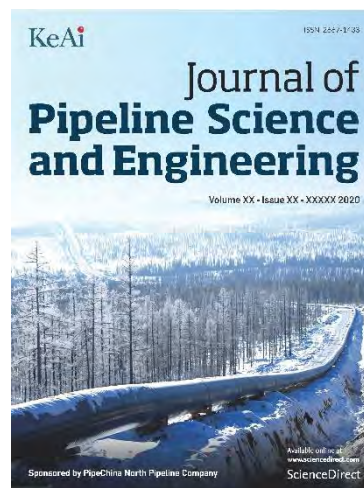
Professor and Canada Research Chair in Pipeline Engineering  
University of Calgary

## About JPSE

*Journal of Pipeline Science and Engineering (JPSE)* is a newly launched academic journal by Ke-Ai Publishing, a subsidiary of Elsevier and China Science Press, and sponsored by PipeChina North Pipeline Company. **JPSE provides an essential medium for communication and dissemination of new ideas, original researches and technology innovation in the general area of energy pipelines transporting oil, natural gas and non-conventional fossil fuels (e.g., heavy oil, diluted bitumen, shale oil, shale gas and oil sands slurry), as well as hydrogen, carbon dioxide and biofuels.** JPSE covers a wide spectrum of pipeline sectors, including gathering, transmission, and distribution systems. JPSE is a quarterly journal, containing 10 papers per issue. The inaugural issue of JPSE will be published in March 2021. JPSE is an open access journal to enhance the academic impact of published papers. The publication fee is waived for authors.

## About Special Issue

- **Special Issue in Pipeline Corrosion and Its Management**  
Guest Editor: Dr. Frank Cheng, University of Calgary, [fcheng@ucalgary.ca](mailto:fcheng@ucalgary.ca)  
Publish date: March 2021.  
Manuscript submission deadline: Dec.1, 2020.
- **Special Issue in Strain based Assessment and Design of Pipelines**  
Guest Editor: Dr. Samer Adeeb, University of Alberta, [samer.adeeb@ualberta.ca](mailto:samer.adeeb@ualberta.ca)  
Publish date: June 2021.  
Manuscript submission deadline: Mar.1, 2021.
- **Special Issue in Risk and Reliability Assessment of Pipelines**  
Guest Editor: Dr. Markus Dann, University of Calgary, [mrdann@ucalgary.ca](mailto:mrdann@ucalgary.ca)  
Publish date: September 2021.  
Manuscript submission deadline: Jun.1, 2021.
- **Special Issue in Smart Operation and Management of Pipelines**  
Guest Editor: Dr. Yongtu Liang, China University of Petroleum-Beijing, [liangyt21st@163.com](mailto:liangyt21st@163.com);  
Dr. Haoran Zhang, Mälardalens University, The University of Tokyo, [zhang\\_ronan@csis.u-tokyo.ac.jp](mailto:zhang_ronan@csis.u-tokyo.ac.jp)  
Publish date: December 2021.  
Manuscript submission deadline: Sep.1, 2021.





# Research Sharing Platforms



**Energy Proceedings** is a peer-reviewed, open-access collection of high-quality conference papers, covering a broad field of multidisciplinary subjects in not only in energy sciences and technologies but also in energy-related economics and social sciences, including policy and legal studies. The papers published in Proceedings—selected from high-quality conferences, workshops, and other scientific meetings—will constitute comprehensive, focused themes and timely topics.

<http://www.energy-proceedings.org/>



**EnerarXiv** is an open access preprint platform for the energy field, covering cutting-edge research in multidisciplinary and interdisciplinary fields including energy science and technology and energy-related economics, social sciences, and policy and law. Enerarxiv is committed to creating a high-quality sharing and exchange community for scholars and enthusiasts in the energy field. We provide a platform for uploading and sharing preprints, and the latest scientific developments, cutting-edge knowledge, and related information in order to stimulate more discussion and thinking, promote exchanges and collisions, and add momentum to scientific research and industry in the energy field. Currently, there are totally 808 accepted papers in all sections including both regular and special ones. They have been reviewed 62,730 times and downloaded 12,577 times.

<http://www.enerarxiv.org/>

[www.applied-energy.org/cue2020](http://www.applied-energy.org/cue2020)

