REM

RENEWABLE ENERGY INTEGRATION with MINI/MICROGRID

REM 2017: CONFERENCE PROGRAM

Renewable Energy integration with Mini/Microgrid

APPLIED ENERGY SYMPOSIUM AND FORUM

TIANJIN, CHINA

18-20 OCT, 2017

Call For Papers

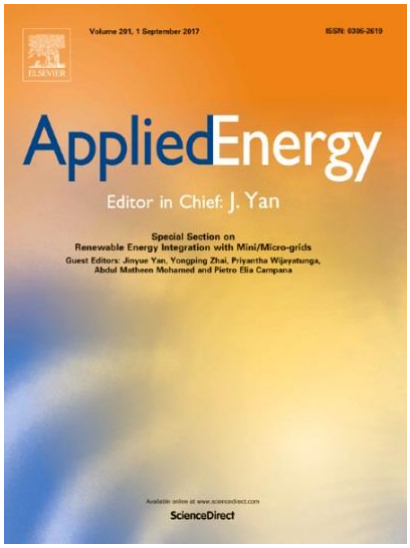
Topics

- Low carbon cities
- Urban energy systems
- Urban planning integrated with energy systems
- Energy efficiency in buildings
- BIPV & renewable energy applications in urban systems
- Smart cities and microgrid
- Smart home energy management systems
- EV and eco-traffic
- High-efficiency vehicle engines
- Energy storage
- Urban wastes to energy
- Urban emissions mitigation
- Low carbon and ecological city indicators
- Distributed energy systems
- District heating and CCHP
- Nexus of energy-water in urban system
- Climate change and cities
- Policy options targeting low-carbon energy systems
- Responses to low carbon energy transition
- Demand side management
- Distributed wireless sensors and power transfer
- Big data and visualization for energy management systems

Deadline for draft paper: Mar. 31, 2018
Notification of acceptance: Apr. 30, 2018
Deadline for final paper: May. 15, 2018

Special Issue of selected papers from CUE2018 will be published in prestigious journals including Applied Energy (IF:7.182)

Contents



Applied Energy

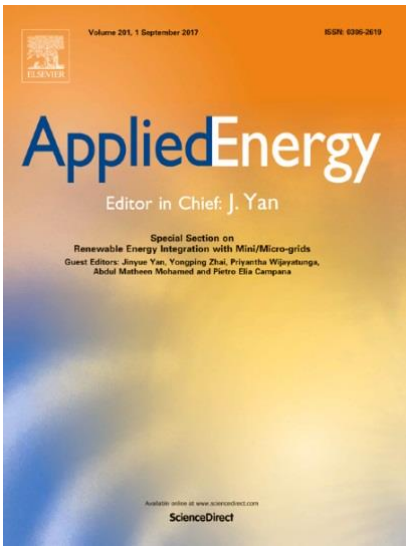
Applied Energy provides a forum for information on innovation, research, development and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, analysis and optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems. The breadth of coverage ranges from innovative technologies and systems of both fossil and renewable energy to the economic industrial and domestic use of energy with no or minor impact on the environment. Applied Energy is also concerned with the attendant problems of modeling and forecasting, conservation strategies, and the environmental, social and economic impacts of energy policies and usage, including climate change mitigation and other environmental pollution reduction.

SUPPORTS OPEN ACCESS

Applied Energy offers authors the option to publish papers open access.

ELSEVIER

Visit the journal homepage:
http://www.journals.elsevier.com/applied-energy/



Over 13,500 papers published, with authors from almost 120 countries

Cite Score: 7.78*
Impact Factor: 7.182**

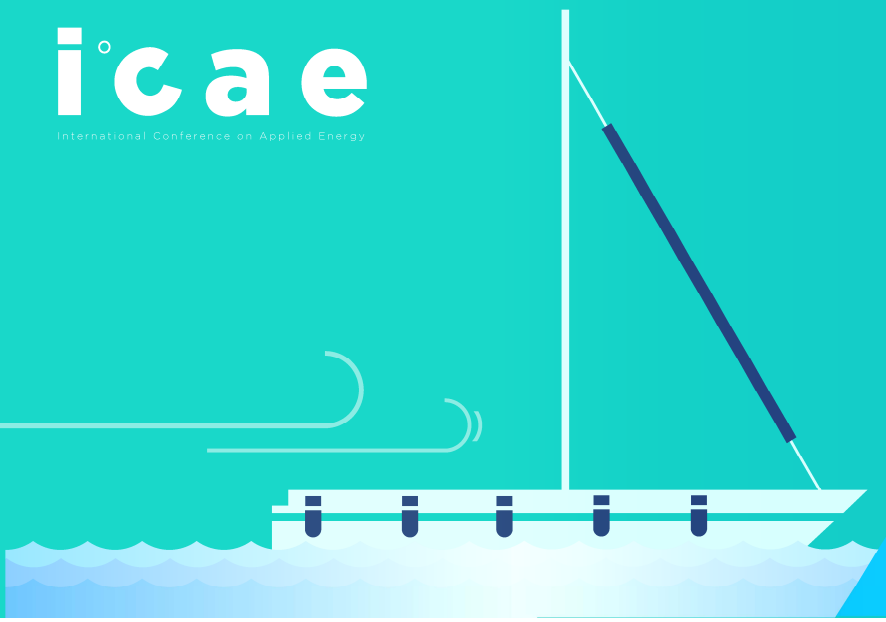
Reasons to publish in *Applied Energy*

- Ranked 1st out of 58 in Energy*
- Ranked 4th in Engineering, Chemical and 6th in Energy & Fuels**
- 3.3 million articles downloaded in 2016 (375 per hour)
- Publication on ScienceDirect, used by over 12 million scientists, researchers, students and professionals worldwide
- No submission fee, page charges or online colour costs
- Simplified submission process with Your Paper, Your Way initiative
- Open access option available
- Access in the developing world through Research 4Life

Follow us @

*Published by Scopus 2016
**Journal Citation Reports (Clarivate Analytics, 2017)

Submit now at:
http://www.journals.elsevier.com/applied-energy/



icae
International Conference on Applied Energy

Rhodes, Greece

REM
RENEWABLE ENERGY INTEGRATION with MINI/MICROGRID

Autumn, 2018

Call For Papers

Deadline for draft paper: Jun. 30, 2018
Notification of acceptance: Aug. 1, 2018
Deadline for final paper: Sept. 1, 2018

Topics

- High penetration of renewable energy
- Mini/microgrid
- Technology innovation
- Implementation
- Commercialization
- Financing & policy

Special Issue of selected papers from REM2018 will be published in prestigious journals including Applied Energy (IF:7.182)

Welcome to REM2017

Welcome to Applied Energy Symposium and Forum, REM2017: *Renewable Energy Integration with Mini/Microgrid*

The increasing share of variable renewable energy sources, strict targets set for the reduction of greenhouse gas emissions and the requirements on improvement of system security and reliability are calling for important changes in our energy systems. Distributed renewable energy and microgrids have emerged as effective ways for improving the quality of energy service given various types of renewable integration, and other challenges to the legacy system. The integration of distributed renewable energy and microgrids is significantly increasing the coupling and interactions between sources, and between supply and end use, at various scales (from multinational, national, and community scale down to building level). The need for energy storage and flexible demand is also increasing for improving the business case for their deployment. The issues need to be addressed to solve the challenges of intermittent power generation and mismatching of energy supply and demand over a time scale. Human behaviors should also be integrated into the energy systems to interactively improve the sustainability. Its interdisciplinary and synthetic approach not only reveals the systematic overview, but also details components of renewable energy systems.

This above background defines the aim and scope of the Applied Energy Symposium and Forum, REM2017: Renewable Energy Integration with Mini/Microgrid to be held in October 18-20, 2017 in Tianjin organized by Tianjin University, Applied Energy Journal together with Applied Energy UNiLAB DEM, Applied Energy Innovation Institute (AEii) and State Grid Tianjin Electric Power Co..

The REM2017, with the theme of “Distributed Energy and Micogrids for Smart Cities”, is to provide a platform focused on Distributed Energy & Microgrid (DEM). We invite all stakeholders including academia, inventors, project developers, financiers, suppliers, policy decision makers, even the public and end-users to participate in the conference. We will explore new approaches and innovative solutions to solve the challenging issues associated with new transitions of future renewable energy systems.

The event consists of keynote sessions, panel discussion, academic papers sessions, and on-site tour of renewable pilot projects.

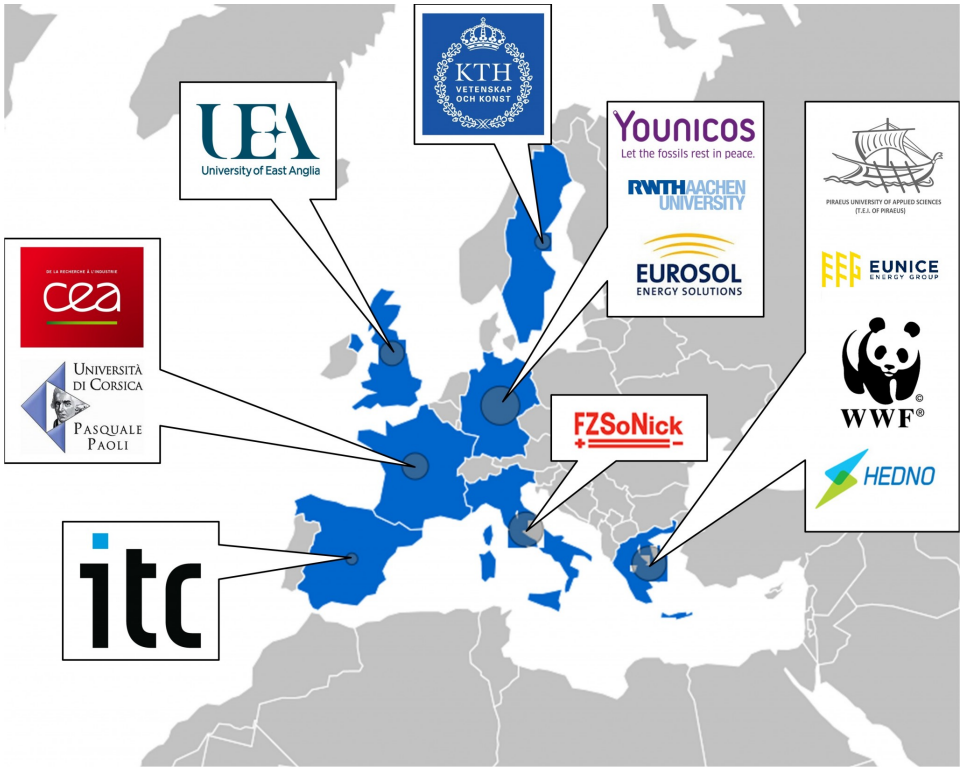
We are looking forward to meeting you in Tianjin.

Prof. Chengshan Wang
Dean, School of Electrical & Information Engineering, Tianjin University, China

Dr. Jiancheng Yu
State Grid Tianjin Electric Power Co.
Tianjin, China

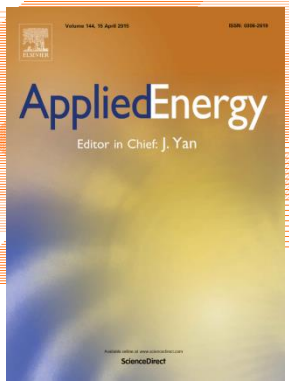
Prof. Jinyue Yan
Editor-in-Chief of Applied Energy

Technology Innovation *for the* Local Scale
Optimum Integration *of* Battery Energy Storage



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 646529.

Acknowledgements



Applied Energy

New Section: Progress in Applied Energy

Cite Score: 7.78 i
Impact Factor: 7.182 ii

Editor-in-Chief
Professor J. Yan

The internationally-renowned journal *Applied Energy* is launching a new section - *Progress in Applied Energy*, which will bridge the gap between development and implementation, focusing:

- On fast-paced, cutting-edge research from forward looking aspects of energy innovations
- On renewable energy and clean technology
- From energy efficiency to climate change mitigation

As the world strives to meet the shared targets of combating climate change and providing sustainable energy access for all, there is a critical need for timely and rapid publication of new energy solutions.

Progress in Applied Energy is the best platform to address these issues, at a time when there is societal pressure to come up with breakthroughs.

What are we looking for?

- Papers must present ground-breaking insights to the field, which will have a positive impact on society, and excite and inspire readers
- Review articles will provide a comprehensive view of the latest trends, bridging scientific frontiers

Why submit to our new section?

Submit and be part of the change in shaping the future of energy research as this new section:

- Provides a home for top scientists and engineers to publish high quality papers
- Fast-tracks papers to reach researchers as quickly as possible
- Offers benefits to authors with articles receiving extra promotion

i Published by Scopus 2016

ii 2016 Journal Citation Reports (Clarivate Analytics, 2017)

FIND OUT MORE:
elsevier.com/locate/apenergy

Committees

Conference Chairs

Prof. Chengshan Wang (Chair)
Dr. Jiancheng Yu (Co-Chair)
Prof. Jinyue Yan (Co-Chair)

Organizing Committee

Prof. Hongjie Jia (Co-Chair)
Prof. Jianzhong Wu (Program and Track Chair)
Prof. Bin Li (Track Chair)
Dr. Ke Xu (Track Chair)
Dr. Hailong Li
Dr. Pietro Elia Campana

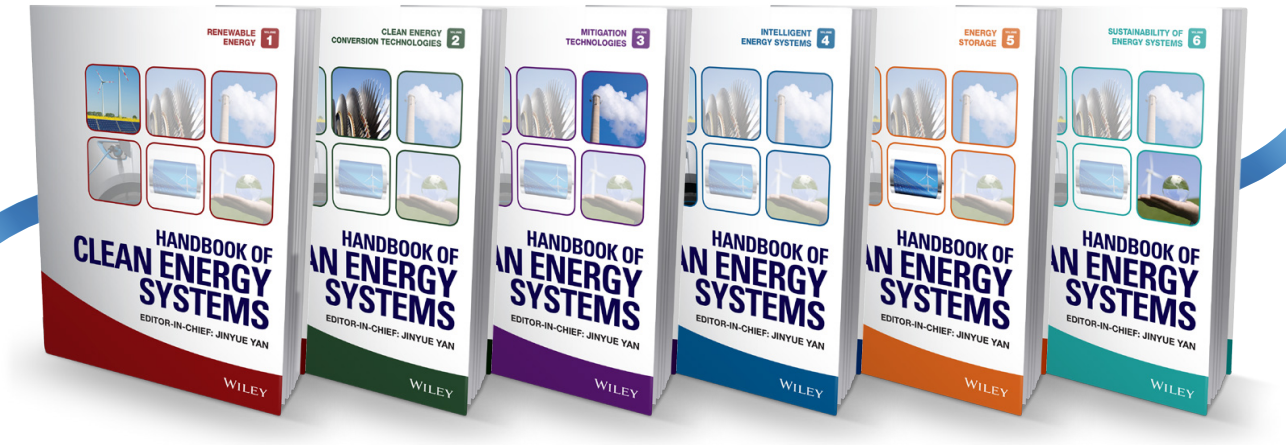
Secretariat

Dr. Tao Xu (Head)
Dr. Yuan Zeng
Dr. Yunfei Mu
Dr. Peng Li
Dr. Yanli Liu
Dr. Xiaohu Yang
Dr. Lei Wang
Mr. Cheng Yao
Ms. Worrada Nookuea
Mr. Yuting Tan
Mr. Yang Zhang

International Scientific Committee

Acharya J., Nepal
Bi T.S., China
Bie Z.H., China
Campanari S., Italy
Chen B., China
Chen W.H., Taiwan
Conejo A.J., USA
Dahlquist E., Sweden
Deng S., Hong Kong
Duic N., Croatia
Enomoto K., Japan
Feng W., USA
Gan D.Q., China
Garimella S.V., USA
Guhathakurta S., USA
Guo Q.L., China
Gupta A.K., USA
Hammond G., UK
Hedin N., Sweden
Hetland J., Norway,
He Z.Y., China
Hou Y.H., Hong Kong
Hubacek K., USA
Jenkins N., UK
Jia H.J., China
Jin H.G., China
Kazmerski L., USA
Kraft M., UK
Kurimoto S., Japan
Lee D.J., Taiwan
Leung M.K.H., Hong Kong
Leung Y.C., Hong Kong
Liu J.Y., China
Li X.G., Canada
Luan W.P., China
Lund H., Denmark
Lund P., Finland
Madlener R., Germany
Marnay C., USA
Massardo A.F., Italy
Neumann A.L., Spain
Obersteiner M., Austria
Ramamurth A., India
Roskilly A.P., UK
Schoonman J., Netherlands
Schwegler B., USA
Shamim T., UAE
Span R., Germany
Strbac G., UK
Sun F.C., China
Tezuka T., Japan
Tu C.M., China
Tu S.T., China
Veneri O., Italy
Wang C.S., China
Wang J.H., USA
Wanniachchi A., Sri Lanka
Wen J.Y., China
Wei Y.M., China
Wu J., China
Wu J.Z., UK
Xia X.H., South Africa
Xie K.G., China
Xu H.M., UK
Yamagata Y., Japan
Yan G.G., China
Yang H.X., Hong Kong
Yang P., USA
Yan Z., China
Zhang C.H., China

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

231501

WILEY-VCH

WILEY

Keynote Speakers

Prof. Chris Marnay
Lawrence Berkeley National Laboratory, US

Keynote: Microgrids: The Revolution is Here

Prof. Chris Marnay is a retired Staff Scientist from the Lawrence Berkeley National Laboratory, where he worked for 29 years. He currently leads an independent consultancy, and remains an Affiliate with Berkeley Lab's China Energy Group. During the winter of 2016-17, he served as a Visiting Scholar in Residence at the Trottier Institute for Sustainability in Engineering and Design at McGill University. He has worked for 15 years in the microgrid area, and has been one of its most influential researchers, publishing a large body of research on microgrid principles, economics, and applications. In 2001, he proposed the the Distributed Energy Resources Customer Adoption Model (DER-CAM), and led its development for over a decade. He also led the Benefits Subgroup under the U.S.-China Climate Change Working Group Smart Grid collaboration, is the Convenor of CIGRÉ Working Group C6.22, and chaired the first 10 International Microgrid Symposiums.

Prof. Qinghua Wu
University of Liverpool, UK
South China University of Technology, China

Keynote: Large-scale Interconnected Energy Systems

Dr. Prof. Wu obtained his MEng degree from Huazhong University of Science and Technology (HUST), majoring in Power System and Its Automation, in 1981, and a PhD in Electrical Engineering from The Queen's University Belfast in 1987. Prof. Wu was the first scholar from mainland China who has been appointed Chair Professor in the UK since the Reform and Opening of China. He has been a Chair Professor in The University of Liverpool and Director of National Instruments e-Automation Laboratory since 1995. He is now a Distinguished Professor of the Thousand Talents Plan Project, and Director of Energy Research Institute of South China University of Technology, China.

Prof. Wu has been long engaged in research on power systems and intelligence engineering. He has undertaken creative work in artificial intelligence, computational intelligence, machine learning, multi-agent system, mathematical morphology, nonlinear adaptive control, system on chip, power electronics, simulation and optimization of complex systems, and applications of the subjects mentioned above in power engineering and energy systems. He has published more than 240 journal papers including 190 SCI papers and over 250 papers of international conferences. He has also contributed over 20 book chapters and published 3 research monographs issued by Springer, and he has 15 registered international and national patents and more are under inspection.

Prof. Wu is a Fellow of IEEE, Chartered Engineer, Fellow of IET, and Fellow of InstMC. He is a Visiting Professor and Overseas Academic Expert Reviewer of Chinese Academy of Science, Expert Reviewer of China Science and Technology Award, Guangbiao Professor of Zhejiang University, Adviser of National Smart Grid Research Center of Shanghai Jiaotong University. In addition, Prof. Wu has also been appointed as Guest Professor of a number of universities and Senior Technical Adviser in several power companies, and has served as the committee member of a number of international academic conferences.

Keynote Speakers

Prof. Guohong Wu
Tohoku Gakuin University, Japan

Keynote: R&D of Distributed Power Generation, Energy Storage and Microgrid Technologies in Japan

Guohong Wu, is working as a tenured professor and director of the Advance Power Engineering Lab. and Renewable Energy and Hybrid Mirogrid Lab. at Dept. of Electrical & Electronic Engineering, Tohoku Gakuin Univ. Japan. He received his joint-supervised Ph.D. degree in Electrical Engineering from the Univ. of Tokyo, Japan and Tianjin Univ., China in 1998, and his M.S. and B.S. degree from Tianjin Univ. in 1994 and 1989, respectively. He was with the Univ. of Tokyo and Tohoku Univ., Japan from 1995 to 2005. Since 2005, he has been working with the Tohoku Gakuin Univ. From April 2014 to Mar. 2015, He was a visiting researcher at UCLA, USA. Prof. Wu's research interests include renewable power generation system, microgrid, FACTS devices, HVDC systems, power system stability analysis, superconductivity application to power systems, etc. He is also the author of 4 books, 157 technical papers and representatives or research member of more than ten research projects, as well as many academic and social committee members related electrical engineering field in Japan. He is the Senior Members of both IEEE and IEEJ

Prof. Phil Jones
Cardiff University, UK

Keynote: Energy Positive Buildings

Phil Jones is Professor of Architectural Science at the Welsh School of Architecture, Cardiff University and he co-directs the Energy Systems University Research Institute (URI). Prof. Phil Jones's research area is in low energy, low carbon, and sustainable design in the built environment. He chairs the Welsh Building Regulation Advisory Committee and is Chairman of the Board of Directors of Warm Wales, a community interest company formed to install energy efficiency measures to existing fuel poor housing in Wales. He is a Distinguished Visiting Research Professor at University of Hong Kong and a Master Academic advisor at Tianjin University.

Panel Session

19th, Oct. 2017

11:00-12:00

Grand Ballroom

Applied Energy UNiLAB of Distributed Energy & Microgrid (DEM)

UNiLAB of DEM is an international virtual lab of collective intelligence in Applied Energy, in order to enhance international collaboration for scientific excellence for science and engineering, and demonstrate technologies in analysis, control, operation, planning and other applications in DEM. This panel will discuss the latest development of DEM and a new initiative to establish a world-leading sustainable research ecosystem of multi-energy Microgrids. The research ecosystem will be built upon a 5-Dimentional Cloud-based platform of Campus Multi-Energy Microgrids. Research data, tools and even source code will be shared through the platform.

Chair: Prof. Jianzhong Wu (Cardiff University, UK)
Participants: Prof. Jinyue Yan (Royal Institute of Technology and Mälardalen University, Sweden); Dr. Jiancheng Yu (State Grid Tianjin Electric Power Co.); Prof. Fredrik Wallin (Mälardalen University, Sweden);

20th, Oct. 2017

10:30-11:50

Grand Ballroom

Panel discussion: From clean energy research into innovation

The society collectively faces grand challenges of environmental deterioration, massive urbanization, aging and unreliable infrastructure, and natural resource depletion in the century to come. The energy and environment sectors are critical pillars of the world economy and have undergone rapid growth in recent years. Clean energy research and technology worldwide such as distributed energy resources, microgrid, smart buildings and smart city have been leveraging and pushing advancement in control, behavior science, power system, and material research to provide potentially impactful solutions to address these issues. Technology innovation is fundamentally important to continuously spur the economy and support a clean and sustainable future. Research and innovation in academic institutes and private sectors provide the foundation for disruptive ideas and projects, which have tremendous potentials to bring values to the society.

In this panel, our invited panelists will discuss and share their views on a range of topics from the vision of clean energy research in ensuring a sustainable future to the challenges and opportunities of bringing innovation to real world products/services, and how researchers, entrepreneurs, government agencies, private sectors around the globe can play a positive role in solving the societal-scale problems collaboratively.

Aligned with the topic of “From clean energy research into innovation”, the Applied Energy Global Innovation award is a large-scale international innovation contest for researchers, inventors and entrepreneurs in clean technology area. It provides the opportunity and platform to take the research to high society impact, with a focus of promoting energy-, environment-related solutions. The panel will also discuss the potential role of building the spirit of innovation and commercializing innovation to strengthen economic future.

Moderator: Dr. Xiaonan Wang
Participants: Prof. Xiaohua Xia (University of Pretoria, South Africa); Prof. Yong Hao (CAS, China); Prof. Fredrik Wallin (Mälardalen University, Sweden); Dr. Wenlong Ming (Cardiff University, UK);

APPLIED ENERGY GLOBAL UNILAB OF MULTI-ENERGY MICROGRID

YOU ARE WARMLY WELCOMED TO JOIN US.

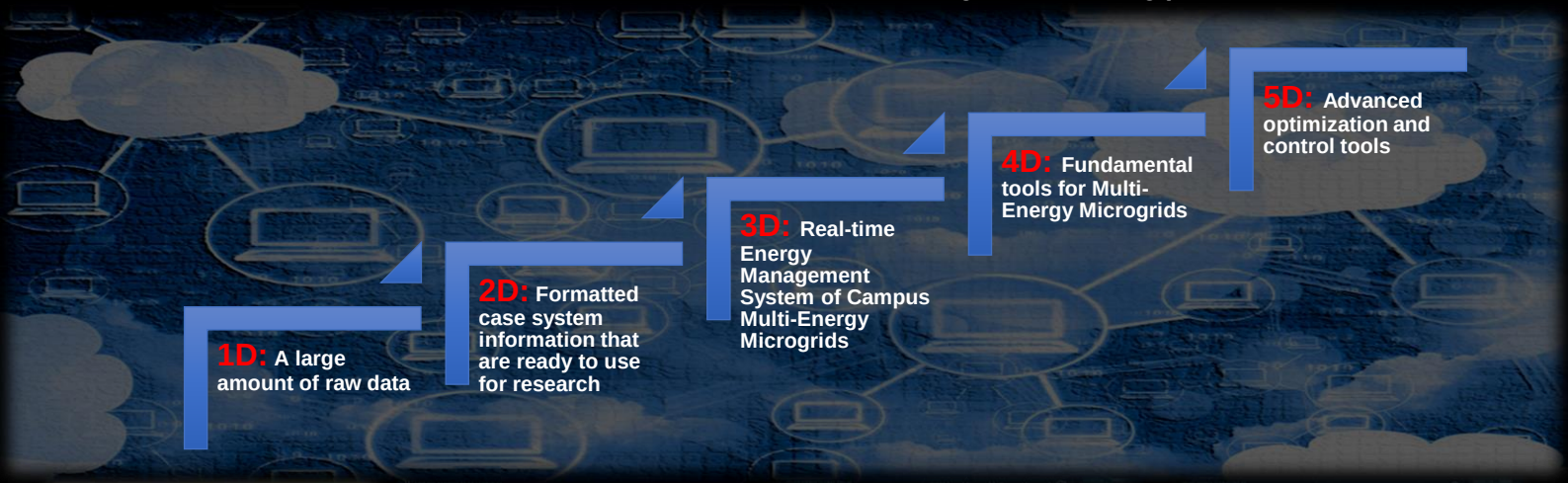
CONTACT: PROF. JINYUE YAN (JINYUE@KTH.SE); PROF. CHENGSHAN WANG (CSWANG@TJU.EDU.CN);
PROF. JIANZHONG WU (WUJ5@CARDIFF.AC.UK)

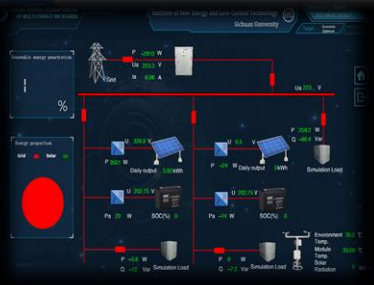
VISION:

Establish a world-leading sustainable research ecosystem of multi-energy Microgrids – We innovate, we collaborate, we share, and we grow up together!

THE WAY FORWARD:

- **Setup and maintain a 5-Dimentional Cloud-based platform of Campus Multi-Energy Microgrids. We share data, tools and even source code from 1D through to 5D among partners.**





- **Share our experience by organizing training and summer schools for early-career researchers**
- **Organize workshops and symposiums to facilitate effective communication and dissemination**
- **Develop Special Issues for Applied Energy**
- **Initiate joint research grant applications among partners**
- **Inform industry and policy-makers on the potential, key technologies and performance of multi-energy Microgrids**
- **Provide skilled workforce for the current global energy revolution**

Applied Energy Global UNiLAB of Multi-Energy Microgrid is an international virtual lab of collective intelligence, in order to enhance international collaboration for scientific excellence and demonstrate innovative technologies in Multi-Energy Microgrids. It is a joint initiative by the Applied Energy UNiLAB of Distributed Energy & Microgrid (DEM) and the UNiLAB of Synergies between Energy Networks (SEM).

Multi-energy Microgrids are able to make a good use of local distributed energy resources, especially renewable energy, optimize the synergies between different energy systems (e.g. electricity, gas, heating and cooling systems), enable the applications of novel techniques (e.g. Peer to Peer energy sharing or trading) and provide services to other Microgrids or to the bulk energy networks. Multi-energy Microgrids have the potential to change the paradigm of the whole energy system.

We are targeting to connect 100 campus Multi-Energy Microgrids across the World. Welcome to join our family!

FUTURE ENERGY

FUTURE ENERGY CENTER

THE CHALLENGES due to energy related emissions, increased energy demand and the fragile state of the global economy calls for rethinking global energy systems. Therefore, the research within the Future Energy Center focuses on renewable energy, energy efficiency and emission mitigation, as well as smarter modelling, optimization and management.

The Future Energy Center is one of Sweden's strongest research environments in process optimization targeting the process industry and the energy sector. We develop innovative solutions and tools within the areas of energy, building and environmental engineering.

The Future Energy Center has good relationships with both companies and recognized national and international centers, including several Chinese universities. The profile comprises nine professors, a further fifteen senior researchers and more than forty graduate students.

THREE FOCUS AREAS

The research at Future Energy Center is focused on three areas:

TRACK 1 Renewable energy

TRACK 2 Energy efficiency and emission mitigation

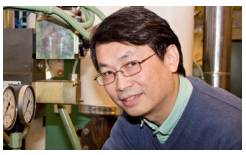
TRACK 3 Smarter modelling/ optimisation and management

The Future Energy Center also offers studies at post-graduate level in Energy and Environmental engineering. We are also part of the research school Reesbe (Resource-Efficient Energy Sytems in the Built Environment).

CONTACT US

www.mdh.se

JINYUE YAN
Professor of Energy Engineering.
jinyue.yan@mdh.se



ERIK DAHLQUIST
Professor of Energy Technology and Research Director.
erik.dahlquist@mdh.se

FREDRIK WALLIN
Track leader in Energy efficiency and emission mitigation.
fredrik.wallin@mdh.se

MÄLARDALEN UNIVERSITY
SWEDEN

Site Visit

TIANJIN ECO-CITY

20th, October 2017

About Tianjin Eco-City

The Sino-Singapore Tianjin Eco-City is the second flagship Government-to-Government project between Singapore and China after the China-Singapore Suzhou Industrial Park. The project was mooted by then-Singapore Senior Minister Goh Chok Tong and then-Chinese Premier Wen Jiabao in April 2007, against the backdrop of rapid urbanization and increasing global attention on the importance of sustainable development. On 18 November 2007, Singapore Prime Minister Lee Hsien Loong and then-Chinese Premier Wen Jiabao signed a Framework Agreement for Singapore and China to jointly develop the Sino-Singapore Tianjin Eco-city. The Sino-Singapore Tianjin Eco-city's vision is to be "A thriving city which is socially harmonious, environmentally-friendly and resource-efficient – a model for sustainable development". This vision is underpinned by the concepts of "Three Harmonies" and "Three Abilities". The Eco-city site is located 40 km from Tianjin city centre and 150 km from Beijing city centre. It is located within the Tianjin Binhai New Area – one of the fastest growing regions in China.

Trip Schedule

- 13:30 – Departure from the conference venue
- 14:30-16:00 – Visiting Tianjin Eco-City
- 16:00 – Return to the conference venue

Registration

Please register at the conference registration desk. Spaces are limited, please make early booking.

About Tianjin

Tianjin, 137 kilometers southeast of Beijing, is located at 39°8' North and 117°2' East, covering area of 11,917 square kilometers, the city is bordering on the Bohai Sea in the east. It is one of three municipalities of China directly under the Central Government. The terrain in Tianjin is low and flat, with an altitude of only two to five metres above sea level. Most part of the city is on the Haihe Plain.

With a growth rate that has exceeded 10% every year since 2004, it is one of the fastest growing large cities in China and in the world. Tianjin's diversified economy comprises many sectors, including high tech, manufacturing, telecommunications, shipping and logistics, oil aerospace, tourism and agriculture. It is being developed as the next major economic zone in the North-East of China, similar to that in Shenzhen and Shanghai. While Tianjin is primarily known for its manufacturing and technological prowess, the development of Tianjin's new Binhai lays the groundwork for the municipality to become China's largest financial center.

Getting around Tianjin

From Tianjin Binhai International Airport (ZBTJ):

ZBTJ is located in Dongli District roughly 13 km (8 mi) away from downtown area. The airport has 59 flight routes, connecting 48 cities, including 30 domestic cities and 17 foreign cities in Japan, Korea, Singapore, Russia and Europe. Airline companies like Japan Airlines, All Nippon Airways, Korean Air, Asiana Airlines, Singapore Airlines Cargo and Martinair Holland all have flights to Tianjin Binhai International Airport.

From Beijing-Capital International Airport (PEK) to Tianjin:

PEK is located northeast of Beijing, capital of People's Republic of China, and 25.35km from the Tiananmen Square, center of Beijing city. It is not only an aviation gateway of Beijing and a window for international communication, but also a radial center for China civil aviation network, featured in a large-scale international airport, with most important location, biggest scale, fullest facilities and busiest transportation in China.

The PEK Airport Shuttle System connects the PEK airport to Tianhuan Passenger Station in Tianjin. The route takes 150min and costs about 90RMB. The schedule is listed as follows.

From: Beijing-Capital International Airport	From: Tianjin-Tianhuan Passenger Station
6:30	4:30
7:30	5:00
8:30	6:00
9:30	7:00
10:30	7:30
11:15	8:00
12:15	9:00
13:00	10:00
13:45	10:30
14:30	11:00
15:15	12:00
16:00	13:00

16:45	13:30
17:30	14:00
18:15	15:00
19:00	16:00
20:00	17:00
21:00	17:30
22:00	18:00
23:00	18:30

By Train

If there is no direct air route from your city to Tianjin, arriving by land from other domestic airports is an option. Following rail lines go through Tianjin:

- Jingshan Railway, from Beijing to Shanghai Pass
- Jinpu Railway, from Tianjin to Pukou District, Nanjing
- Jinji Railway, from Tianjin urban area to Ji County, Tianjin
- Jinba Railway, from Tianjin to Bazhou, Hebei

The inter-city trains between Beijing and Tianjin:

- C2001 - C2198: From Beijing South Station to Tianjin, non-stop.
- C2201 - C2268: From Beijing South Station to Tianjin, with stops at Wuqing Station or Yizhuang Station;
- C2271 - C2298: From Beijing South Station to Tanggu Station of Tianjin.

The C trains take only 30 min between Beijing and Tianjin and the ticket price is around 69 RMB for first class and 55 RMB for second class.

By Taxi

The taxis in Tianjin are uniform, light-blue vehicles. The flag-down fare is 8 RMB, and each additional kilometer is 2-3 RMB. The following translations might be useful to show to taxi drivers.

(Please take me to the airport.)

请带我去天津机场

(Please take me to the Holiday Inn Riverside Hotel.)

请带我去天津海河假日酒店

(Please take me to the Tianjin train station.)

请带我去天津火车站

Climate and Clothing

The climate of Tianjin is temperate, continental-type monsoon climate with four seasons distinct from one another. The average temperature in October is 14.1 °C.

Currency and Banking

The Chinese Yuan (CNY) is the currency of China. ATMS and credit cards are widely accepted.

Electricity

Power is supplied at 220 Volts. The alternating current cycle is rated at 50 Hz. Adapters are needed if you come from foreign countries. The following picture shows the sockets.

Time Difference

UTC+8

Venue Information

Conference Venue

The conference will be held at Holiday Inn (Holiday Inn Tianjin Riverside). The conference badge will have to be worn at all times to access the conference venue.
Location: East Haihe Road, Hebei District, Tianjin 300141, China
More information about the hotel can be found: https://www.ihg.com/holidayinn/hotels/cn/zh/tianjin/tsncr/hoteldetail

Registration area

Lobby of the conference venue

Conference banquet, dinner and lunch breaks

Date	Activity	Location
18th, October	Lunch	Cafeteria, 2nd Floor
18th, October	Conference Banquet	Grand Ballroom, 5th Floor
19th, October	Lunch	Cafeteria, 2nd Floor
19th, October	Dinner	Cafeteria, 2nd Floor
20th, October	Lunch	Cafeteria, 2nd Floor

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 20 minutes, which include the questions and answers. Please refer to this program booklet for actual presentation times. You are kindly requested to be present in the relevant presentation venue at least 10 minutes before the session starts.

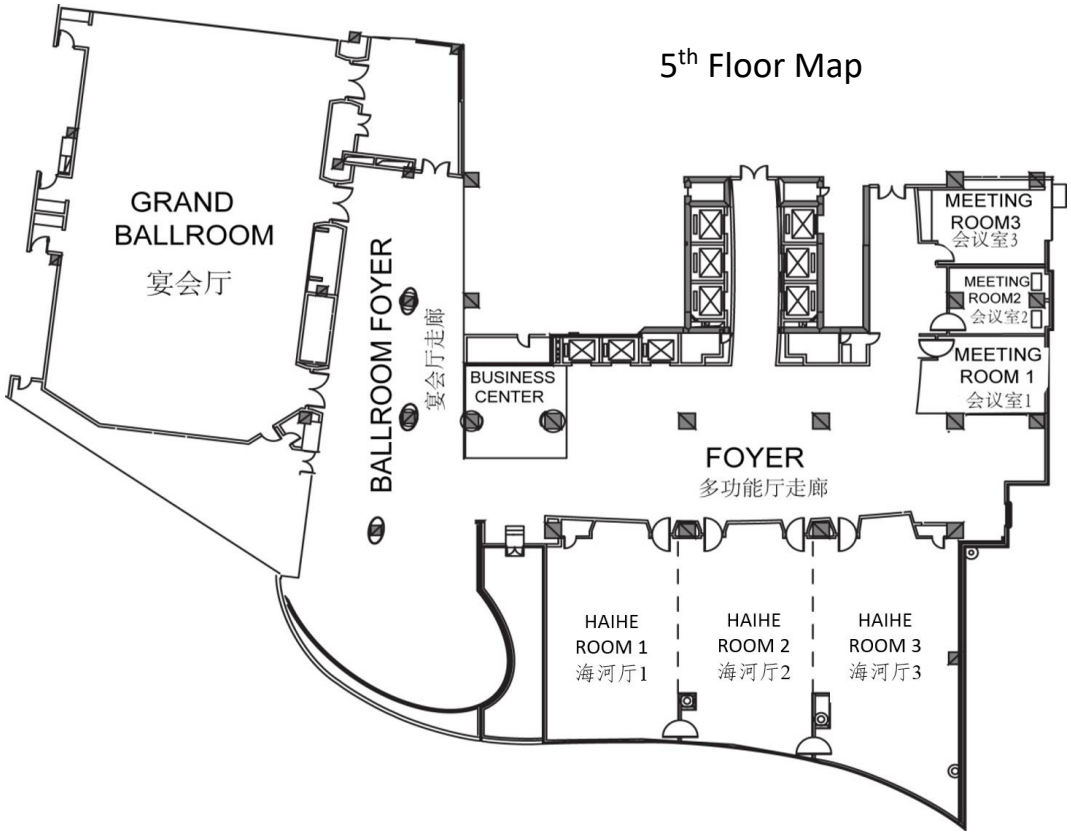
Each presentation room is equipped with a laptop computer with a data projector. PowerPoint is the standard presentation format. The computers in the meetings rooms are provided to Window-based PC Users. Conference volunteers will be available to assist you in case you encounter difficulties to use the IT equipment.

Presentation Venues

The opening ceremony, keynote speeches, and panel session will be held at the grand ballroom. The following table lists all the presentation venues with abbreviations which are used in the detailed program in the late part of this booklet.

Paper Session	Room
Session 1-A1, Session 1-A2, Session 2-A1, Session 2-A2, Session 3-A1	HAIHE ROOM 1, 5th Floor
Session 1-B1, Session 1-B2, Session 2-B1, Session 2-B2, Session 3-B1	HAIHE ROOM 2, 5th Floor
Session 1-C1, Session 1-C2, Session 2-C1, Session 2-C2, Session 3-C1	HAIHE ROOM 3, 5th Floor
Session 1-D1, Session 1-D2	MEETING ROOM 2, 5th Floor

5th Floor Map



Programme at a Glance

Registration: Oct,17th: 10:00-17:00; Oct, 18th: 08:30-15:00; Oct, 19th: 08:30-12:00	
October, 17th	
10:00-17:00	Registration

Day 1: October, 18th				
09:00-09:30	Opening			
09:30-10:30	Prof. Qinghua Wu Large-scale Interconnected Energy Systems			
10:30-11:00	Coffee break and Group photo			
11:00-12:00	Prof. Chris Marnay Microgrids: The Revolution is Here			
12:00-13:30	Lunch			
	Session 1-A1: Microgrid reliability and resiliency	Session 1-B1: Demand side management	Session 1-C1: Optimal control strategy	Session 1-D1: Microgrid planning
13:30-13:50	2	48	14	32
13:50-14:10	7	65	35	58
14:10-14:30	8	95	46	61
14:30-14:50	41	98	54	67
14:50:15:10	62	100	71	68
15:10-15:30	63	119	107	113
15:30-16:00	Coffee break			
	Session 1-A2: Microgrid reliability and resiliency	Session 1-B2: Frequency control and power quality	Session 1-C2: Optimal control strategy	Session 1-D2: Photovoltaic and wind turbine system
16:00-16:20	80	17	18	97
16:20-16:40	92	19	24	101
16:40-17:00	99	53	55	132
17:00-17:20	108	116	66	44
17:20-17:40	109	117	88	69
17:40-18:00	51	86	121	42
19:00-20:30	Conference banquet			

Day 2: October, 19th	
08:30-09:30	Prof. Phil Jones Energy Positive Buildings
09:30-10:30	Prof. Guohong Wu R&D of Distributed Power Generation, Energy Storage and Microgrid Technologies in Japan

Programme at a Glance

10:30-11:00	Coffee break
11:00-12:00	UNiLAB DEM Panel meeting
12:00-13:30	Lunch

	Session 2-A1: Renewable energy utilization	Session 2-B1: Communication and information technology	Session 2-C1: Optimal control strategy
13:30-13:50	20	22	9
13:50-14:10	64	103	29
14:10-14:30	77	111	28
14:30-14:50	110	102	83
14:50:15:10	133	104	118
15:10-15:30	128	81	
15:30-16:00	Coffee break		
	Session 2-A2: Renewable energy utilization	Session 2-B2: Energy storage and EV	Session 2-C2: Energy flexibility
16:00-16:20	50	30	82
16:20-16:40	96	36	84
16:40-17:00	105	39	112
17:00-17:20	114	57	129
17:20-17:40	131	93	120
17:40-18:00	135	25	122
18:30-20:00	Dinner		

Day 3: October, 20th			
	Session 3-A1: Renewable energy utilization	Session 3-B1: Inverter and converter	Session 3-C1: Economical, environmental and policy analysis, and demonstration
08:30-08:50	34	40	26
08:50-09:10	49	85	45
09:10-09:30	94	90	59
09:30-09:50	130	124	73
09:50-10:10	134	126	125
10:10-10:30	13	89	136
10:30-11:50	Panel discussion: From clean energy research into innovation		
11:50-12:00	Closing		
12:00-13:30	Lunch		
13:30-18:00	Site Visit		

Day 1 Oral Presentations

Room: Haihe Room 1 **Session 1-A1: Microgrid reliability and resiliency** Session chairs: Chris Marnay, Tao Xu			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	2	Zhang Xingyou, Chen Bo, Cheng Yan, Sun Shumin, Wang Shouxiang	A multi-microgrids system model considering stochastic correlations among microgrids
13:50-14:10	7	Xueming Li, Yi Tang, Zengji Liu, Xu Gao, Yingxin Ma and Sumeng Tao	Reliability analysis of the security and stability control device based on the Monte Carlo method
14:10-14:30	8	Chen Bo, Zhang Xingyou and Wang Shouxiang	Multi-microgrids system reliability assessment algorithm considering energy dispatch strategy among microgrids
14:30-14:50	41	Yong Ren, Chao Wang, Siqin Li, Long Jiao, Hongli Zhang, Fusuo Liu	Three-stage evolution mechanism of multiple stability problems and control strategies of AC/DC power system with large-scale wind turbine generators
14:50:15:10	62	Lingxue Lin, Lin Guan, Hengan Chen, Zhihui Dong, Jiantian Chen and Minghui Xiao	Fault location and isolation for distribution network with DGs based on intelligent multi-agent system
15:10-15:30	63	Lin Guan, Gang Yang , Lingxue Lin, Zhihui Dong	The influence analysis of DG on the utilization of feeder
Room: Haihe Room 2 **Session 1-B1: Demand side management** Session chairs: Wei Feng, Guanyu Song			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	48	Liukai Chen, Zhigang Wu	Study on the effects of ev charging to global load characteristics via charging aggregators
13:50-14:10	65	Peipei Zhang, Mei Sun, Mingzhuang Zhang, Xu Yan	The research of the real-time pricing model based on the cumulated points system in the demand response
14:10-14:30	95	Sana Noor, Miao Guo, Koen H. van Dam, Nilay Shah, Xiaonan Wang	Energy demand side management with supply constraints: game theoretic approach
14:30-14:50	98	Benjamin Chris Ampimah, Mei Sun, Xueyin Wang, Joseph Ansah, Kwabena Takyi	Solving the perennial electricity crises management of residential consumer through dDRPs in sub-saharan africa: a case study of Ghana's electricity market using incentivized credit function technique
14:50:15:10	100	Kai Yuan, Yi Song, Yinchi Shao, Chongbo Sun, Zhili Wu	An charging strategy with the price stimulus considering the queue of charging station and EV fast charging demand
15:10-15:30	119	Qu Xinyao, Hui Hongxun, Ding Yi, Luan Kaining	Optimal control of intelligent electricity consumption for residential customers considering demand response

Room: Haihe Room 3 **Session 1-C1: Optimal control strategy** Session chairs: Jianzhong Wu, Kai Hou			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	14	Mukalu Sandro Masaki, Lijun Zhang and Xiaohua Xia	Hierarchical power flow control of a grid-tied photovoltaic plant using a battery-supercapacitor energy storage system
13:50-14:10	35	Xiaonan Cao, Changzhi Zhang, Yingtian Zhang, Zhiyong Gan, Haoran Li, Weichen Ni, Jianjun Wang	The simulation study of the modulation method for PV grid-connected system
14:10-14:30	46	Xiaoyong Chang , Fufeng Chen, Yuping Li, Yuting Wang, Chengji Xu	Coordinated active power control of hybrid energy storage system for ac micro-grids in islanding mode
14:30-14:50	54	Zhongqing Sun, Rui Chen, Hui Fang, Yinguo Yang, Tao Chen, Fusuo Liu	Study on control strategy of hydropower asynchronous integration coupling with DC emergency power support
14:50:15:10	71	Qiyu Chen, Xiuyuan Yang, Guoqing He, Xiaoxin Zhou	Optimal scheduling system for wind farm and hydro power plant coordinating operation
15:10-15:30	107	Fulai Yao, Qingbin Gao	Efficiency optimization of a power station with different generators
Room: Meeting Room 2 **Session 1-D1: Microgrid planning** Session chairs: Jinyue Yan, Hong Liu			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	32	Chongbo Sun, Kai Yuan, Yi Song, Xianing Jin, Guanyu Song, Yingying Yu	An adaptability evaluation for DG Integration based on hierarchical and regional frame
13:50-14:10	58	Jiancheng Yu, Chris Marnay, Ming Jin, Cheng Yao, Xu -Angela- Liu and Wei Feng	Review of microgrid development in the United States with lessons learned for China
14:10-14:30	61	Xianxian Pan, Hong Liu, Haojun Zhu, Bo Wang, Mengze Yu, Zhe Tian and Zan Yang	Comprehensive comparative analysis of different regional energy supply schemes
14:30-14:50	67	Xiaobin Guo, Peng Li, Kaiqiao Zhan, Wenxiao Wei, Qinxue Tan, Wentao Yang, Fengzhang Luo	Data flow design for power network planning software
14:50:15:10	68	Xue Wang, Qiang Sun, Guanyuan Wei, Fengzhang Luo, Wentao Yang, Ke Xu, Zhe Wang	Comparison and quantification analysis method of urban energy consumption features from perspective of urban energy interconnection
15:10-15:30	113	Bowen Hong, Weiwei Miao, Zhe Liu and Long Wang	Architecture and functions of micro-grid energy management system for the smart distribution network application

Day 1 Oral Presentations

Room: Haihe Room 1 **Session 1-A2: Microgrid reliability and resiliency** Session chairs: Zhigang Wu, Jun Xu			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	80	Bei Wang, Lin Zhu and Da Chen	Mechanism research on the influence of large scale wind power integration on power system angle stability
16:20-16:40	92	Zhu Yihua, Li Wei, Guo Qi, Chang Dongxu, Luo Jianbob, Wang Yu, Li Xueming, Li Zhaowei, Li Zhukun, Li Bijun	Research on security and stability characteristics and control strategy of power grid with VSC-HVDC
16:40-17:00	99	Chaoyu Dong, Qingbin Gao, Hongjie Jia, Guohong Wu, Xiaomeng Li and Zhenyu Zhang	Stability analysis for the DC microgrid of chained communication network with cluster treatment of characteristic roots (CTCR) paradigm
17:00-17:20	108	Qingbin Gao, Chaoyu Dong, Hongjie Jia and Zhenyu Zhang	Multiple time-delay stability analysis for the DC-microgrid cluster with distributed control
17:20-17:40	109	Chenxi Wu, Hongli Zhang, Yuqiang Hou, Lu Cao, Fusuo Liu	Analysis of Binjin UHVDC restart failure and relevant suggestions on secure and stable operation of power grid
17:40-18:00	51	Lei Liang, Julong Wang, Mingying Li and Ming Chen	A correction method for HVDC transmission plan considering the correlation between sending end new energy generation and receiving end loads
Room: Haihe Room 2 **Session 1-B2: Frequency control and power quality** Session chairs: Zhongqing Sun, Ramesh Babu N.			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	17	Ni Ming, Chen Qian, Li Manli, Wang Qi, Tang Yi	A frequency control model for cyber physical power system considering demand response strategy
16:20-16:40	19	Xueshen Zhao, Ke Peng, Qing Wan, Xi Yan, Cong Zhang, Yuehao Zhao	Research on droop control strategy of multi-terminal AC/DC hybrid distribution system
16:40-17:00	53	Pengfei Li, Weihao Hu, Rui Hu and Zhe Chen	The primary frequency control method of tidal turbine based on pitch control
17:00-17:20	116	Arun Shankar V.K., Umashankar S, Sanjeevikumar P., Viliam Fedák, Vigna K. Ramachandaramurthy, Lucian Mihet-Popa	Investigations of power quality disturbances in a variable speed parallel pumping system with grid tied solar PV
17:20-17:40	117	Arun Shankar V.K., Umashankar S., Sanjeevikumar P., Lucian Mihet-Popa, Viliam Fedák, Vigna K. Ramachandaramurthy	Power quality performance analysis of grid tied PV fed parallel pumping system under normal and vibrating condition
17:40-18:00	86	Xinjie Hao, Shuyong Song and Xiaofei Liu	Parameter optimization and experimental research about speed governor system of isolated network operation area

Room: Haihe Room 3 **Session 1-C2: Optimal control strategy** Session chairs: Chao Wang, Peng Li			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	18	Yuquan Liu,Yuehao Zhao,Ke Peng,Bingyin Xu,Li Wang,Huangsheng Hua	Bilevel optimal coordinated control strategy for park-level integrated energy system
16:20-16:40	24	Dongsheng Yang, Qianqian Chong, Bo Hu, Min Ma	Optimal operation of microgrid based on user electricity anxiety
16:40-17:00	55	Jing Xu, Hong Liu, Ke Xu, Jifeng Li, Shiju Wang, Zan Yang and Bo Wang	Synergistic scheduling in integrated community energy system considering wind power accommodation
17:00-17:20	66	Sumeng Tao, Chunlai Li, Lei Zhang and Yi Tang	Operational risk assessment of grid-connected pv system considering weather variability and component availability
17:20-17:40	88	Scarlett Chen, Min-Sen Chiu and Xiaonan Wang	Local control of fuel cell systems within hybrid renewable energy generation using model predictive control
17:40-18:00	121	Chao Long, Jianzhong Wu, Yue Zhou, Nick Jenkins	Aggregated battery control for peer-to-peer energy sharing in a community microgrid with PV battery systems
Room: Meeting Room 2 **Session 1-D2: Photovoltaic and wind turbine system** Session chairs: Hongxing Yang, Yanli Liu			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	97	Zhicong Chen, Wencheng Lin, Lijun Wu, Chao Long, Peijie Lin, Shuying Cheng	A capacitor based fast I-V characteristics tester for photovoltaic arrays
16:20-16:40	101	Guodeng Chen, Peijie Lin, Yunfeng Lai, Zhicong Chen, Lijun Wu and Shuying Cheng	Location for fault string of photovoltaic array based on current time series change detection
16:40-17:00	132	Yingming Zhu, Fu Wang and Jinyue Yan	The potential of distributed energy resources in building sustainable campus: the case of sichuan university
17:00-17:20	44	Xiong Shangfeng, Jiang Dajun and Wu Jinbo	An integrated wind power control system designing
17:20-17:40	69	Haiying Sun, Hongxing Yang	Study on three wake models' effect on wind energy estimation in Hong Kong
17:40-18:00	42	Zhenxing Zhao, Hao Xiao and Yanhong Yang	Improved coordinated control strategy of hybrid energy storages in PV Power Smoothing

Day 2 Oral Presentations

Room: Haihe Room 1 **Session 2-A1: Renewable energy utilization** Session chairs: Guohong Wu, Xiaonan Wang			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	20	Jean-Paul Kone, Xinyu Zhang, Yuying Yan, Guilin Hu and Goodarz Ahmadi	CFD modeling and simulation of PEM fuel cell using OpenFOAM
13:50-14:10	64	Sanli Tang, Wanjun Qu, Hui Hong, Jie Sun	A smart full-spectrum solar power system integrating photovoltaics and fuel cell
14:10-14:30	77	Qiongqiong Jiang, Hao Zhang, Qilan Kang, Hui Hong, Hongguang Jin	A hybrid solar mini smart electricity system with chemical looping reforming of methane and hydrogen storage using LaCuxNi1-xO3 as oxygen carriers
14:30-14:50	110	Sichang Yang, Xinyu Zhang, Jean-Paul Kone, Bo Wang, Hanzhe Huang, Zirui Zhao, Xinyuan Wang, Kaili Yu and Goodarz Ahmadi	A practical low-cost approach to build membrane electrode assemblies using decal transfer technique
14:50:15:10	133	Yuexia Lv, Longyu Xia, Jinyue Yan and Jinpeng Bi	Design of a hybrid fiber optic daylighting and PV solar lighting system
15:10-15:30	128	Shuquan Li, Siwei Li and Daomin Qu	Discussion on Integration Technology for Local Energy Internet
Room: Haihe Room 2 **Session 2-B1: Communication and information technology** Session chairs: Bowen Hong, Bing Sun			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	22	Xinyi Zhang, Limin Jiang, Kecheng Li, Congchuan Hu, Xiaoming Ma, Dongsheng Yang, Bowen Zhou	A communication delay compensation method applied to ACLs for distributed energy consumption
13:50-14:10	103	Shouzhou Liu, Yanfu Li, Zhou Yang	Modelling of cyber-attacks and defenses in local metering system
14:10-14:30	111	Oluleke Bamodu, Felix Osebor, Liang Xia, Ali Cheshmehzangi and Llewellyn Tang	Indoor environment monitoring based on humidity conditions using a low-cost sensor network
14:30-14:50	102	Weijie Hao, Qiang Yang	Data traffic characterization in intelligent electric substations using FARIMA based threshold model
14:50:15:10	104	Yongfu Li, Peijie Lin, Haifang Zhou, Zhicong Chen, Lijun Wu, Shuying Cheng and Fengping Su	On-line monitoring system based on open source platform for photovoltaic array
15:10-15:30	81	Hao Xiao, Zuomin Dong, Li Kong, Wei Pei and Zhenxing Zhao	Optimal power flow using a novel metamodel based global optimization method

Day 2

Oral Presentations

Room: Haihe Room 3 **Session 2-C1: Optimal control strategy** Session chairs: Bin Li, Chao Long			
Time	**ID**	**Author**	**Paper title**
13:30-13:50	9	Wenwei Wang, Junhui Shi, Zhipeng Zhang, Cheng Lin	Optimization of a dual-motor coupled powertrain energy management strategy for a battery electric bus
13:50-14:10	29	Xuewei Wu, Wei Pei, Wei Deng, Li Kong and Hua Ye	Collaborative optimal distribution strategy of AGC with aarticipation of ESS and controllable load
14:10-14:30	28	Xin Ma, Hui Qu, Wei Pei and Hao Xiao	Optimal interactive operation of microgrid under demand response based on rolling optimization algorithm
14:30-14:50	83	Yanhong Yang, Wei Pei, Qunhai Huo, Jianjun Sun and Feng Xu	Coordinate planning of multiple microgrids and distribution network with mixed AC/DC Interconnection method
14:50:15:10	118	Haonan Li, Hongwen He, Jiankun Peng and Zhanjiang Li	Three-parameter Shift Schedule of Automatic Mechanical Transmission for Electric Bus
Room: Haihe Room 1 **Session 2-A2: Renewable energy utilization** Session chairs: Fu Wang, Hongxing Yang			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	50	Shubhra Kanti Das, Hyun Jo, Ocktaeck Lim, Youngmin Woo	Combustion characteristics of biodiesel blended gasoline fuel in engine like condition using constant volume combustion(CVCC)
16:20-16:40	96	Hyojin Kim, Hyun Jo, Sakda Tongchai, Ocktacke Lim	A study on the particle size and velocity profile on a gasoline port injector using a phase doppler particle analyzers (PDPA)
16:40-17:00	105	Zahrul Mufrodi, Arief Budiman and Suryo Purwono	Operation conditions in syntesize of bioaditive from glycerol as by-product biodiesel : A review
17:00-17:20	114	Mochamad Syamsiro, Harwin Saptoadi, Abdul Sattar Nizami, Mohammad Rehan	Pyrolysis of compact disc (CD) case wastes to produce liquid fuel as a renewable source of electricity generation
17:20-17:40	131	Husni Firmansyah Sutrisno, Yuting Tan, Jinyue Yan	Power and methanol production from biomass combined with solar and wind energy: analysis and comparison
17:40-18:00	135	Yong Hao, Hailong Li, Pietro Elia Campana and Jinyue Yan	Integration of concentrating PVs in anaerobic digestion for biomethane production

Room: Haihe Room 2 **Session 2-B2: Energy storage and EV** Session chairs: Shuang Gao			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	30	Jinpeng Tian, Rui Xiong	State-of-Health (SOH) estimation based on fractional order model for lithium ion batteries
16:20-16:40	36	Wenwei Wang, Sheng Yang, Yiding Li, Cheng Lin	Mechanical and electrical response of cylindrical Lithium-ion cells at various State of Charge
16:40-17:00	39	Dan Xu, Le Zhang, Bin Wang, Guangliang Ma	A novel equivalent-circuit model and parameter identification method for supercapacitor performance
17:00-17:20	57	Zeyu Chen, Rui Xiong, Jiahuan Lu	External short circuit fault of Lithium-ion batteries in low temperature condition: An experimental study
17:20-17:40	93	Yunfei Zhao, Jun Xu, Xiao Wang, Xuesong Mei	The adaptive fading extended kalman filter SOC estimation method for Lithium-ion batteries
17:40-18:00	25	Tianrun Yang, Qie Sun and Ronald Wennersten	The impact of refrigerant inlet temperature on the ice storage process in an ice-on-coil storage plate
Room: Haihe Room 3 **Session 2-C2: Energy flexibility** Session chairs: Xiaonan Wang, Lei Liang			
Time	**ID**	**Author**	**Paper title**
16:00-16:20	82	Qing Zeng, Jiakun Fang, Baohua Zhang, Zhe Chen	The coordinated operation of electricity, gas and district heating systems
16:20-16:40	84	Hao Li, Pengwei Su, Bo Yu, Jun Zhao, Cheng Ling, Qingsong An	Case study on optimization scheme design based on load prediction for regional heating system in industrial community
16:40-17:00	112	Bowen Hong, Qionghui Li, Weiwei Miao, Hu Yan, Jianing Liu	Energy storage application in improving distribution network's solar photovoltaic (PV) adoption capability
17:00-17:20	129	Yang Zhang, Pietro Elia Campana, Ying Yang, Anders Lundblad, Bengt Stridh, Jinyue Yan	Increasing energy flexibility through bridging electrical load and thermal load: A case study in Sweden
17:20-17:40	120	Zhaoguang Pan, Jianzhong Wu, Hongbin Sun, Muditha Abeysekera	Quantification of operational flexibility from a heating network
17:40-18:00	122	Cheng Yao, Changxin Zhou, Jiancheng Yu, Ke Xu, Peng Li, Guanyu Song	A sequential optimization method for soft open point integrated with energy storage in active distribution networks

Room: Haihe Room 1 **Session 3-A1: Renewable energy utilization** Session chairs: Zahrul Mufrodi, Rui Xiong			
Time	**ID**	**Author**	**Paper title**
08:30-08:50	34	Bosheng Su, Wanjun Qu, Wei Han, Hongguang Jin	Performance analysis of a hybrid photovoltaic/thermal and liquid desiccant system
08:50-09:10	49	Ji-Sheng Cui, Yun-Xin Wu, Jia-Li Liang, Hong Gang, Peng Qiu	Evaluation on light sources for electric power emergency recovery system based on grille method and maximum information coefficient method
09:10-09:30	94	Jiyun Du, Zhicheng Shen and Hongxing Yang	Performance enhancement of an inline cross-flow hydro turbine for power supply to water leakage monitoring system
09:30-09:50	130	Fu Wang	Performance of solar PV micro-grid systems: A comparison study
09:50-10:10	134	Yuexia Lv, Pengfei Si, Xiangyang Rong and Jinyue Yan	An optimization method for CCHP and river water source heat pump combined system
10:10-10:30	13	Wei Deng and Wei Pei	Typical operation modes and coordinated control of low voltage AC/DC distribution based on DC Interconnection
Room: Haihe Room 2 **Session 3-B1: Inverter and converter** Session chairs: Yu Wang, Leijiao Ge			
Time	**ID**	**Author**	**Paper title**
08:30-08:50	40	Guangliang Ma, Bin Wang, Dan Xu, Le Zhang	Switching control strategy based on non-singular terminal sliding mode for buck converter in auxiliary energy source
08:50-09:10	85	Huiping Zheng, Xinjie Hao, Yuqiang Hou, Ling Zhu	Research on sub-synchronous oscillation stability of VSC converter
09:10-09:30	90	Kumar. K, Ramji Tiwari, Ramesh Babu. N, Prabhu. K.R	Analysis of MISO super lift negative output luo converter with MPPT for DC grid connected hybrid PV/Wind system
09:30-09:50	124	Sridhar Vavilapalli, Umashankar S.,Sanjeevikumar P., Viliam Fedák, Lucian Mihet-Popa, Vigna K. Ramachandaramurthy	A buck-chopper based energy storage system for the cascaded H-Bridge inverters in PV applications
09:50-10:10	126	Sridhar V., Umashankar S. , Sanjeevikumar P., Vigna K. Ramachandaramurthy, Lucian Mihet-Popa, Viliam Fedák	Control architecture for cascaded H-Bridge inverters in large-scale PV systems
10:10-10:30	89	Ramji Tiwari, Kumar. K, Ramesh Babu. N, Prabhu. K.R	Coordinated MPPT and DPC strategies for PMSG based grid connected wind energy conversion system

Room: Haihe Room 3 **Session 3-C1: Economical, environmental and policy analysis, and demonstration** Session chairs: Chris Marnay, Mei Sun			
Time	**ID**	**Author**	**Paper title**
08:30-08:50	26	Yuquan Liu, Huan Li, Ke Peng, Cong Zhang, Huangsheng Hua, Li Wang	Demonstration projects of integrated energy system in China
08:50-09:10	45	Shuang Zhang, Tao Zhao, Bai-Chen Xie	Analysis of power generation mix in China: An evaluation based on portfolio theory
09:10-09:30	59	Kyeonghun Jwa, Ocktaeck Lim	Comparative life cycle assessment of lithium-ion battery electric bus and Diesel bus from well to wheel
09:30-09:50	73	Jiuli Yin, Lishuang Bian, Mengjiao Tian, Xinghua Fan	Pursue high economic development with less pollution: implications from the Resource-Economy-Pollution dynamic system
09:50-10:10	125	Yunlong Liu, Zhiyuan Liu, Chunyan Zhang	The problem study of district energy system in Shanghai, China
10:10-10:30	136	Victor Nian, Xunpeng Shi, Hari Malamakkavu Padinjare Variam, Jun Yuan, Bin Su and Yingzhu Li	The state of developments in regional integration among Southeast Asian states and implications for the future

REM

RENEWABLE ENERGY INTEGRATION with
MINI/MICROGRID

Note

REM

RENEWABLE ENERGY INTEGRATION with
MINI/MICROGRID

Note

REM

RENEWABLE ENERGY INTEGRATION with
MINI/MICROGRID

Note

REM

RENEWABLE ENERGY INTEGRATION with
MINI/MICROGRID

Note

REM

RENEWABLE ENERGY INTEGRATION with
MINI/MICROGRID

Note


International Conference on Applied Energy