

icae

International Conference on Applied Energy

August 12-16, 2019
Västerås • Sweden



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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 at Mälardalen University focuses on renewable energy, energy efficiency and emission mitigation, as well as smarter modelling, optimization and management.

FUTURE ENERGY CENTER is an established and internationally competitive research environment to achieve scientific excellence and to enhance co-innovation with stakeholders from industry and other organisations. We develop innovative solutions and tools in the areas of energy, building and environmental engineering. The center comprises nine professors, fifteen senior researchers and more than forty graduate students.

MER14 "MDH:s Evaluation for improved Research quality" was an evaluation of research conducted at MDH

in 2013 and 2014. According to the evaluation Future Energy Center carries out a world-class research.

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

FUTURE ENERGY CENTER offers studies at post-graduate level in Energy and Environmental Engineering. We are one of the partners of the Graduate School Reesbe (Resource-Efficient Energy Systems in the Built Environment). The center also has established collaborative partnerships with dozens of industrial partners. Scientists are actively participating in various international cooperation worldwide involving in organization of international conferences, establishment of virtual collaboration labs, and exchanges of students and professors.

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**MÄLARDALEN UNIVERSITY
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Welcome to ICAE2019



The Organizing Committee of ICAE2019 warmly invites you to attend the 11th International Conference on Applied Energy during Aug 12-15, 2019, in Västerås, Sweden. The theme of ICAE2019 is “Innovative Solutions for Energy Transitions”. As the conference chairmen, it is a great honour for us to make an invitation for all of you to this exciting event, with the cordial hospitality and the warm welcome of Västerås.

As a continuation of this prestigious conferences series, we will follow the style of the former nine successful conferences, held in Hong Kong, Singapore, Perugia/Italy, Suzhou/China, Pretoria/South Africa, Taipei/Taiwan, Abu Dhabi/United Arab Emirates, Beijing/China, Cardiff/United Kingdom and Hongkong to have you enjoy the program and social activities provided by the host.

ICAE2019 will include keynote and invited speeches, plenary sessions, oral presentations, and poster sessions on different topics including:

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

We are looking forward to seeing you in Västerås, Sweden.

Conference Chairs

Prof. Erik Dahlquist and Prof. Jinyue Yan

Acknowledgements



VÄSTERÅS STAD



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Keynote Speakers



Björn Jonsson

**Head of Industrial
Automation Division,
and HUB Manager
Control Technologies
Northern Europe, ABB
AB, Sweden**

Keynote 1: How process automation is making the world more resource and energy efficient – future trends

The world is facing major challenges in coping with the supply of food and other necessities to all people, while ensuring a sustainable and environmentally friendly future. It places great demands on the process industry to streamline their processes – utilize raw material as efficiently as possible, increase the quality of the products with reduced material usage and minimize energy use. To achieve this, new digital technology and advanced automation are the most effective means. With relatively small investments, great effects can be achieved.

Today, the collection of data from the entire plant can be done faster and more accurately, while in the same time it is processed using various algorithms, advanced control systems or cloud services. It provides decision support to operators and predicted maintenance. It enables production planning based on customer orders from raw materials, overall production steps to distribution of the product and model-based control and optimization of not only individually processes, but entire factories or even entire corporations via Collaborative Operation Centers by the supplier's experts around the world 365/24.

Björn Jonsson is Head of Industrial Automation Division, and HUB Manager Control Technologies Northern Europe, ABB AB Sweden. He has a Master of Science Degree in Electrical Engineering, Royal Institute of Technology, Sweden Exchange Studies at University of Adelaide, Adelaide, South Australia and Master thesis at Ericsson (Bluetooth Network Scheduling/simulation), Stockholm, Sweden. 2012 – 2016 he was Global Service Manager Process Industries, ABB, Dubai UAE., 2010-2012 Local Business Unit Manager, Metals Systems Northern Europe region, Process Automation, ABB AB and 2004-2010 different engineering and management roles in the metal industry control area. He is also chairman of the board of Automation Region Swedish Triple Helix Cluster organization with some 120+ member companies and other organizations in the Automation area. The organization is driving development of this area with respect to business, research, and innovation where industry is working closely related to academy and society. He also been part of the national business development board initiated by the minister for business in Sweden. He is also Board Member of SynerLeap, ABB AB Sweden growth HUB for smaller SME companies and Board member Svemin, Swedish Mining association. Convenor of the British Standards Institution (BSi) GHG Management Group.

Keynote Speakers



Prof. Stephanie Pincetl

**Founding Director
Center for Sustainable
Communities, Institute
of the Environment and
Sustainability, UCLA,
USA**

Keynote 2: Understanding Building Energy Data, a key to a More Equitable Energy Transition – Impacts of and on Urban Development and Digitalisation

Building energy use, electricity and natural gas consumption, coupled with grid infrastructure and building characteristics such as age, size, use, industrial classification code of users, and sociodemographic characteristics of consumers, can reveal a great deal about cities. With a desire to decarbonize building energy use, it becomes critical to know the baselines of the current system to inform urban development patterns into the future, and the use of digital information and technologies. In the California case, new development will need to be zero net energy, integrate solar technologies, and at the same time, going forward soon, is the implementation of time of use pricing. This is a complex mix that requires, at a minimum, knowledge of the multiple components of building energy use today, including grid capacity, for a just transition.

Stephanie Pincetl is a Professor in Residence and founding Director of the Center for Sustainable Communities at the UCLA Institute of the Environment. Dr. Pincetl conducts research on environmental policies and governance is expert in bringing together interdisciplinary teams of researchers across the biophysical and engineering sciences with the social sciences to address problems of complex urban systems and environmental management.

Dr Pincetl has written extensively about land use in California, environmental justice, habitat conservation efforts, water and energy policy, socio-technical systems and urban ecology. She has received funding from the National Science Foundation to conduct collaborative research with biophysical scientists on urban ecology and water management in Los Angeles, as well as from the California state Energy Commission PIER and EPIC programs. Her book, *Transforming California, the Political History of Land Use in the State*, is the definitive work on land use politics and policies of California. She is the leading author of the urban section of the Southwest Technical Report to the National Climate Assessment and a contributing author of the urban section of the National Climate Assessment.

Dr. Pincetl has a PhD in Urban Planning and teaches at UCLA. She has taught at the University of Paris, the Institut de Sciences Politiques, has received a number of Fulbright scholarships and been a Senior Scholar at the Institute for Humanity and Nature in Kyoto Japan.

Keynote Speakers



Dr. Michael Obersteiner

**Program Director of the
Ecosystems Services and
Management Program,
International Institute
for Applied Systems
Analysis, Austria**

Keynote 3: What do we know about the global negative emissions energy system – 2050+

The European Union and an increasing number of Parties to the UNFCCC have declared zero-net emission targets to be reached by 2050. The technical prospects of changing the energy system of these economies into delivering near zero emissions are being clarified today. However, a vibrant global energy system which delivers massive amounts of negative emissions has received little attention although this era will start a little more than 30 years in the future – a technical lifetime of a power plant and a time horizon most of us will live in. A large deployment of native emission technologies will need to happen some of which will be connected to energy generation while others will require massive energy input. Clearly, the energy needed to propel negative emission processes will become an important component of overall energy demand. Furthermore, only few have realized that negative emission technologies cannot be incentivized by traditional carbon regulatory instruments such as tax and cap-and-trade systems, but will require considerable amounts of direct subsidies. The financial implications and the subsequent intergenerational equity issues related to late century have not been tackled. Finally, we conclude with a discussion on the opportunities arising from company level science-based GHG emission target setting and the role of negative emissions in these.

Michael Obersteiner has been Program Director of the Ecosystems Services and Management (ESM) Program at the International Institute for Applied Systems Analysis (IIASA) in Laxenburg, Austria and has now assumed the directorship of the Environmental Change Institute in Oxford. Michael has lead large scale interdisciplinary research projects in the fields of integrated assessment of climate, energy and land-use. He is author of over 250 scientific papers covering a very wide range of science fields. Currently he serves in UNEP's international resource panel (IRP) is lead convening author (CLA) of two IPBES chapters and a steering member to UNISDR's Global Assessment report. He completed graduate studies in Forest Science at the University of Life Sciences, Economics at the Institute for Advanced Studies, Vienna and Columbia University, New York.



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Best Papers of ICAE2018

- Impacts on industrial-scale market deployment of advanced biofuels and recycled carbon fuels from the EU Renewable Energy Directive II, *Chiaramonti, D., Goumas, T.*
- Modeling Framework for Planning and Operation of Multi-Modal Energy Systems in the Case of Germany, *Müller, C., Hoffrichter, A., Wyrwoll, L., Schmitt, C., Trageser, M., Kulms, T., Beulertz, D., Metzger, M., Duckheim, M., Huber, M., Küppers, M., Most, D., Paulus, S., Heger, H. J., Schnettler, A.*
- Model Predictive Control of Active Thermal Storage considering Indoor Environment for Building Proactive Demand Response in Smart Grids, *Tang, R., Wang, S.*
- A Graph Mining-based Methodology for Discovering and Visualizing High-level Knowledge for Building Energy Management, *Fan, C., Xiao, F., Song, M., Wang, J.*
- Thermo-chromic glazing performance: from component experimental characterisation to whole building performance evaluation, *Giovannini, L., Favoino, F., Pellegrino, A., Lo Verso, V.R.M., Serra, V., Zinzi, M.*
- Distributed or centralized? Designing district-level urban energy systems by a hierarchical approach considering demand uncertainties, *Jing, R., Wang, M., Zhang, Z., Wang, X., Li, N., Shah, N., Zhao, Y.*
- A stochastic optimization approach to the design and operation planning of a hybrid renewable energy system, *Yu, J., Ryu, J., Lee, I.*
- Advancements on scaling-up simulation of Proton Exchange Membrane Fuel Cells impedance through Buckingham Pi theorem, *Polverino, P., Bove, G., Sorrentino, M., Pianese, C., Beretta, D.*



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Awards of Highly Cited Research Papers

- The effect of renewable energy consumption on economic growth: Evidence from top 38 countries, *Bhattacharya, M., Paramati, S.R., Ozturk, I., Bhattacharya, S.*
- Consumption-based emission accounting for Chinese cities, *Mi Z., Zhang Y., Guan D., Shan Y., Liu Z., Cong R., Yuan X.-C., Wei Y.-M.*
- A systematic state-of-charge estimation framework for multi-cell battery pack in electric vehicles using bias correction technique, *Sun F., Xiong R., He H.*
- Combined analysis of electricity and heat networks, *Liu X., Wu J., Jenkins N., Bagdanavicius A.*
- Methanol synthesis using captured CO₂ as raw material: Techno-economic and environmental assessment, *Pérez-Fortes M., Schöneberger J.C., Boulamanti A., Tzimas E.*
- Impact of energy conservation policies on the green productivity in China's manufacturing sector: Evidence from a three-stage DEA model, *Li K., Lin B.*
- Blockchain technology in the chemical industry: Machine-to-machine electricity market, *Sikorski J.J., Haughton J., Kraft M.*
- Deep learning based ensemble approach for probabilistic wind power forecasting, *Wang H.-Z., Li G.-Q., Wang G.-B., Peng J.-C., Jiang H., Liu Y.-T.*
- Deep belief network based deterministic and probabilistic wind speed forecasting approach, *Wang H.Z., Wang G.B., Li G.Q., Peng J.C., Liu Y.T.*
- Optimal allocation and sizing of PV/Wind/Split-diesel/Battery hybrid energy system for minimizing life cycle cost, carbon emission and dump energy of remote residential building, *Ogunjuyigbe A.S.O., Ayodele T.R., Akinola O.A.*
- Assessing the benefits of residential demand response in a real time distribution energy market, *Siano P., Sarno D.*
- Multi-objective optimization of the building energy performance: A simulation-based approach by means of particle swarm optimization (PSO), *Delgarm N., Sajadi B., Kowsary F., Delgarm S.*
- Occupancy-based demand response and thermal comfort optimization in microgrids with renewable energy sources and energy storage, *Korkas C.D., Baldi S., Michailidis I., Kosmatopoulos E.B.*
- Interval optimization based operating strategy for gas-electricity integrated energy systems considering demand response and wind uncertainty, *Bai L., Li F., Cui H., Jiang T., Sun H., Zhu J.*
- A wavelet-coupled support vector machine model for forecasting global incident solar radiation using limited meteorological dataset, *Deo R.C., Wen X., Qi F.*
- Rule based energy management strategy for a series-parallel plug-in hybrid electric bus optimized by dynamic programming, *Peng J., He H., Xiong R.*



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Awards of Highly Cited Review Papers

- Review of natural gas hydrates as an energy resource: Prospects and challenges, *Chong Z.R., Yang S.H.B., Babu P., Linga P., Li X.-S.*
- Energy storage technologies and real life applications – A state of the art review, *Aneke M., Wang M.*
- Recent advances in the use of different substrates in microbial fuel cells toward wastewater treatment and simultaneous energy recovery, *Pandey P., Shinde V.N., Deopurkar R.L., Kale S.P., Patil S.A., Pant D.*
- Thermal energy storage for low and medium temperature applications using phase change materials - A review, *Pereira da Cunha J., Eames P.*
- A comprehensive review of lithium-ion batteries used in hybrid and electric vehicles at cold temperatures, *Jaguemont J., Boulon L., Dubé Y.*
- A review on compressed air energy storage: Basic principles, past milestones and recent developments, *Budt M., Wolf D., Span R., Yan J.*
- A review of the composite phase change materials: Fabrication, characterization, mathematical modeling and application to performance enhancement, *Zhang P., Xiao X., Ma Z.W.*
- Carbon capture by physical adsorption: Materials, experimental investigations and numerical modeling and simulations - A review, *Ben-Mansour R., Habib M.A., Bamidele O.E., Basha M., Qasem N.A.A., Peedikakkal A., Laoui T., Ali M.*
- The Calcium-Looping technology for CO₂ capture: On the important roles of energy integration and sorbent behavior, *Perejón A., Romeo L.M., Lara Y., Lisbona P., Martínez A., Valverde J.M.*
- Oxy-fuel combustion of pulverized fuels: Combustion fundamentals and modeling, *Yin C., Yan J.*
- Thermal energy storage (TES) for industrial waste heat (IWH) recovery: A review, *Miró L., Gasia J., Cabeza L.F.*
- A review of recent development: Transport and performance modeling of PEM fuel cells, *Wu H.-W.*
- Investigation into gas production from natural gas hydrate: A review, *Li X.-S., Xu C.-G., Zhang Y., Ruan X.-K., Li G., Wang Y.*



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Awards of Best Reviewers

- Giorgio Besagni, Italy
- Qie Sun, China
- M.Hadi Amini, United States
- Zhongbao Wei, Singapore
- Ali Al-Wakeel, United Kingdom
- Wei Han, China
- Luis Fabián Fuentes-Cortés, Mexico
- Shuai Deng, China
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- Ali Eftekhari, United Kingdom
- Pietro Bartocci, Italy
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CSEE Journal of Power and Energy Systems



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- Electric Equipment with Advanced Materials and Technologies

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Eskilstuna Energy and Environment

Eskilstuna energy and environment is handling everything related to heat and power, tap water and wastewater treatment as well as waste collection, sorting and recycling for the cities Eskilstuna and Strängnäs, and for household waste also for Orebro.

This tour will focus on waste sorting, where the inhabitants sort glass, plastic, metal, paper, packages, cloths and food waste in bags with different colours. The bags are then collected, transported to the plant at Lilla Nyby, where it is sorted automatically. The food waste is diluted to 16-18% ds where after it is screened and the filtrate mixed with fly larvae. After 2-3 weeks much of the waste (30-35% of ds) is converted into protein and fat rich larvae, that can be used as fodder for fish and animals. Today approximately 5% is used for larvae production while the rest goes for biogas production. The methane produced is refined and used as fuel for buses, garbage collection trucks and personal vehicles.

The plant also has the first passive energy office building in Sweden and the first commercial activity for “recycling design” where “scrap” is transferred into new products.

VafabMiljö

VafabMiljö works with sustainable and environmentally sound handling of waste, and is owned by the municipalities in Västmanland County together with the municipalities Heby and Enköping. The population of the region is about 330000, and there are more than 10 000 businesses that generate waste.

The task consists of dealing with all the waste in an environmentally correct manner. The primary aim is to reduce the total amounts of waste. The remaining waste should be regarded as a resource, and recycled to the extent that is technically and economically possible. VafabMiljö also manages the transport waste from industries and businesses. The most important values in our work is sustainable environment, good service, good quality, high efficiency, great commitment and great competence.

VafabMiljö has 18 recycling centres around the region, of which six are located in Västerås. Here the inhabitants can leave bulky waste (such as scrap metal, garden waste, combustible, well, etc.) and their hazardous waste and electronic waste. We also operates five waste stations where several now are transfer stations. An active landfill is at Gryta in Västerås. By the unit Gas, we can produce biogas and biofertilizer.

VafabMiljö works with waste advice, information, collection, transportation, sorting, recycling, energy recovery, biological treatment, composting, anaerobic digestion and landfill.

VafabMiljö is also responsible for collection of household waste, sludge and sewage, billing, customer service and more.

Please pay attention to more detailed information on the registration of site visits during the conference.

Practical Guide

General Information

Västerås is a city in central Sweden on the shore of Lake Mälaren in the province of Västmanland, 100 kilometres west of Stockholm. The city has a population of approximately 120,000 out of the municipal total of 150,000.

Weather

During the month of June, July and August you are most likely to experience good weather with pleasant average temperatures that fall between 20 degrees Celsius (68°F) and 25 degrees Celsius (77°F). On average, the warmest month is July. July is the wettest month, followed by August.

Currency

The current exchange rate is SEK 1 = US\$0.11 = €0.095, approximately. Foreign currencies are typically not accepted. They can be exchanged at money changers. Credit/debit cards are widely accepted also for small purchases.

Electricity

The voltage and frequency used in Sweden are 230 volts and 50 Hz, respectively.

Time difference

UTC +2

Travel guide

For tourist information about Västerås, visit <https://visitvasteras.se/>

Transport

FROM ARLANDA AIRPORT TO VÄSTERÅS

1. Train through Stockholm Central. Travelling by train to Västerås from Stockholm Central is 1 hour.
2. Direct Buses (<https://www.nettbuss.com/#/> or <https://global.flixbus.com/index>)

TO MÄLARDALEN UNIVERSITY

BY CAR

Turn off the E18 motorway at Rocklundamotet (exit 132). Drive along Vasagatan towards "centrum". After ca 700 metres, turn left to "Högskolan". Parking is available both in front of and behind the University building. GPS: Lat: N 59° 37' 6.76" Long: E 16° 32' 26.44".

BY TRAIN

The University is located about a fifteen-minute walk from Västerås Railway Station.

BY BUS

City buses 2 or 6, and regional bus 21, go from Västerås Bus Terminal to the "Högskolan" bus stop.

Find your way around the university at https://www.mdh.se/hogskolan/kontakt/hitta-pa-hogskolan-1.1256?l=en_UK

Programme at a Glance

Registration: Aug 12: 14:00 - 16:00 (Entrance of Mälardalen University); Aug 13: 8:00-12:00 (Aros Congress Center), 12:00-16:00 (Entrance of Mälardalen University); Aug 14: 8:00 - 16:00 (Entrance of Mälardalen University); Aug 15: 8:00-12:00 (Entrance of Mälardalen University).													
Time	Day 1: Aug 13												
09:00-09:15	Welcome by the Governor Minoo Akhtarzand												
09:15-09:30	Opening of the 11th International Conference on Applied Energy (ICAE2019)												
09:30-09:45	Opening of the 60th International Conference of Scandinavian Simulation Society (SIMS)												
09:45-10:15	Keynote 1												
10:15-10:45	Tea/Coffee Break												
10:45-11:30	Keynote 2												
11:30-12:15	Keynote 3												
12:15-13:30	Lunch												
13:30-14:10	Poster Session I												
Afternoon	1-A3	1-B3	1-C3	1-D3	1-E3	1-F3	1-G3	1-H3	1-I3	1-J3	1-K3	1-L3	1-M3
14:10-15:50	RE	RE	ES	CLE	CLE	SS	EM	EM	IES	MT	SIMS		CLE
15:50-16:20	Tea/Coffee Break												
Afternoon	1-A4	1-B4	1-C4	1-D4	1-E4	1-F4	1-G4	1-H4	1-I4	1-J4	1-K4	1-L4	1-M4
16:20-18:00	RE	RE	ES	CLE	CLE	SS	EM	EM	IES	MT	SIMS		ES
Time	Day 2: Aug 14												
Morning	2-A1	2-B1	2-C1	2-D1	2-E1	2-F1	2-G1	2-H1	2-I1	2-J1	2-K1	2-L1	2-M1
08:20-10:00	RE	RE	ES	CLE	CLE	SS	EM	EM	IES	MT	SIMS		
10:00-10:30	Tea/Coffee Break												
Morning	2-A2	2-B2	2-C2	2-D2	2-E2	2-F2	2-G2	2-H2	2-I2	2-J2	2-K2	2-L2	2-M2
10:30-12:10	RE	RE	ES	CLE	CLE	SS	EM	EM	IES	MT	SIMS		
12:10-13:30	Lunch												
13:30-14:10	Poster Session II												
Afternoon	2-A3	2-B3	2-C3	2-D3	2-E3	2-F3	2-G3	2-H3	2-I3	2-J3	2-K3	2-L3	2-M3
14:10-15:50	RE	RE	IES	CLE	CLE	SS	EM	EM	IES	MT	SIMS		IES
15:50-16:20	Tea/Coffee Break												
Afternoon	2-A4	2-B4	2-C4	2-D4	2-E4	2-F4	2-G4	2-H4	2-I4	2-J4	2-K4	2-L4	2-M1
16:20-18:00	RE	RE	IES	CLE	CLE	SS	EM	EM	IES	MT	SIMS		ES
18:45-22:00	Conference Banquet												
Time	Day 3: Aug 15												
Morning	3-A1	3-B1	3-C1	3-D1	3-E1	3-F1	3-G1	3-H1	3-I1	3-J1	3-K1	3-L1	3-M1
08:20-10:00	RE	RE	IES	CLE	CLE	CLE	EM	IES	IES	MT	SIMS		MT
10:00-10:30	Tea/Coffee Break												
Morning	3-A2	3-B2	3-C2	3-D2	3-E2	3-F2	3-G2	3-H2	3-I2	3-J2	3-K2	3-L2	3-M2
10:30-12:10	RE	RE	IES	ES	CLE	CLE	EM	IES	IES	MT	SIMS		CLE
12:10-13:30	Lunch												
Afternoon	3-A3	3-B3	3-C3	3-D3	3-E3	3-F3	3-G3	3-H3	3-I3	3-J3	3-K3	3-L3	3-M3
14:10-15:50	RE	RE	RE	ES	CLE	CLE	EM	MT	IES	IES	SIMS		EM
15:50-16:20	Tea/Coffee Break												
Afternoon	3-A4	3-B4	3-C4	3-D4	3-E4	3-F4	3-G4	3-H4	3-I4	3-J4	3-K4	3-L4	3-M4
16:20-18:00	RE	RE	RE	MT	CLE	CLE	EM	CLE	IES	IES	MT		RE

MT = Mitigation technology and energy storage
CLE=Clean energy conversion technology
EM=Energy Management, Policy and Economics
ES=Energy Sciences
IES=Intelligent energy system
RE=Renewable Energy
SIMS
SS=Special Session
Panel Session

For the detailed programme of the 60th International Conference of Scandinavian Simulation Society (SIMS), please refer to the Oral presentations-SIMS.

Speaker's Guide

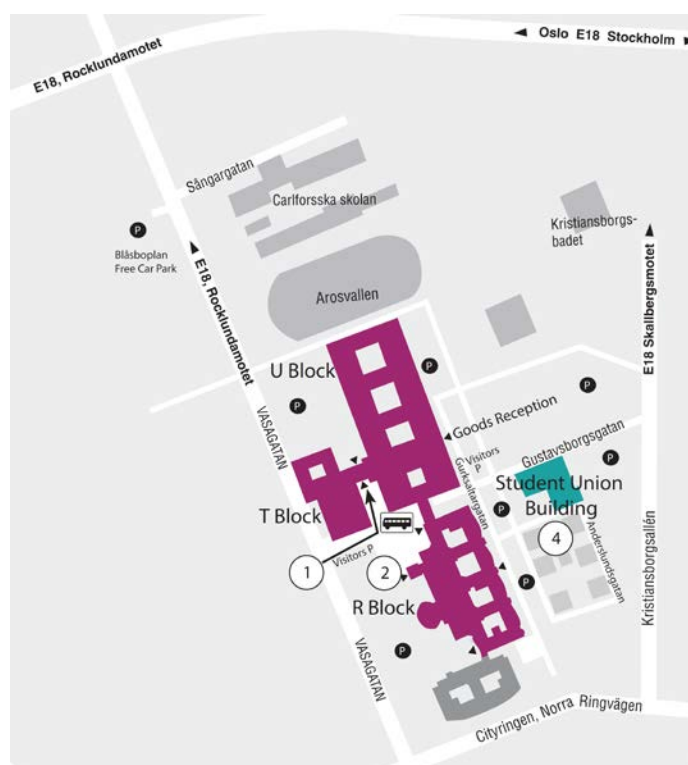
Presentation

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 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

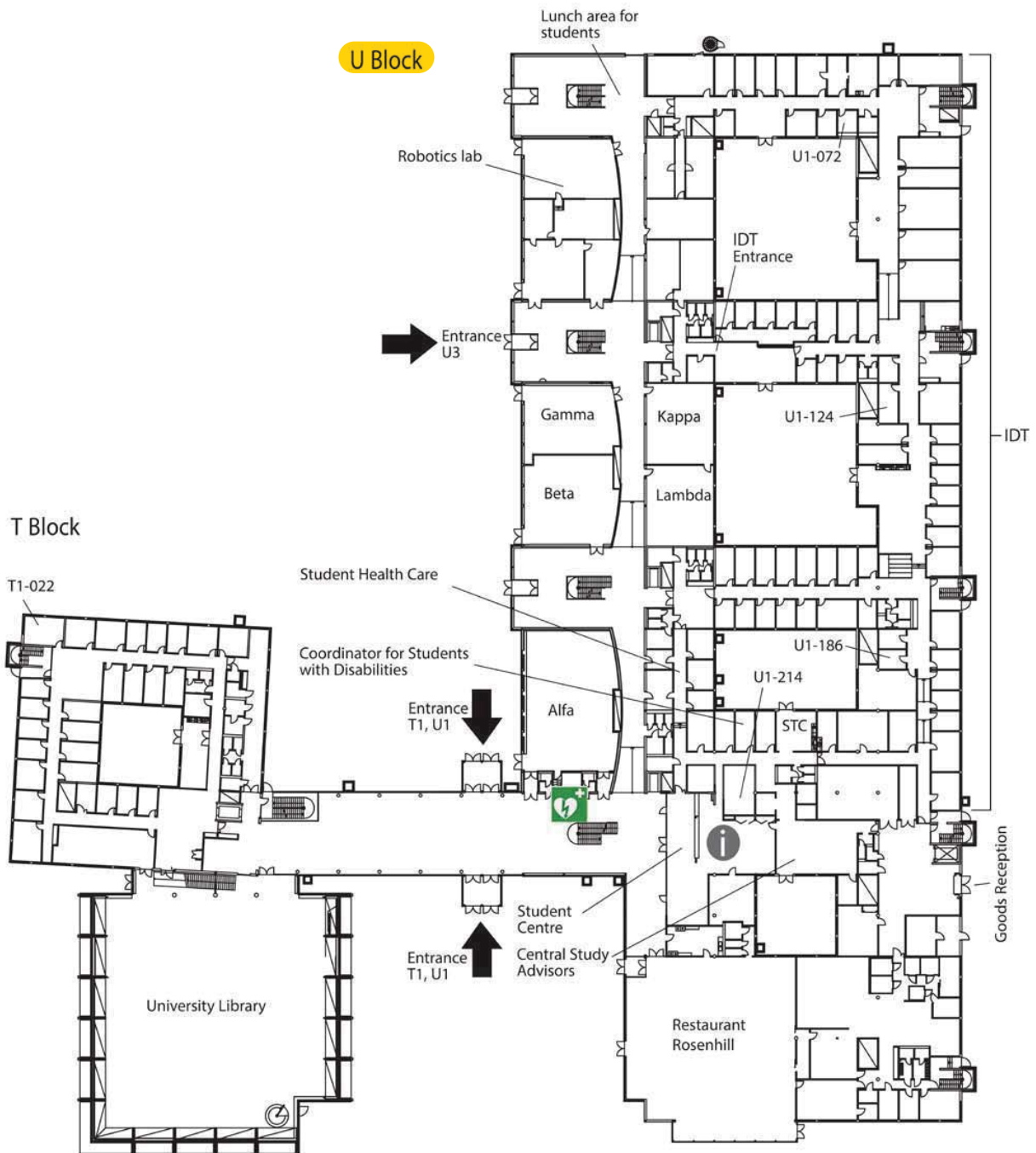
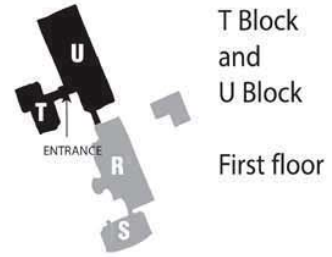
The following table lists all the presentation venues with abbreviations, which are used in the detailed programme in the late part of this booklet.

Session	Room	Block
A	Beta	U
B	Gamma	U
C	Lambda	U
D	Kappa	U
E	R1-121	R
F	R1-122	R
G	R1-131	R
H	R1-141	R
I	R1-142	R
J	R1-302	R
K	Alfa	U
L	Omega	R
M	R1-306	R



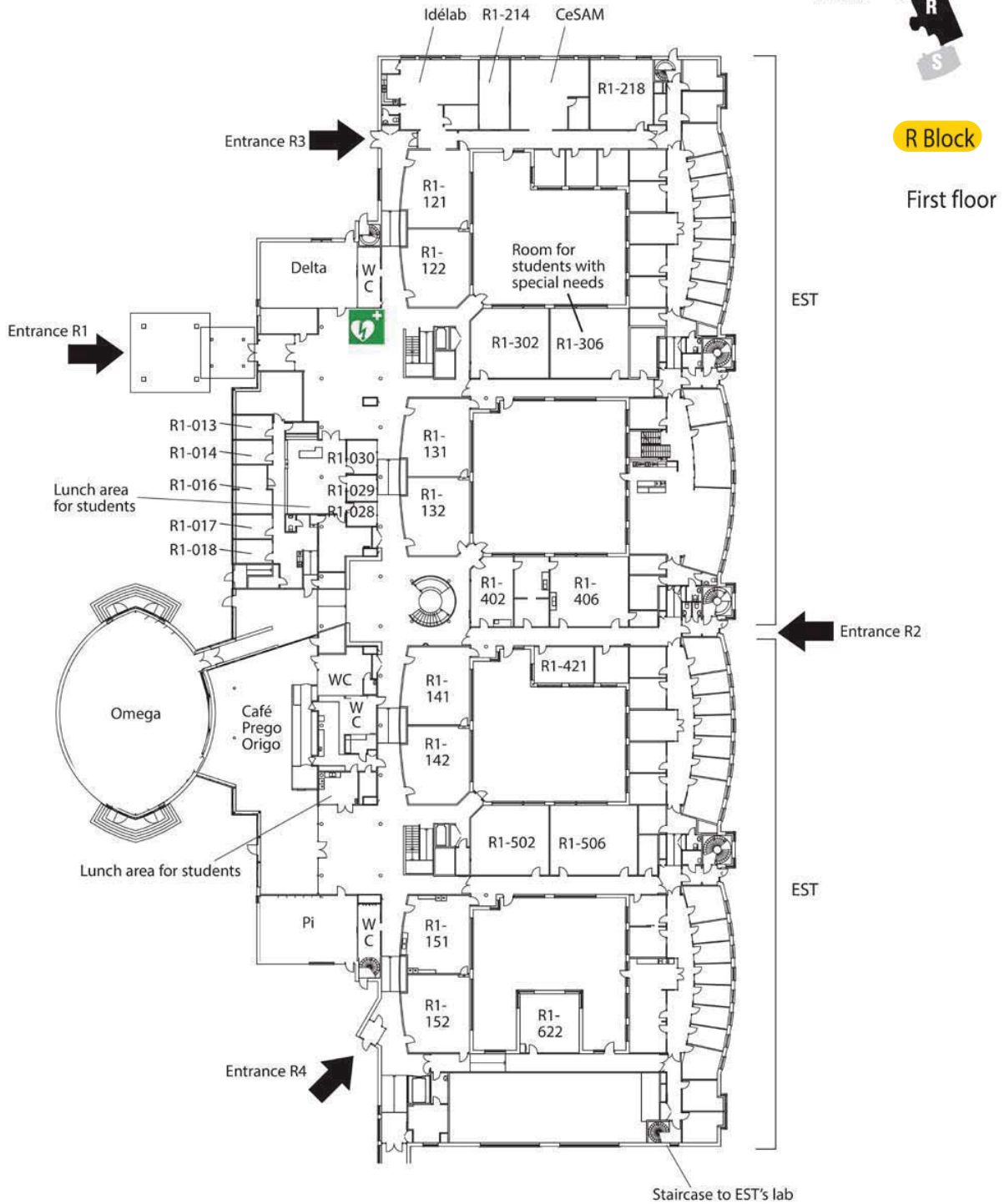
Speaker's Guide

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Speaker's Guide

We have defibrillators



Panel Sessions

Women in Applied Energy, 13th August

icae



PROGRAM

Aug.13 2:10 PM OMEGA

14:10 Panel I

Face Challenges and Achieve Success

14:50 Mentoring Program

15:20 Panel II

WIAE Added Values

15:50 Group & MentorLink Photo

MISSIONS

Empower women working in the Applied Energy community to achieve their career goals.

Create a supportive platform and provide mentorship for addressing gender-related issues.

Promote gender equality and “women power” in the field of energy science, technology and engineering.

QUESTIONNAIRE LINK



- What's going on about WIAE
- Requirement existing in WIAE
- AE Resources for WIAE

<http://yingkebao.top/web/formview/5d36cfa675a03c2cc8139f3c>

A PLATFORM WITH ADDED VALUE FOR WOMEN LEAN IN



Panel Sessions

Architecture & Model of Sustainable Power & Energy Systems, 14th August

Moderator: Prof. Dong Liu (Shanghai Jiao Tong University), Prof. Jianzhong Wu (Cardiff University), and Prof. Ruomei Li (Chinese Society for Electrical Engineering).

Time	Content
Opening Ceremony	
09:00—09:10	Prof. Xiaoxin Zhou Editor-in-Chief of CSEE JPES
09:10—09:15	Prof. Jinyue Yan Editor-in-Chief of Applied Energy
Keynote Report	
09:15—09:35	Prof. Daniel Favrat Ecole Polytechnique Federale de Lausanne Boosting the synergy between energy networks and users in more sustainable urban areas
09:35—09:55	Prof. Jun Liang Cardiff University Sustainable energy supply: Grid integration of clean power and electrified transport
09:55—10:15	Prof. Dong Liu Shanghai Jiaotong University Cyber physical hybrid modelling for power distribution internet of things
10:15—10:35	Group Photo and Tea Break
10:35—10:55	Prof. Carsten Ahrens University of Applied Sciences Jadehochschule in Oldenburg Development towards a 100% renewably produced energy world - enera makes a reality for a blueprint for other regions
10:55—11:15	Prof. Qinglai Guo Tsinghua University Automatic voltage control supporting large-scale renewable energy integration
11:15—12:00	Discussion and Summary

Panel Sessions

Water-energy nexus and strategic management decision-support, 14th August

Session chairs: Jianhua Wang (China Institute of Water Resources and Hydropower Research), Zhou Nan (Lawrence Berkeley National Laboratory).

Energy and water are both crucial areas in addressing current and future resource availability, environment and climate change issues. Energy and water are also closely intertwined, and a nexus approach is needed to ensure future sustainability of energy and water development plans. There is urgent need to find energy and water development pathways that are advantageous to reducing energy use and energy-related CO₂ emissions and water use requirements at the same time.

Considerable research is being conducted on some aspects of the water-energy nexus, but this nexus is regionally diverse and has many unexplored facets. We aim to bring together insights for energy-water nexus management decisions to both share current research and identify knowledge gaps.

We welcome contributions that focus on water and energy issues, including, but not limited to:

- Water and energy conservation and efficiency
- Water-energy nexus from different policy perspectives
- Climate impacts on energy development paths and water limits to future energy development
- Technology and energy development pathways to maximize water/energy efficiency and greenhouse gas (GHG) reduction
- Coordinated policy making for optimal control of energy and water

Day 1

Oral Presentations

09:00-09:15	Welcome by the Governor Minoo Akhtarzand		
09:15-09:30	Opening of the 11 th International Conference on Applied Energy (ICAE2019)		
09:30-09:45	Opening of the 60 th International Conference of Scandinavian Simulation Society (SIMS)		
09:45-10:15	KEYNOTE 1: Björn Jonsson Head of Industrial Automation Division, and HUB Manager Control Technologies Northern Europe, ABB AB Sweden. How process automation is making the world more resource and energy efficient – future trends		
10:15-10:45	TEA/COFFEE BREAK		
10:45-11:30	KEYNOTE 2: Professor Stephanie Pincetl Founding Director Center for Sustainable Communities, Institute of the Environment and Sustainability, UCLA. Understanding Building Energy Data, a key to a More Equitable Energy Transition – Impacts of and on Urban Development and Digitalisation		
11:30-12:15	KEYNOTE 3: Dr. Michael Obersteiner Program Director of the Ecosystems Services and Management Program, International Institute for Applied Systems Analysis, Austria What do we know about the global negative emissions energy system – 2050+		
12:15-13:30	LUNCH		
13:30-14:10	POSTER SESSION I		
ROOM: BETA SESSION NAME: RENEWABLE ENERGY I SESSION CHAIRS: XINHAI YU, SEBASTIAN SCHWEDE			
TIME	ID	AUTHOR	TITLE
14:10-14:30	104	HAN LI, WENMING YANG	SKELETAL MECHANISM CONSTRUCTION FOR METHYL OLEATE IN REAL BIODIESEL FUELS
14:30-14:50	281	DAOKUAN JIAO, JIAO KUI, QING DU	DIRECT NUMERICAL SIMULATION OF THE NEAR FIELD CHARACTERISTICS OF POWER-LAW BIOFUEL SPRAYS
14:50-15:10	807	IBRAHIM ARIS MOHAMMED, JONATHAN G.M. LEE, ADAM P. HARVEY	SIMULTANEOUS TRANSESTERIFICATION AND REACTIVE COUPLING FOR BIODIESEL AND POLYGLYCEROL PRODUCTION
15:10-15:30	964	ZHICHAO ZHANG, YIJI LU, YAODONG WANG, XIAOLI YU, TONY ROSKILLY	EXPERIMENTAL STUDY ON MACROSCOPIC SPARY CHARACTERISTICS OF HYDROTREATED VEGETABLE OIL (HVO) AND GAS TO LIQUID FUEL (GTL)
15:30-15:50	1158	AHMED AL HATROOSHI	PROCESS SIMULATION AND TECHNO-ECONOMIC ANALYSIS OF BIODIESEL PRODUCTION PLANTS USING WASTE SHARK LIVER OIL AND REFINED VEGETABLE OIL
ROOM: GAMMA SESSION NAME: RENEWABLE ENERGY II SESSION CHAIRS: PIETRO CAMPANA, TAKURO KOBASHI			
TIME	ID	AUTHOR	TITLE
14:10-14:30	51	TEFERA MEKONNEN	OPTIMAL DESIGN AND TECHNO-ECONOMIC ANALYSIS OF GRID-CONNECTED PV POWER SYSTEM FOR INDUSTRY PARK UNDER GRID OUTAGES
14:30-14:50	81	TIEN-CHIEN JEN, GEORGE ENEBE, KINGSLEY UKOBA	SIMULATION AND OPTIMIZATION OF NANOSTRUCTURED CU ₂ O/TIO ₂ PN HETEROJUNCTION SOLAR CELLS USING SCAPS
14:50-15:10	123	GAOMING ZHANG, WEI JINJIA	DESIGN AND OPTIMIZATION OF THE COMPOUND PARABOLIC CONCENTRATORS (CPCS) WITH VARIOUS TRUNCATION POSITIONS
15:10-15:30	495	QIONG WU, XUEPENG SHI	OPTIMIZATION PERFORMANCE OF DOUBLE SKIN FAÇADE INTEGRATED SEMI-TRANSPARENT PHOTOVOLTAIC
15:30-15:50	1150	VISHAL VERMA, PANKHURI ASTHANA	PV FED MULTI-INPUT AND SINGLE CASCADED OUTPUT CONVERTER FOR GROUND CURRENT REDUCTION
ROOM: LAMBDA SESSION NAME: ENERGY SCIENCES I SESSION CHAIRS: MINGFA YAO, REBEI BEL FDHILA			
TIME	ID	AUTHOR	TITLE
14:10-14:30	17	YEE-TING LEE, WAN-HSUAN LIN, WAN-YI CHEN, AN-SHIK YANG	CHARACTERIZATION OF CONDENSATION HEAT TRANSFER AND PRESSURE DROP FOR REFRIGERANT R1234YF
14:30-14:50	100	ZHEN CAO, BIN LIU, ZAN WU, YONGHAI ZHANG, WEI JINJIA, BENGT SUNDÉN	A COMPARATIVE STUDY ON POOL BOILING OF FC-72 ON MICRO-PIN-FIN SILICON SURFACES WITH AND WITHOUT NANOPARTICLES
14:50-15:10	362	YINGLING LI	EFFECT OF LUBRICATING OIL ON HEAT TRANSFER PERFORMANCE OF FALLING FILM EVAPORATION ON HORIZONTAL TUBE
15:10-15:30	428	JINGGUO QU, JIAN-FEI ZHANG	NUMERICAL STUDY ON AN IONIC WIND PUMP WITH MULTI-WIRE CORONA ELECTRODES FOR CHIP COOLING
15:30-15:50	908	NGUYEN BA CHIEN, PHAM QUANG VU, JONG-TAEK OH	TWO-PHASE FLOW BOILING HEAT TRANSFER COEFFICIENT AND PRESSURE DROP OF R-717 AND R-290 INSIDE MINICHANNEL MULTI-PORT TUBE

Day 1

Oral Presentations

ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES I			
SESSION CHAIRS: XIAOHUA XIA, WANDONG ZHENG			
TIME	ID	AUTHOR	TITLE
14:10-14:30	333	SI CHEN, YAXING REN, DANIEL FRIEDRICH, ZHIBIN YU	DISTRICT HEAT DEMAND PREDICTION USING ARTIFICIAL NEURAL NETWORK WITH DATA OF SAMPLE BUILDINGS
14:30-14:50	818	ANDREAS OLYMPIOS, ANTONIO MARCO PANTALEO, PAUL SAPIN, KOEN H. VAN DAM, CHRISTOS MARKIDES	CENTRALISED VS DISTRIBUTED ENERGY SYSTEMS OPTIONS: DISTRICT HEATING FOR THE ISLE OF DOGS IN LONDON
14:50-15:10	616	HAORAN ZHANG	GPS DATA IN URBAN ONLINE CAR-HAILING: THE POTENTIAL REDUCTION OF INVALID EMISSION BY A STOCHASTIC OPTIMIZATION-BASED SMART MATCHING SYSTEM
15:10-15:30	586	AARON JULES DEL ROSARIO, ARISTOTLE UBANDO, ALVIN CULABA	PREDICTING ENERGY CONSUMPTION IN MIXED-USE BUILDINGS USING MACHINE LEARNING TECHNIQUES
15:30-15:50	487	NATASA NORD, MOHAMMAD SHAKERIN	ANALYSIS OF DISTRICT HEATING SYSTEMS INTEGRATING DISTRIBUTED SOURCES
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES II			
SESSION CHAIRS: MICHAEL LEUNG, JUNJIE YAN			
TIME	ID	AUTHOR	TITLE
14:10-14:30	40	HAO YU, XINLI LU, JIAQI ZHANG, TAIDOU WANG, YUNCHENG GU, CHANGYOU GENG	THERMODYNAMIC PERFORMANCE ANALYSIS OF A TRIPLE-PRESSURE ORC - COMPARISON WITH SINGLE-PRESSURE AND DUAL-PRESSURE ORCS
14:30-14:50	861	SIMON EMHARDT, GUOHONG TIAN, JOHN CHEW	INFLUENCE OF RADIAL CLEARANCES ON THE AERODYNAMIC PERFORMANCE OF ORC SCROLL EXPANDERS MADE OF VARIABLE WALL THICKNESSES
14:50-15:10	173	YILIN ZHU, YONGZHEN WANG, SYLVAIN QUOILIN, WEIYI LI, JUN LI, HAOJIE LI, SHUAI LI	THERMO-ECONOMIC ANALYSIS OF BIOMASS-FIRED ORC COMBINED HEAT AND POWER SYSTEM VERSUS TRANSFER OF PINCH POINT
15:10-15:30	419	WEICONG XU, LI ZHAO, YUE ZHANG, SHAN LIN, SHUAI DENG	TOWARDS FREE-CONSTRUCTION OF THERMODYNAMICS CYCLE: A NEW PERSPECTIVE ON WORKING FLUID SELECTION
15:30-15:50	435	JOSEPH OYEKALE, GIORGIO CAU	ENHANCED EXERGOECONOMIC ANALYSIS OF A HYBRID SOLAR-BIOMASS ORGANIC RANKINE CYCLE COGENERATION PLANT
ROOM: R1-122			
SESSION NAME: SPECIAL SESSION I			
SESSION CHAIRS: XIAOHUI LEI, XIN WEN			
TIME	ID	AUTHOR	TITLE
14:10-14:30	19	STEFAN VÖGELE, MATTHIAS GRAJEWSKI, KRISTINA GOVORUKHA, DIRK RÜBBELKE	CHALLENGES FOR THE EUROPEAN STEEL INDUSTRY AND THEIR POSSIBLE IMPLICATIONS ON ENERGY, EMISSIONS AND SOCIAL ASPECTS
14:30-14:50	22	HOLGER SCHLÖR, SANDRA VENGHAUS	THE FOOD-ENERGY-(WATER VIRTUAL)-NEXUS OF THE GERMAN HOUSEHOLDS – A BUDGET ANALYSIS
14:50-15:10	439	TIES VAN DER HEIJDEN, EDO ABRAHAM, PETER PALENSKY, RONALD VAN NOOYEN, DORIEN LUGT	DEMAND RESPONSE FROM OPEN CANAL SYSTEMS IN THE DUTCH R1-306
15:10-15:30	566	RAMCHANDRA BHANDARI	NEEDS FOR RENEWABLE ENERGY IN NIGER'S ELECTRICITY SUPPLY BY 2030
15:30-15:50	795	QI CUI, LING HE, HAO CHEN, GUOYI HAN, JUAN CAO	CLIMATE AND WATER RESOURCE IMPLICATIONS OF REDUCING RENEWABLE POWER CURTAILMENT IN CHINA: A NEXUS PERSPECTIVE
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT I			
SESSION CHAIRS: SK CHOU, HADI FARABI-ASL			
TIME	ID	AUTHOR	TITLE
14:10-14:30	687	BO SHEN	WHAT CAN WE LEARN FROM CALIFORNIA EXPERIENCES IN EXPANDING THE MARKET FOR RENEWABLE ENERGY?
14:30-14:50	231	T. ADEFARATI, RAMESH BANSAL, NSILULU TRESOR MBUNGU, R. NAIDOO	TECHNO-ECONOMIC EVALUATION OF A GRID CONNECTED MICROGRID-COGENERATION SYSTEM USING WIND TURBINES, MICROTURBINE AND BATTERY SYSTEM
14:50-15:10	339	JENNY PALM, CARL-REINHOLD BRÅKENHJELM	SURVEY ON SWEDISH CITIZENS KNOWLEDGE ON NUCLEAR WASTE REPOSITORY
15:10-15:30	341	KAREN OLSEN, YI ZONG, SHI YOU, HENRIK BINDNER, MATTI KOIVISTO, JUAN GEA-BERMÚDEZ	DATA-DRIVEN FLEXIBILITY REQUIREMENTS FOR CURRENT AND FUTURE SCENARIOS WITH HIGH PENETRATION OF RENEWABLES
15:30-15:50	361	KENJI SHIRAISHI, DANIEL KAMMEN	GEOSPATIAL, STATISTICAL APPROACH FOR MULTI-CRITERIA ANALYSIS OF RENEWABLE ENERGY POTENTIAL: A CASE STUDY ON JAPAN'S ONSHORE WIND

Day 1

Oral Presentations

ROOM: R1-141			
SESSION NAME: ENERGY MANAGEMENT II			
SESSION CHAIRS: PERRY YANG, YOSHIKI YAMAGATA			
TIME	ID	AUTHOR	TITLE
14:10-14:30	355	SOOWON CHANG, TAKAHIRO YOSHIDA, MICHAEL TOBEY, YOSHIKI YAMAGATA, PERRY YANG	TRANSFORMATIVE MODEL OF URBAN BUILDINGS OPTIMIZING ENERGY DEMANDS, SOLAR HARVESTING POTENTIAL, AND INDOOR THERMAL COMFORT
14:30-14:50	904	MICHAEL TOBEY, SOOWON CHANG, TAKAHIRO YOSHIDA, ROBERT BINDER, YOSHIKI YAMAGATA	MEASURING RESILIENCE, ECONOMY, SUSTAINABILITY, AND HUMAN WELL-BEING IN MULTIPLE SCALES FOR URBAN DIAGNOSTICS
14:50-15:10	940	TAKAHIRO YOSHIDA, SOOWON CHANG, DAISUKE MURAKAMI, YOSHIKI YAMAGATA	THE RELATIONSHIPS BETWEEN ENERGY CONSUMPTION AND SURFACE TEMPERATURE: A COMBINING MULTIPLE-SCALE OBSERVATIONS APPROACH
15:10-15:30	973	ROBERT B. BINDER, SOOWON CHANG, MICHAEL TOBEY, MICHAEL ZILSKE, YOSHIKI YAMAGATA	THE SMART HUB CONCEPT: DEVELOPING THE RELATIONSHIP BETWEEN HUMAN MOBILITY AND ENERGY CONSUMPTION IN TOKYO
15:30-15:50	24	YING YANG	POTENTIAL ROOFTOP AREA FOR PHOTOVOLTAICS AND GOVERNMENT SUBSIDY EVALUATION IN SWEDEN
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS I			
SESSION CHAIRS: TAEHOON HONG, JEAN-NICOLAS LOUIS			
TIME	ID	AUTHOR	TITLE
14:10-14:30	39	SHIMING DENG	A MODELING STUDY ON THE INHERENT OPERATIONAL CHARACTERISTICS OF A DIRECT EXPANSION BASED AIR CONDITIONING SYSTEM HAVING A TWO-SECTIONED COOLING COIL (TS-DXAC)
14:30-14:50	49	XUAN ZHOU, LIEQUAN LIANG	ABNORMAL ENERGY CONSUMPTION MODE DETECTION OF OFFICE BUILDING AIR CONDITIONING SYSTEM BASED ON INFORMATION ENTROPY
14:50-15:10	92	DONGMEI PAN	THE IMPACTS OF BUILDING ENVELOPES INTEGRATED WITH PHASE CHANGE MATERIALS ON THE NIGHTTIME COOLING LOAD REDUCTION IN A BEDROOM IN SUB-TROPICS
15:10-15:30	215	YANZHE YU, SHIJUN YOU, HUAN ZHANG, TIANZHENG YE, XUEJING ZHENG, YARAN WANG	REVIEW OF PASSIVE STRATEGIES FOR VENTILATION AND AIR-CONDITIONING ENERGY SAVING IN UNDERGROUND METRO STATIONS
15:30-15:50	284	JIN HOU	EVENT DEFINITION METHOD FOR THE EVENT-DRIVEN OPTIMAL CONTROL STRATEGY OF AIR-CONDITIONING SYSTEMS
ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE I			
SESSION CHAIRS: ANTONIO PANTALEO, TAO MA			
TIME	ID	AUTHOR	TITLE
14:10-14:30	20	GURPREET SINGH SODHI, K. VIGNESHWARAN, MUTHUKUMAR PALANISAMY	EFFECT OF FIN CONFIGURATION ON THE CHARGING AND DISCHARGING CHARACTERISTICS OF A CYLINDRICAL LATENT HEAT STORAGE SYSTEM
14:30-14:50	94	DIGANT MEHTA, MANISH K RATHOD, JYOTIRMAY BANERJEE	ACCELERATED CHARGING OF PCM IN HORIZONTAL LATENT HEAT STORAGE UNIT USING DIFFERENT MULTITUBE ARRANGEMENT
14:50-15:10	137	QIUWANG WANG, KAREM ELFEKY	INFLUENCE OF THE PCM VOLUME FRACTION ON THE THERMAL PERFORMANCE OF THERMOCLINE THERMAL ENERGY STORAGE TANK USED IN CSP PLANTS
15:10-15:30	629	ZOLTAN BACSIK, EVA BJÖRKMANN, NADIA AMIRPOUR, DMITRI GLEBOV, ULRIKA TORNREFELT, GÖRAN BOLIN, NIKLAS HEDIN	THERMOCHEMICAL HEAT STORAGE WITH CALCIUM OXIDE COATED BY NANO-SIZED SILICA
15:30-15:50	235	ZAOXIAO ZHANG	THERMODYNAMIC INVESTIGATION OF A NOVEL METAL HYDRIDE BASED SOLAR THERMAL ENERGY STORAGE REACTOR FOR SOLAR BAKERY UNIT: ENERGY AND EXERGY ANALYSIS
14:10-15:50	PANEL SESSION: WOMEN IN APPLIED ENERGY ROOM: OMEGA		

Day 1

Oral Presentations

SESSION CHAIRS: R1-306			
SESSION CHAIRS: CLEAN ENERGY CONVERSION TECHNOLOGIES III			
SESSION CHAIRS: WEI-HSIN CHEN, HONGMING XU			
TIME	ID	AUTHOR	TITLE
14:10-14:30	1045	ZEFENG WANG, WEI HAN, NA ZHANG, CHANGCHUN LIU	EXPERIMENTAL STUDIES ON INLET AIR THROTTLING OPERATING STRATEGY IN CCHP SYSTEM
14:30-14:50	153	HONGHAO PAN, JIE ZHANG, DAMING SUN	MULTI-STAGE TRAVELING-WAVE THERMOACOUSTIC POWER GENERATION SYSTEM UTILIZING LNG COLD EXERGY AND LOW-TEMPERATURE WASTE HEAT
14:50-15:10	693	TING HE, DONGHAI LI, YALI XUE, JIHONG WANG	START UP AND SHUT DOWN SIMULATION OF MICRO GAS TURBINE BASED ON REINFORCED LEARNING
15:10-15:30	767	PENG CHEN, ZUNQING ZHENG, XINLEI LIU, MINGFA YAO, HU WANG, HAIFENG LIU	EXPERIMENTAL STUDY ON THE EFFECT OF INJECTION PARAMETERS ON COMBUSTION AND PARTICULATE SIZE DISTRIBUTION OF PARTIALLY PREMIXED COMBUSTION FUELED WITH N-BUTANOL
15:30-15:50	742	JUAN FANG, QIBIN LIU, DAWEI SU, TAIXIU LIU, ZHIMEI ZHENG, JING LEI, HONGGUANG JIN	EXPLORING THE POTENTIAL OF SOLAR FULL-SPECTRUM UTILIZATION WITH CONCENTRATED PHOTOCHEMICAL-PHOTOVOLTAIC-THERMOCHEMICAL (P-PV-T) SYSTEM
15:50-16:10	TEA/COFFEE BREAK		
ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY III			
SESSION CHAIRS: JESPER OLSSON, EVA NORDLANDER			
TIME	ID	AUTHOR	TITLE
16:20-16:40	30	YONG WANG, BEIDOU XI, XUAN JIA, MINGXIAO LI, LIANHAI REN, XUE WANG, JIAQI HOUMEIYING YE	INSIGHT INTO MICROBIAL COMMUNITY DYNAMIC AND ENERGY RECOVERY FROM FOOD WASTES: THE EFFECTS OF TEMPERATURE AND OLR STRESSES ON THE LONG-TERM HYDROGEN PRODUCTION SYSTEMS
16:40-17:00	363	MOHAMMADAMIN ZAREI, JAY LIU	MATHEMATICAL OPTIMIZATION OF MACROALGAE-BASED BIOFUEL SUPPLY CHAIN – A LOGISTIC CASE STUDY IN KOREA
17:00-17:20	454	ERSHAD ULLAH KHAN, ÅKE NORDBERG, PETER MALMROS	THERMO-ECONOMIC ANALYSIS OF A THERMOPHILIC BIOGAS PLANT INTEGRATED WITH MEMBRANE DISTILLATION
17:20-17:40	992	XIAOYAN JI	EFFECT OF H ₂ S IN RAW BIOGAS ON THE PERFORMANCE OF BIOGAS UPGRADING WITH HIGH PRESSURE WATER SCRUBBING
17:40-18:00	1013	ABDELRAHMAN SALEH ZAKY AHMED, CHRISTOPHER FRENCH	PRELIMINARY ASSESSMENT OF AN INTEGRATED MARINE FERMENTATION PROCESS FOR THE EFFICIENT PRODUCTION OF BIOFUELS
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY IV			
SESSION CHAIRS: HONGXING YANG, KOK KEONG CHONG			
TIME	ID	AUTHOR	TITLE
16:20-16:40	660	YASSIR ALAMRI, SAAD MAHMOUD, RAYA AL-DADAHA	THERMAL MODELLING OF MULTI-JUNCTION SOLAR CELLS ASSEMBLY UNDER FRESNEL-BASED CONCENTRATOR PHOTOVOLTAIC/THERMAL SYSTEM
16:40-17:00	695	YANJUAN WU, XIAODONG WANG, LIUTAO WANG	ACCURATE SOLUTION TO NONLINEAR PARAMETERS OF SOLAR CELLS BASED ON LIMIT CONSTRAINTS
17:00-17:20	774	KEEN YIP LAI, BOON HAN LIM	OPTIMAL INVERTER SIZING RATIO FOR PHOTOVOLTAIC POWER PLANTS IN MALAYSIA
17:20-17:40	894	ALVIN CULABA, AARON JULES DEL ROSARIO, ARISTOTLE UBANDO	DEVELOPMENT OF A FORECASTING MODEL FOR TROPICAL SOLAR ENERGY SYSTEMS USING SUPPORT VECTOR MACHINES
17:40-18:00	932	GILTON FURTADO, ANDRÉ MESQUITA, ALESSANDRO MORABITO, PATRICK HENDRICK	ENERGY ALTERNATIVES FOR THE OPERATION OF TUCURUÍ LOCKS
ROOM: LAMBDA			
SESSION NAME: ENERGY SCIENCES II			
SESSION CHAIRS: REBEI BEL FDHILA, JONG-TAEK OH			
TIME	ID	AUTHOR	TITLE
16:20-16:40	638	MINGJIE LI, WENJING ZHOU, YUTONG MU, BAOJIN QI, JINJIA WEI, WENQUAN TAO	LATTICE BOLZMANN STUDY ON DROPWISE CONDENSATION ON TEXTURED STRUCTURES FOR PURE VAPOR AND BINARY MIXTURE WITH NON-CONDENSABLE GAS
16:40-17:00	736	HAYDEE MARTINEZ-ZAVALA, DEBAJYOTI BHADURI, AGUSTIN VALERA-MEDINA, SAMUEL BIGOT	EXPERIMENTAL STUDY ON HEAT TRANSFER ENHANCEMENT DURING CONDENSATION USING MICROSTRUCTURED SURFACES
17:00-17:20	849	MRINAL JAGIRDAR, WEI LI ONG, POH SENG LEE, GHIM WEI HO	EXPERIMENTAL INVESTIGATIONS ON DESICCANT COATED FIN-TUBE HEAT EXCHANGERS RETROFITTED TO A CONVENTIONAL HVAC SYSTEM
17:20-17:40	859	ABDUL RAOUF TAJIK, TARIQ SHAMIM, VLADIMIR PAREZANOVIĆ, RASHID ABU AL-RUB	ESTIMATING FLUE-GAS DISTRIBUTION IN ANODE BAKING FURNACES EMPLOYING AN ARTIFICIAL NEURAL NETWORK-BASED METHOD
17:40-18:00	170	SHAN JI, SHIXUE WANG, KAIXIANG LI	COMPARATIVE STUDY ON COOLING SCHEMES OF LITHIUM-ION BATTERY PACKS FOR ELECTRIC VEHICLES

Day 1

Oral Presentations

ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES IV			
SESSION CHAIRS: WEI HAN, ANTONIO PANTALEO			
TIME	ID	AUTHOR	TITLE
16:20-16:40	474	ZHEWEN CHEN	THE ENERGY-SAVING MECHANISM OF COAL-FIRED POWER PLANT WITH S-CO ₂ CYCLE COMPARED TO STEAM-RANKINE CYCLE
16:40-17:00	972	KE TANG, YIJI LU, ZHI LI, YAODONG WANG, KE TANG	COMPARISON OF THE COOLING AND POWER SYSTEMS INTEGRATING ORC WITH CHEMISORPTION CYCLES
17:00-17:20	1157	ZHANGHUA WU	INVESTIGATION ON HEAT-DRIVEN THERMOACOUSTIC NATURAL GAS LIQUEFACTION TECHNOLOGY
17:20-17:40	1211	CHAUDHARY AWAIS SALMAN, SYED MUHAMMAD RAZA NAQVI, EVA THORIN, JINYUE YAN	A MULTI-CRITERIA DECISION ANALYSIS TO ASSESS DIFFERENT BIOFUELS PRODUCTION IN CHP-GASIFICATION BASED POLYGENERATION SYSTEMS
17:40-18:00	72	JAIRO RÚA, LARS NORD	STRESS MONITORING DURING OPTIMAL DYNAMIC OPERATION OF A NATURAL GAS COMBINED CYCLE: LINEAR VS NONLINEAR FORMULATION
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES V			
SESSION CHAIRS: GUOHONG TIAN, YIJI LU			
TIME	ID	AUTHOR	TITLE
16:20-16:40	496	SHAN LIN, LI ZHAO, SHUAI DENG, WEI WANG, DONGPENG ZHAO, DAHAI WANG	SIMULTANEOUS ALGORITHM FOR ACHIEVING INTELLIGENT CONSTRUCTION OF ORC CONFIGURATION AND FLUID SELECTION
16:40-17:00	720	FABIAN DAWO, SEBASTIAN EYERER, ROBERTO PILI, CHRISTOPH WIELAND, HARTMUT SPLIETHOFF	VALIDATION OF A TWIN-SCREW EXPANDER MODEL WITH EXPERIMENTAL DATA FROM AN ORGANIC RANKINE CYCLE
17:00-17:20	764	MICHAEL K.H. LEUNG, ZHANYING ZHENG, WEI WU, HONG XIAOQIANG, TIN FU CHEUNG, MUHAMMAD ASIM	COMPARATIVE ANALYSES BETWEEN ORGANIC RANKINE CYCLE (ORC) AND ALTERNATIVES USING WET GASES AS LOW-GRADE HEAT SOURCES
17:20-17:40	99	LIANG LI, YUNTING GE, GUOQIANG XU, SAVVAS TASSOU	EXPERIMENTAL INVESTIGATION OF ORGANIC RANKINE CYCLE (ORC) SYSTEM WITH DIFFERENT COMPONENTS
17:40-18:00	950	LUCA CIOCCOLANTI, ROBERTO TASCIONI, MATTEO PIRRO, CARLO MARIA BARTOLINI, ALESSIA ARTECONI	DEVELOPMENT OF A SMART SIMULATOR FOR SMALL-SCALE SOLAR CHP SYSTEM IN THE BUILT ENVIRONMENT
ROOM: R1-122			
SESSION NAME: SPECIAL SESSION II			
SESSION CHAIRS: XIN WEN, STEFAN VÖGELE			
TIME	ID	AUTHOR	TITLE
16:20-16:40	57	YU PENG, ZHONGYANG LUO, QINHUI WANG, MENGXIANG FANG	LIFE CYCLE COMPARISON ASSESSMENT OF COAL-BASED POLYGENERATION AND SEPARATE PRODUCTION
16:40-17:00	261	YIN LONG, QIONG ZHANG, HAORAN ZHANG	RELOCATED TRANSPORT CARBON EMISSION AFTER ELECTRIC VEHICLE PROMOTION IN TOKYO, JAPAN-ANALYSIS BASED ON BIG DATA AND SUPPLY CHAIN
17:00-17:20	425	WEI-HSIN CHEN, YI-BIN CHIOU	DESIGN OF SEGMENTED THERMOELECTRIC GENERATOR OPTIMIZED BY MULTI-OBJECTIVE GENETIC ALGORITHM
17:20-17:40	485	AMBROSE NJEPU, LIJUN ZHANG, XIAOHUA XIA	OPTIMAL PUMP OPERATION FOR RESIDENTIAL WATER SUPPLY SYSTEM
17:40-18:00	863	LEA EGGEMANN	LIFE CYCLE ASSESSMENT OF A NOVEL POWER-TO-FUEL SYSTEM FOR METHANOL PRODUCTION USING CO ₂ FROM BIOGAS
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT III			
SESSION CHAIRS: PATRIK KLINTENBERG, BO SHEN			
TIME	ID	AUTHOR	TITLE
16:20-16:40	373	JAYNE LOIS SAN JUAN, ALVIN CULABA, ANDRES PHILIP MAYOL, ARISTOTLE UBANDO, EDWIN SYBINGCO, PHOEBE MAE CHING, WEI-HSIN CHEN, JO-SHU CHANG	DYNAMIC ASSESSMENT OF THE SUSTAINABILITY OF ALGAL BIOREFINERIES IN THE PRODUCTION OF BIOFUELS
16:40-17:00	374	ALVIN CULABA, JAYNE LOIS SAN JUAN, PHOEBE MAE CHING, ANDRES PHILIP MAYOL, EDWIN SYBINGCO, ARISTOTLE UBANDO, WEI-HSIN CHEN, JO-SHU CHANG	OPTIMAL STRATEGIES FOR A TECHNO-ECONOMIC AND ENVIRONMENTAL EFFICIENT ALGAL BIOREFINERY
17:00-17:20	603	YIYU DING, HELGE BRATTEBØ, NATASA NORD	ENERGY ANALYSIS AND ENERGY PLANNING FOR KINDERGARTENS BASED ON DATA ANALYSIS
17:20-17:40	628	SAHEED GBADAMOSI, NNAMDI NWULU	A DYNAMIC OPTIMAL EXPANSION PLANNING MODEL INTEGRATING RENEWABLE ENERGY SOURCES
17:40-18:00	1173	HUI HOU, TAO XU, XIXIU WU, YAN XU, HUAN WANG, PENG LIU	RESEARCH ON CAPACITY CONFIGURATION AND COMPREHENSIVE BENEFIT OF WIND-PHOTOVOLTAIC-STORAGE HYBRID POWER SYSTEM BASED ON GRAVITY ENERGY STORAGE

Day 1

Oral Presentations

ROOM: R1-141			
SESSION NAME: ENERGY MANAGEMENT IV			
SESSION CHAIRS: VINCENT MAZAUIC, LEI ZHU			
TIME	ID	AUTHOR	TITLE
16:20-16:40	262	JUNRONG MA, LI ZHU	BASED ON CITESPACE'S 1998-2018 ENERGY ECONOMIC RESEARCH TRACK AND FUTURE FORECAST
16:40-17:00	351	SIMONE FRANZÒ, FEDERICO FRATTINI, ENRICO CAGNO, ANDREA TRIANNI	TOWARDS A COMPREHENSIVE ANALYSIS OF ENERGY EFFICIENCY POLICIES FOR BUILDINGS: LESSONS LEARNT FROM THE ITALIAN TAX RELIEF SCHEME
17:00-17:20	440	BO WANG, HONG CHEN	MULTI-OBJECTIVE OPTIMIZATION FOR BUILDING ENERGY RETROFITTING CONSIDERING USER SATISFACTION
17:20-17:40	480	MOHAMMAD ANSARIN, YASHAR GHIASSI-FARROKHFAL, WOLFGANG KETTER, JOHN COLLINS	INCREASING DISTRIBUTED RENEWABLES LEADS TO HIGHER CROSS-SUBSIDIES FOR PROSUMERS, DEPENDING ON TARIFF
17:40-18:00	621	JOHANNES HUHN, PHILIPP KNÖPFLE, JOHANNES KNÖRR, HELGE PRUESSMANN, TIMM TRÄNKLER	ESTIMATING THE ATTRACTIVENESS OF GERMAN COUNTIES FOR ENERGETIC RETROFITTING: A CONJOINT-ANALYSIS APPROACH
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS II			
SESSION CHAIRS: SOOWON CHANG, JAKUB JURASZ			
TIME	ID	AUTHOR	TITLE
16:20-16:40	303	JIANHENG CHEN, LIN LU, HONG ZHONG, YAXIONG JI	DEVELOPMENT OF A NEW HGMS-BASED COOL ROOF COATING AND ITS APPLICATION ANALYSIS IN BUILDINGS
16:40-17:00	328	XUEPENG SHI, ABEL TABLADA DE LA TORRE, LIJUN WANG, QIONG WU	THE IMPACT OF DYNAMIC FACADE TYPOLOGY ON DAYLIGHT AND ENERGY PERFORMANCE: COMPARING ROTATION AND FOLDING MOTION
17:00-17:20	672	PUNEET SAINI, XINGXING ZHANG, BENEDETTA COPERTARO	A PRELIMINARY OPTIMIZATION AND TECHNO-ECONOMIC ANALYSIS OF SOLAR ASSISTED BUILDING HEATING SYSTEM USING TRANSPIRED AIR SOLAR COLLECTOR AND HEAT PUMP IN SWEDEN
17:20-17:40	860	SHUANGYU WEI, PAIGE WENBIN TIEN, JOHN CALAUTIT, YUPENG WU	A NOVEL DEEP LEARNING APPROACH FOR EQUIPMENT LOAD DETECTION FOR REDUCING BUILDING ENERGY DEMAND
17:40-18:00	1021	MONA RAMADAN, ABDULLAH ALSALEMI, FAYCAL BENSAAI, ABBES AMIRA, CHRISTOS SARDIANOS, IRAKLIS VARLAMIS, GEORGE DIMITRAKOPOULOSDIMOSTHENIS ANAGNOSTOPOULOS	SIMULATING APPLIANCE-BASED POWER CONSUMPTION RECORDS FOR ENERGY EFFICIENCY AWARENESS
ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE II			
SESSION CHAIRS: CHUAN WANG, JIANFENG LU			
TIME	ID	AUTHOR	TITLE
16:20-16:40	239	ZAOXIAO ZHANG, ZHEN WU	DYNAMIC INVESTIGATION OF A NOVEL SOFC-MHR-ENGINE HYBRID ENERGY CONVERSION SYSTEM
16:40-17:00	241	YUAN FANG, ZHIGUO QU, JIAN-FEI ZHANG	SIMULTANEOUS CHARGING AND DISCHARGING PERFORMANCE OF A LATENT ENERGY STORAGE SYSTEM
17:00-17:20	326	ZUANSI CAI	MODELLING A FILED-SCALE COMPRESSED AIR ENERGY STORAGE IN POROUS ROCK RESERVOIRS
17:20-17:40	344	WOLF TILMANN PFEIFFER, FRANCESCO WITTE, ILJA TUSCHY, SEBASTIAN BAUER	TEST CASES FOR A COUPLED POWER-PLANT AND GEOSTORAGE MODEL TO SIMULATE COMPRESSED AIR ENERGY STORAGE IN GEOLOGICAL POROUS MEDIA
17:40-18:00	349	TIANRUN YANG, WEN LIU, GERT JAN KRAMER, QIE SUN	STATE OF THE ART REVIEW OF SEASONAL SENSIBLE HEAT STORAGE
16:20-18:00	PANEL SESSION: SCIENTIFIC WRITING ROOM: OMEGA		

Day 1

Oral Presentations

ROOM: R1-306			
SESSION NAME: ENERGY SCIENCES III			
SESSION CHAIRS: TAO MA, JIANFEI ZHANG			
TIME	ID	AUTHOR	TITLE
16:20-16:40	1188	LISI JIA, YING CHEN	INVESTIGATION ON PREPARATION OF PCM EMULSIONS USING A CO-FLOW MICROFLUIDIC METHOD
16:40-17:00	424	YUTARO SHIMADA, KOJI TOKIMATSU	STUDY ON OPTIMUM OPERATION OF GROUND SOURCE HEAT PUMP IN BANGKOK, THAILAND BASED ON THE FIELD EXPERIMENT
17:00-17:20	106	ZHIYING LIANG, JIANYONG CHEN, XIANGLONG LUO, YING CHEN, ZHI YANG, YINGZONG LIANG	INVESTIGATION OF PLATE CONDENSER WITH MULTIPLY LIQUID-SEPARATIONS
17:20-17:40	745	CHANGQING TIAN, YIYU CHEN, JUNQI DONG, HUIMING ZOU, BIHAN HUANG	EXPERIMENTAL INVESTIGATION ON CO2 EJECTOR-EXPANSION REFRIGERATION SYSTEM FOR BATTERY PACK COOLING
17:40-18:00	475	QIANMEI FU, YUANYUAN ZHANG, JING DING, WEILONG WANG, JIANFENG LU	OPTIMIZATION OF ZIGZAG PASSAGE OF PCHE FOR MOLTEN SALT/S-CO2 HEAT EXCHANGER

Day 2

Oral Presentations

ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY V			
SESSION CHAIRS: KUNIO YOSHIKAWA			
TIME	ID	AUTHOR	TITLE
08:20-08:40	97	ANQI ZHOU, HONGPENG XU, WENMING YANG	NUMERICAL STUDY OF BIOMASS CO-COMBUSTION WITH CONSIDERATION OF DISTINCT CHARACTERISTICS OF THE FUEL CONSTITUENTS
08:40-09:00	282	ZHIJUN PENG, GUANGZHI FAN, JIAO KUI, QING DU, FAN ZHANG, SHENGHUI ZHONG	EFFECTS OF RATIO OF ETHANOL AND BUTANOL IN ABE (ACETONE-BUTANOL-ETHANOL) ON MICRO-EXPLOSION CHARACTERISTICS OF ABE/KEROSENE DROPLET
09:00-09:20	402	TSAMARA TSANI, BASKORO LOKAHITA, MUHAMMAD AZIZ, FUMITAKE TAKAHASHI	MECHANISM OF POTASSIUM REMOVAL FROM PALM KERNEL SHELL (PKS) BY HYDROTHERMAL TREATMENT
09:20-09:40	593	ZHEZHE HAN, MD MOINUL HOSSAIN, CHUANLONG XU	COMBUSTION CONDITION MONITORING THROUGH DEEP LEARNING NETWORKS
09:40-10:00	1069	HONGPENG XU	MODELING OF BIOMASS COMBUSTION IN THE PACKED BED USING CFD-DEM
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY VI			
SESSION CHAIRS: PIETRO CAMPANA, JINQING PENG			
TIME	ID	AUTHOR	TITLE
08:20-08:40	582	CHIA-LIN YEH, YI-JUNE HUANG, HAN-TING CHEN, CHUAN-PEI LEE, KUO-CHUAN HO	HIERARCHICAL NANONEEDLE –DECORATED SHELL STRUCTURE OF COBALT PHOSPHIDE AS COUNTER ELECTRODE FOR DYE-SENSITIZED SOLAR CELL
08:40-09:00	1025	KAREN BARBOSA DE MELO, HUGO SOEIRO MOREIRA, ANDREW VINÍCIUS SILVA MOREIRA, FREDRIK WALLIN, MARCELO GRADELLA VILLALVA	INFLUENCE OF BACKTRACKING AT SOLAR-TRACKING PHOTOVOLTAIC POWER PLANTS FOR GENERATION AND PROTECTION
09:00-09:20	1097	VISHAL VERMA, VANDANA ARORA	MODULE INTEGRATED HIGH GAIN DC-DC CONVERTER FOR SOLAR BASED EV CHARGING STATION
09:20-09:40	1197	PIETRO ELIA CAMPANA	COMMERCIAL BUILDINGS WITH HIGH RENEWABLE PENETRATION IN SWEDEN
09:40-10:00	1214	MASOUME SHABANI, ERIK DAHLQUIST, FREDRIK WALLIN, JINYUE YAN	COMPARISON OF THE OPTIMAL DESIGN OF PV-BATTERY AND PV-PHS OFF-GRID ENERGY SYSTEMS-A CASE STUDY IN SWEDEN
ROOM: LAMBDA			
SESSION NAME: ENERGY SCIENCES IV			
SESSION CHAIRS: LIN GAO, ROLAND SPAN			
TIME	ID	AUTHOR	TITLE
08:20-08:40	48	QIANG LIU, DONGYU MENG, RAN CHEN, ZHONGLI JI	OPTIMAL FLASH EVAPORATION TEMPERATURES FOR GEOTHERMAL FLASH RANKINE CYCLES USING PENTANE
08:40-09:00	165	SHUNQI ZHANG, MING LIU, YONGLIANG ZHAO, JIPING LIU, JUNJIE YAN	STUDY ON THE DYNAMIC PERFORMANCE OF A NOVEL STEAM TURBINE SYSTEM WITH AN ADDITIONAL REGENERATIVE TURBINE
09:00-09:20	346	ALI KUYUK, GHOREISHI-MADISEH SEYED ALI, AGUS SASMITO	NUMERICAL STUDY OF HEAT TRANSFER AND FLUID FLOW IN LARGE-SCALE SPRAY COOLING SYSTEMS; EXAMPLE OF MINE-BULK-AIR COOLER
09:20-09:40	348	LISHENG PAN	THEORETICAL ANALYSIS ON A CO ₂ HEAT PUMP DRIVEN BY WASTE HEAT
09:40-10:00	987	RAVI RANJAN, FAHID RIAZ, POH SENG LEE, SJAW KIANG CHOU	VAPORIZING LIQUID MICROTHRUSTER TESTING UNDER PULSED MODE OPERATION
ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES VI			
SESSION CHAIRS: WEI-HSIN CHEN, ZHIGUO QU			
TIME	ID	AUTHOR	TITLE
08:20-08:40	9	LONG JIANG, RUIQI WANG, YAODONG WANG, TONY ROSKILLY	PROCESS SIMULATION OF BLAST FURNACE OPERATION WITH BIOMASS SYNGAS INJECTION FOR CLEAN PRODUCTION
08:40-09:00	80	ARIF DARMAWAN, MUHAMMAD W. AJIWIBOWO, KOJI TOKIMATSU, MUHAMMAD AZIZ	EFFICIENT AMMONIA PRODUCTION FROM EMPTY FRUIT BUNCH VIA HYDROTHERMAL GASIFICATION, SYNGAS CHEMICAL LOOPING AND NH ₃ SYNTHESIS
09:00-09:20	161	BORIS BRIGLJEVIC, BOREUM LEE, ROFICE DICKSON, JAY LIU, SANGGYU KANG, HANKWON LIM	TEMPERATURE CASCADE LOHC DEHYDROGENATION AS A PROCESS INTENSIFICATION STRATEGY
09:20-09:40	272	DIEDERIK COPPITERS, WARD DE PAEPE, FRANCESCO CONTINO	DOES THE INCLUSION OF A HYDROGEN-BASED ENERGY SYSTEM IMPROVES THE ROBUSTNESS OF THE LEVELIZED COST OF ELECTRICITY FOR AN URBAN, GRID-CONNECTED HOUSEHOLD?
09:40-10:00	302	XIAOEN LI, XUE YANG, YOU ZHOU, SHUJUN MU, JOHN PATRICK LEMMON	SUSTAINABLE ENERGY ECOSYSTEM BASED ON POWER TO X TECHNOLOGY

Day 2

Oral Presentations

ROOM: R1-121			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES VII			
SESSION CHAIRS: GUOHONG TIAN, MINGSHENG TANG			
TIME	ID	AUTHOR	TITLE
08:20-08:40	6	XIAOMING LI, JIN BAI	THE EFFECT OF IRON OXIDE ON INTERACTION BETWEEN RESIDUAL CHAR AND ASH AT HIGH TEMPERATURE AND ITS INFLUENCE ON ASH FUSIBILITY
08:40-09:00	8	XIAOMING LI, MENGJIE LIU, JIN BAI	THE RELATIONSHIP BETWEEN COAL CHAR REACTIVITY AND CHAR STRUCTURE AT RAPID HEATING CONDITION BY TG AND HEATING STAGE-MICROSCOPY
09:00-09:20	343	CHRISTOPHER ULISHNEY, JINLONG LIU, COSMIN DUMITRESCU, ALI SIVRI	EFFECT OF BOWL-IN-PISTON CHAMBER ON THE COMBUSTION PROCESS IN A STOICHIOMETRIC NATURAL-GAS SPARK-IGNITION ENGINE
09:20-09:40	166	ZHIMIN ZHENG, WENMING YANG, WANG HUI, ANQI ZHOU, YONGTIE CAI, ZENG GUANG, HONGPENG XU	MODELLING AND EXPERIMENTAL VALIDATION OF DEPOSIT FORMATION FOR A WOODCHIP FIRED GRATE BOILER BASED ON A MECHANISTIC FOULING MODEL
09:40-10:00	378	ZENG GUANG, SHAOZENG SUN, YAOJIE TU, WENMING YANG, YONGTIE CAI, ZHIMIN ZHENG, MINGCHEN XU	IGNITION CHARACTERISTICS OF BIAS PULVERIZED COAL JETS AT DIFFERENT INITIAL PULVERIZED COAL CONCENTRATIONS IN A REDUCING ATMOSPHERE
ROOM: R1-122			
SESSION NAME: SPECIAL SESSION III			
SESSION CHAIRS: XIANDONG XU, CHAO LONG			
TIME	ID	AUTHOR	TITLE
08:20-08:40	59	XING ZHENG, MINGFANG TANG	EXPERIMENTAL EVALUATION OF THERMAL PERFORMANCE AND PASSIVE COOLING EFFECT OF GREEN ROOF ON SUNNY SUMMERTIME
08:40-09:00	181	WENLIANG LIU, YANXIN CHAI, YUE XIANG, JUNYONG LIU	CORRELATION-BASED INVESTMENT DECISION FOR MULTI-YEAR DISTRIBUTION NETWORK EXPANSION
09:00-09:20	229	MENGYING WANG, HONGNAN CHEN, CHUN DENG, XIAOHUI WANG, BEI LIU, CHANGYU SUN, GUANGJIN CHENMAHMOUD EL-HALWAGI	INTEGRATED NATURAL GAS HYDRATE EXPLOITATION BY CH ₄ -CO ₂ /H ₂ REPLACEMENT WITH METHANE REFORMING: CONCEPTUAL PROCESS DESIGN AND EXERGY ANALYSIS
09:20-09:40	868	CONRAD ALLAN JAY PANTUA, JOHN CALAUTIT, YUPENG WU	FLUID-STRUCTURE INTERACTION (FSI) MODELLING OF SOLAR PANEL INSTALLATIONS IN BUILDINGS FOR TYPHOON RESILIENCE
09:40-10:00	951	WEIJIA YANG, JIANDONG YANG, ZHIGAO ZHAO	SIMULATION FOR DYNAMIC PERFORMANCE OF VIRTUAL POWER PLANT WITH VARIABLE SPEED PUMPED STORAGE AND PHOTOVOLTAIC POWER SYSTEM
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT V			
SESSION CHAIRS: HOLGER SCHLÖR, ANDREA TRIANNI			
TIME	ID	AUTHOR	TITLE
08:20-08:40	667	ANDREA BARTOLINI, FABRIZIO MARINELLI, ROBERTO ROSETTI, ANDREA PIZZUTI, GABRIELE COMODI	A MODEL-BASED APPROACH FOR THE LONG TERM PLANNING OF DISTRIBUTED ENERGY SYSTEMS IN THE ENERGY TRANSITION
08:40-09:00	669	PUSHPENDRA SINGH, SHREE KRISHNA BISHNOI, NAND KISHOR MEENA, JIN YANG, EDUARDO VEGA-FUENTES	MONARCH BUTTERFLY OPTIMIZATION FOR OPTIMAL INTEGRATION OF RENEWABLE ENERGY RESOURCES IN DISTRIBUTION SYSTEMS
09:00-09:20	670	NAND MEENA, JIN YANG, EDUARDO VEGA-FUENTES, CHENGWEI LOU	STRATEGIC DEPLOYMENT OF LOW-CARBON MICROGRIDS CONSIDERING CARBON POLICIES AND GREEN CITY GOALS
09:20-09:40	750	LEI ZHU, XING YAO	IMPACT OF VRE INTEGRATION ON THE POWER SYSTEM: A CASE STUDY OF GUANGDONG PROVINCE UNDER ELECTRICITY MARKET TRANSITION IN CHINA
09:40-10:00	789	MENG WANG	STUDY ON THE ADAPTABILITY OF CLEAN HEATING IN WINTER IN RURAL AREAS OF SHANDONG PROVINCE
ROOM: R1-141			
SESSION NAME: ENERGY MANAGEMENT VI			
SESSION CHAIRS: YINGRU ZHAO, GANG HE			
TIME	ID	AUTHOR	TITLE
08:20-08:40	168	HADI FARABI-ASL	DEPLOYMENT OF ZERO-EMISSION TRANSPORTATION TECHNOLOGIES IN JAPAN BY 2050, A TECHNO-ECONOMIC ANALYSIS USING TIMES-JAPAN FRAMEWORK
08:40-09:00	273	MENGYANG CHEN, NAN LI, HAILIN MU	OPTIMIZE CHINA'S SEASONAL NATURAL GAS STORAGE: A WELFARE-ECONOMICS APPROACH
09:00-09:20	365	QIANG ZHANG	ELECTRICITY FLOW OF PRESENT AND FUTURE IN CHINA: A PROVINCIAL PERSPECTIVE
09:20-09:40	414	JAKAPONG PONGTHANISAWAN, WEERIN WANGJIRANIRAN	SCENARIO ANALYSIS OF ELECTRIC VEHICLE AND ITS IMPACTS ON ENERGY SYSTEM OF ROAD TRANSPORT SECTOR IN THAILAND
09:40-10:00	471	MUHAMMAD HUDA, KOJI TOKIMATSU, MUHAMMAD AZIZ	FEED-IN TARIFF OPTIMIZATION FOR VEHICLE-TO-GRID IMPLEMENTATION AS ANCILARY SERVICE IN INDONESIA POWER SYSTEM

Day 2

Oral Presentations

ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS III			
SESSION CHAIRS: BIN YE, YANLI LIU			
TIME	ID	AUTHOR	TITLE
08:20-08:40	142	SHAORYUN GE, YUCHEN CAO, HONG LIU, JIFENG LI	ENERGY SUPPLY CAPABILITY EVALUATION OF MULTI-ENERGY MICROGRID CONSIDERING RELIABILITY CONSTRAINTS
08:40-09:00	180	LOUIS POLLEUX, JOHN SANDOVAL MORENO, GILLES GUERASSIMOFF, JEAN-PAUL MARMORAT	IMPACTS OF THERMAL GENERATION FLEXIBILITY ON POWER QUALITY AND LCOE OF INDUSTRIAL OFF-GRID POWER PLANTS
09:00-09:20	337	PEDRO JOSE DOS SANTOS NETO	A POWER MANAGEMENT STRATEGY FOR DC MICROGRIDS OPERATING IN GRID CONNECTED MODE
09:20-09:40	949	LEFENG SHI, YUE ZHOU, CHAO LONG, SATHSARA ABEYSINGHE, LIANA CIPCIGAN, JIANZHONG WU	A PEER-TO-PEER ENERGY TRADING HIERARCHY FOR MICROGRIDS IN DISTRIBUTION NETWORKS
09:40-10:00	221	YU ZENG, WEIDONG CHEN	A REAL OPTION GAME-THEORETIC ANALYSIS OF FINANCIAL INCENTIVES FOR ENERGY STORAGE SYSTEM IN MICROGRID
ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE III			
SESSION CHAIRS: ZAOXIAO ZHANG, CHUAN WANG			
TIME	ID	AUTHOR	TITLE
08:20-08:40	437	JOHANNES NORDBECK, SEBASTIAN BAUER, ANDREAS DAHMKE, HUGO GOMES, HENOK HAILEMARIAM, CONSTANTIN KINIAS, KERSTIN MEIER ZU BEERENTRUPCHRISTIAN SMIRR, THOMAS VIENKEN, FRANK WUTTKE, CHRISTOF BEYER	FIRST RESULTS OF A NUMERICAL CHARACTERIZATION OF A FIELD-SCALE CEMENT BASED THERMAL ENERGY STORAGE SYSTEM
08:40-09:00	184	QIUWANG WANG, XINYI LI	INFLUENCE OF VOID CAVITY DISTRIBUTION ON MELTING OF COMPOSITE PHASE CHANGE MATERIALS
09:00-09:20	738	XIN XIAO, DONGSHENG WEN, XUDONG ZHAO, HONGWEI JIA	EXPERIMENTAL STUDY OF A LATENT HEAT THERMAL ENERGY STORAGE UNIT ENCAPSULATED WITH MOLTEN SALT/COPPER FOAM COMPOSITE SEEDED WITH NANOPARTICLES
09:20-09:40	771	MARCO ANTONIO RODRIGUES DE BRITO, DURJOY BAIDYA, GHOREISHI-MADISEH SEYED ALI	TECHNO-ECONOMIC ASSESSMENT OF INTEGRATING THERMAL ENERGY STORAGE WITH DIESEL EXHAUST WASTE HEAT RECOVERY SYSTEM FOR REMOTE MINES IN COLD CLIMATES
09:40-10:00	1077	ABDULLAH AL KINDI, ANTONIO MARCO PANTALEO, CHRISTOS MARKIDES, KAI WANG	THERMODYNAMIC ASSESSMENT OF STEAM-ACCUMULATION THERMAL ENERGY STORAGE IN CONCENTRATING SOLAR POWER PLANTS
8:20-10:00	PANEL SESSION: FUTURE ENERGY CENTER ROOM: OMEGA		
8:20-10:00	PANEL SESSION: ARCHITECTURE & MODEL OF SUSTAINABLE POWER & ENERGY SYSTEMS ROOM: R1-306		
10:00-10:30	TEA/COFFEE BREAK		
ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY VII			
SESSION CHAIRS: LU DING, MANOSH PAUL			
TIME	ID	AUTHOR	TITLE
10:30-10:50	653	TAMER ISMAIL, YASUNORI KOBAYASHI, KUNIO YOSHIKAWA, LU DING, TAKAHIRO KOBORI, FUMITAKE TAKAHASHI, MOHAMED ABD EL-SALAM	EFFECT OF ELECTRON INJECTED AIR ON THE THERMAL DECOMPOSITION OF SOLID WASTES (PART 2: ANALYTICAL INVESTIGATION)
10:50-11:10	264	WANG LI, WEI WANG, WEN YING LI	CO-HYDROGENATION PERFORMANCE OF PINE SAWDUST AND HEAVY COMPONENTS OF COAL TAR
11:10-11:30	291	TIANBAO GU, CHUNGEN YIN	A PARALLEL REACTION KINETIC MODEL BASED ON WEIBULL DISTRIBUTION FOR BIOMASS PYROLYSIS
11:30-11:50	375	YASUNORI KOBAYASHI, KUNIO YOSHIKAWA, TAMER ISMAIL, FUMITAKE TAKAHASHI, LU DING, TAKAHIRO KOBORI	EFFECT OF ELECTRON INJECTED AIR ON THE THERMAL DECOMPOSITION OF SOLID WASTES (PART 1: EXPERIMENTAL INVESTIGATION)
11:50-12:10	299	XIA YUE, DEZHEN CHEN, JIA LUO	UPGRADING OF REED PYROLYSIS OIL BY CATALYTIC ESTERIFICATION USING SOLID ACID CATALYST GENERATED FROM REED BIOCHAR

ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY VIII			
SESSION CHAIRS: JINQING PENG, JINGCHUN FENG			
TIME	ID	AUTHOR	TITLE
10:30-10:50	78	HAOSHAN REN, ZHENJUN MA	LIFE CYCLE COST ANALYSIS OF A RENEWABLE COOLING AND HEATING SYSTEM WITH THERMAL ENERGY STORAGE
10:50-11:10	154	DI TIAN, ZHIGUO QU, JIAN-FEI ZHANG	EFFECT OF A MAGNETIC FIELD ON TURBULENT DOUBLE-DIFFUSIVE CONVECTION IN A SALT GRADIENT SOLAR POND
11:10-11:30	357	MD HASANUZZAMAN, AFROZA NAHAR, NASRUDIN ABD RAHIM	EFFECTS OF THE FLOW CHANNEL MATERIALS ON THE PERFORMANCE OF THE PHOTOVOLTAIC THERMAL SYSTEM
11:30-11:50	595	MIN YU	IMPACT INVESTIGATION OF HEIGHT DIFFERENCE ON SOLAR THERMAL PERFORMANCE OF A NOVEL SOLAR MICRO-CHANNEL LOOP HEAT PIPE-PV/T HEATING SYSTEM
11:50-12:10	1152	JIAN SONG, MICHAEL SIMPSON, KAI WANG, CHRISTOS MARKIDES	THERMODYNAMIC ASSESSMENT OF COMBINED SUPERCRITICAL CO ₂ (SCO ₂) AND ORGANIC RANKINE CYCLE (ORC) SYSTEMS FOR CONCENTRATED SOLAR POWER
ROOM: LAMBDA			
SESSION NAME: ENERGY SCIENCES V			
SESSION CHAIRS: PRAVEEN LINGA, YI WANG			
TIME	ID	AUTHOR	TITLE
10:30-10:50	899	JING-CHUN FENG, SI ZHANG, LIN WANG, JIE LI, HAO YIN	ENVIRONMENTAL IMPACTS OF METHANE SEEPAGE FROM MARINE HYDRATE EXPLOITATION: CHALLENGES AND FUTURE PERSPECTIVE
10:50-11:10	395	PENGFEI WANG, YING TENG, RUIFANG HUANG, YUSHENG ZHAO, SHENGLONG WANG, YONGCHEN SONG	NUMERICAL AND EXPERIMENTAL STUDY ON METHANE HYDRATE PRODUCTION CHARACTERISTICS DURING DEPRESSURIZATION
11:10-11:30	265	HARI PRAKASH VELUSWAMY	INVESTIGATION OF KINETICS OF MIXED NATURAL GAS HYDRATE FORMATION FOR ENERGY STORAGE APPLICATIONS
11:30-11:50	345	MINGHAO YU	NUMERICAL SIMULATION STUDY OF THE INFLUENCE OF ICE ON GAS PRODUCTION FROM HYDRATE DISSOCIATION IN POROUS MEDIA
11:50-12:10	382	ZHENYUAN YIN, LI HUANG, PRAVEEN LINGA	MULTI-SCALE EXPERIMENTAL INVESTIGATION ON THE KINETIC BEHAVIOR OF CH ₄ -HYDRATE IN SANDY MEDIA
ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES VIII			
SESSION CHAIRS: GEOFFREY HAMMOND, MICHAEL K.H. LEUNG			
TIME	ID	AUTHOR	TITLE
10:30-10:50	370	DAOCHENG LIU, JIEYING JING, TING-YU LI, JIE FENG, WEN YING LI	IMPROVING CO ₂ SORPTION PERFORMANCE OF CAO/CA3AL2O6 SORBENTS BY STEAM HYDRATION PRETREATMENT
10:50-11:10	436	XIANGYU LIU, HAO ZHANG, HUI HONG, HONGGUANG JIN	SOLAR SYNGAS PRODUCTION VIA CHEMICAL-LOOPING CYCLE FROM REDOX CYCLING OF NIO IN A HONEYCOMB REACTOR
11:10-11:30	583	YIN-CHEN LIN, CHENG-HSUN CHUANG, LI-YIN HSIAO, MIN-HSIN YEH, KUO-CHUAN HO	O ₂ PLASMA ACTIVATION OF CARBON NANOTUBES-INTERCONNECTED PRUSSIAN BLUE ANALOGUE FOR OXYGEN EVOLUTION REACTION
11:30-11:50	703	AMIN LAHNAOUI, CHRISTINA WULF, DIDIER DALMAZZONE	IMPACT OF THE OPTIMIZATION METHOD ON REDUCING THE INFRASTRUCTURE COST OF HYDROGEN TRANSPORTED AT DIFFERENT STATES OF AGGREGATION
11:50-12:10	768	XIAO TAN, LIBIN SHI, JIAWEI YAN, SUITAO QI	THEORETICAL STUDY ON THE PYROLYTIC DEHYDROGENATION MECHANISM OF AMMONIA BORANE
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES IX			
SESSION CHAIRS: QIBIN LIU, RUBEN MOCHOLÍ MONTAÑÉS			
TIME	ID	AUTHOR	TITLE
10:30-10:50	169	ZE SHI, DAOTONG CHONG, MING LIU, JINSHI WANG, JUNJIE YAN	SYSTEM STUDY OF POWER PLANT BASED ON SUPERCRITICAL WATER GASIFICATION OF COAL
10:50-11:10	482	ISMAIL JUMARE, RAMCHANDRA BHANDARI, ABDELLATIF ZERGA	ENERGY SUPPLY WITH PHOTOVOLTAICS/WIND HYBRID SYSTEM: A RELIABILITY ASSESSMENT IN NORTHERN NIGERIA
11:10-11:30	486	YIFAN LIANG, SHIXUE WANG, ZHAOJUN LIANG, YULONG ZHAO	EXPERIMENTAL STUDY ON POWER GENERATION PERFORMANCE OF THERMOELECTRIC MODULE IN LOW-TEMPERATURE ENVIRONMENT
11:30-11:50	916	CHRISTOPHER OLKIS, STEFANO BRANDANI, GIULIO SANTORI	ELECTRICITY FROM LOW-GRADE HEAT: INCREASING INDUSTRY EFFICIENCY BY ADSORPTION REVERSE ELECTRODIALYSIS
11:50-12:10	1047	ROBERTO SCACCABAROZZI, EMANUELE MARTELLI, MANUELE GATTI, PAOLO CHIESA, MATTEO PINI, CARLO MARIA DE SERVI	CONCEPTUAL THERMO-FLUID DYNAMIC DESIGN OF THE COOLED SUPERCRITICAL CO ₂ TURBINE FOR THE ALLAM CYCLE

Day 2

Oral Presentations

ROOM: R1-122			
SESSION NAME: SPECIAL SESSION IV			
SESSION CHAIRS: DAN WANG, XINWEI SHEN			
TIME	ID	AUTHOR	TITLE
10:30-10:50	119	XU SUN, YANLI LIU	ASSESSMENT OF EV RESPONSE CAPABILITY CONSIDERING USER'S DEMAND
10:50-11:10	120	LUKAS WEIMANN, MABEL ELLERKER, GERT JAN KRAMER, MATTEO GAZZANI	MODELING GAS TURBINES IN MULTI-ENERGY SYSTEMS: A LINEAR MODEL ACCOUNTING FOR PART-LOAD OPERATION, FUEL, TEMPERATURE, AND SIZING EFFECTS
11:10-11:30	212	YONGLIANG ZHAO, CHAOYANG WANG, MING LIU, DAOTONG CHONG, JUNJIE YAN	FLEXIBILITY OPTIMIZATION OF COAL-FIRED POWER UNITS BY REGULATING OF HIGH-PRESSURE EXTRACTION STEAM DURING PEAK SHAVING PROCESSES
11:30-11:50	256	CHI ON HO	A FRAMEWORK FOR SIMULTANEOUS OPTIMIZATION OF CAPEX AND OPEX DURING DESIGN, RAMP-UP AND OPERATIONS FOR DISTRICT ENERGY SYSTEMS
11:50-12:10	377	WENLIANG LIU, SHUAI HU, YUE XIANG, JUNYONG LIU, SHAFQAT JAWAD	OPTIMAL OPERATION OF DISTRIBUTED ENERGY RESOURCES FROM MULTI-INVESTORS IN A DISTRIBUTION NETWORK
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT VII			
SESSION CHAIRS: RONALD WENNERSTEN			
TIME	ID	AUTHOR	TITLE
10:30-10:50	794	XIAOYU LIU, NAN LI, HAILIN MU, MIAO LI, XINXIN LIU	OPTIMAL SIZING FOR OFFSHORE WIND-BASED PUMPED HYDRO STORAGE SYSTEM IN CONNECT TO THE MAIN GRID NETWORK
10:50-11:10	826	GANG HE	EXISTING TRENDS OF RENEWABLE AND STORAGE COSTS DECLINE OFFERS NEW OPPORTUNITY TO DECARBONIZE CHINA'S POWER GRID
11:10-11:30	901	CARLOS ANDRADE, SANDRINE SELOSSE	MODELING LOW-CARBON ENERGY TRANSITION IN THE TERRITORIES: A TIMES-SUDPACA MODEL TO ASSESS A LONG-TERM DECARBONIZATION STRATEGY FOR THE SOUTH-EAST REGION OF FRANCE
11:30-11:50	919	RUNSEN ZHANG	TRANSPORT ELECTRIFICATION: A GLOBAL SIMULATION OF THE PENETRATION OF ELECTRIC VEHICLES
11:50-12:10	945	RUJING YAN, RUJING YAN, YOU LIANG CHENG, ZHERUI MA, SITONG ZHU	A NOVEL METHODOLOGY ON OPTIMIZING NETWORK LAYOUT FOR REGIONAL ENERGY INTERNET
ROOM: R1-141			
SESSION NAME: ENERGY MANAGEMENT VII			
SESSION CHAIRS: PHILIP DE VAAL, TAEHOON HONG			
TIME	ID	AUTHOR	TITLE
10:30-10:50	519	SECK GONDIA SOKHNA, EMMANUEL HACHE, MARINE SIMOEN, FLORIAN FOSSE	DO METALS REALLY MATTER FOR THE ENERGY TRANSITION? AN ENDOGENOUS MATERIAL SUPPLY CHAIN IN A LONG-TERM ENERGY MODEL
10:50-11:10	647	ISMAIL BEKKOUCHE, RAMCHANDRA BHANDARI, ABDELHALIM BENMANSOUR, BHUNESH KUMAR	CLIMATE ACTION IN ENERGY TRANSITION INTO ROAD TRANSPORT TO ENSURE FUTURE MOBILITY IN ALGERIA
11:10-11:30	787	TAO MA, ZHENPENG LI	LOCAL PEER-TO-PEER ELECTRICITY TRADING SYSTEM BASED ON DOUBLE AUCTION MARKET AND BLOCKCHAIN TECHNOLOGY
11:30-11:50	802	SHIQI GUO, YUNFEI MU, WEI LIN, HONGJIE JIA	TWO-LAYER OPTIMAL SCHEDULING OF AC/DC HYBRID MICROGRID WITH PET
11:50-12:10	838	JIA SI, YUNFEI MU, HONGJIE JIA	STATE ESTIMATION OF AC/DC HYBRID DISTRIBUTION NETWORK WITH PET
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS IV			
SESSION CHAIRS: JAKUB JURASZ, WANDONG ZHENG			
TIME	ID	AUTHOR	TITLE
10:30-10:50	96	DOMINIQUE ADOLFO, CARLO CARCASI	STEADY STATE SIMULATION OF GAS DISTRIBUTION NETWORKS IN THE PRESENCE OF LOCALIZED HYDROGEN INJECTIONS
10:50-11:10	617	QIANYU ZHAO, SHOUXIANG WANG, JIE BAI, YUE LANG, YANG YANG	TRANSIENT STABILITY ASSESSMENT FOR TRANSMISSION SYSTEMS WITH WIND POWER INTEGRATION BASED ON DEEP RESIDUAL LEARNING
11:10-11:30	936	ZHONGGUAN WANG	NEWTON-BASED DISTRIBUTED VOLTAGE CONTROL METHOD FOR HIGH PENETRATION OF PV GENERATION
11:30-11:50	869	PAIGE WENBIN TIEN, SHUANGYU WEI, JOHN CALAUTIT, JO DARKWA, CHRISTOPHER WOOD	A NEW DEEP LEARNING APPROACH FOR ENERGY MANAGEMENT AND OPTIMISATION OF HVAC SYSTEMS FOR THE BUILT ENVIRONMENT
11:50-12:10	911	HILAL BAHLOWAN, MIRKO MORINI, MICHELE PINELLI, PIER RUGGERO SPINA, MAURO VENTURINI	OPTIMIZED ENERGY MANAGEMENT OF A HYBRID ENERGY PLANT BY USING A METHODOLOGY BASED ON DYNAMIC PROGRAMMING

Day 2

Oral Presentations

ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE IV			
SESSION CHAIRS: MONICA ODLARE, MASSIMILIANO RENZI			
TIME	ID	AUTHOR	TITLE
10:30-10:50	213	JUNBIN YANG, MINZHANG LIU, HUAN ZHANG, WANDONG ZHENG, SHIJUN YOU	AN INVESTIGATION ON EXPOSURE TO PARTICULATE MATTER IN SUBWAY STATION
10:50-11:10	569	ZHAOLING LI, TATSUYA HANAOKA	ESTIMATING THE ENERGY CONSUMPTION AND AIR POLLUTANTS EMISSIONS FROM IRON AND STEEL INDUSTRY IN CHINA USING AIM/ENDUSE MODEL
11:10-11:30	711	YONGTIE CAI, WENMING YANG, ZHIMIN ZHENG, ZENG GUANG, KENG BOON SIAH, SUBBAIAH PRABAKARAN	QUANTIFICATION OF AMORPHOUS CONTENT IN COMBUSTION BY-PRODUCTS: AN OVERVIEW
11:30-11:50	594	ZHAOYU XIAO	RESEARCH OVERVIEW ON RECOVERY OF WASTE HEAT FROM HIGH TEMPERATURE SLAG PARTICLES
11:50-12:10	610	BASKORO LOKAHITA, TSAMARA TSANI, MUHAMMAD AZIZ, FUMITAKE TAKAHASHI	HYDROTHERMAL TREATMENT OF EXCAVATED WASTE FROM INDONESIA LANDFILL
10:30-12:10	PANEL SESSION: FUTURE ENERGY CENTER ROOM: OMEGA		
10:30-12:10	PANEL SESSION: ARCHITECTURE & MODEL OF SUSTAINABLE POWER & ENERGY SYSTEMS ROOM: R1-306		
10:30-12:10	PANEL SESSION: WATER-ENERGY NEXUS AND STRATEGIC MANAGEMENT DECISION-SUPPORT ROOM: R1-151		
12:10-13:30	LUNCH		
13:30-14:10	POSTER SESSION II		
ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY IX			
SESSION CHAIRS: LIN GAO, QIBIN LIU			
TIME	ID	AUTHOR	TITLE
14:10-14:30	327	XING ZHANG, JUNHAO CHEN, KAIGE WANG, LINGJUN ZHU, SHURONG WANG	MILD HYDROGENATION OF BIO-DERIVED PHENOLICS OVER SIO ₂ -SUPPORTED PT-NI BIMETALLIC CATALYSTS
14:30-14:50	1090	JIAN LI	MICROWAVE REFORMING WITH CHAR-SUPPORTED NI-CE CATALYSTS: A POTENTIAL APPROACH FOR THOROUGH REMOVAL OF BIOMASS TAR
14:50-15:10	466	SIRONG HE	PYROLYSIS STUDY ON CATTLE MANURE: FROM CONVENTIONAL ANALYTICAL METHOD TO ONLINE STUDY OF PYROLYSIS PHOTOIONIZATION TIME-OF-LIGHT MASS SPECTROMETRY
15:10-15:30	494	YUMING WEN, SHULE WANG, WEIHONG YANG	INVESTIGATION OF THE PERFORMANCE OF PEAT MOSS PYROLYSIS
15:30-15:50	500	TERESA MARTI ROSSELLO, JUN LI, LEO LUE	HEAT TRANSFER BEHAVIOUR OF A WHEAT STRAW PELLET UNDERGOING PYROLYSIS
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY X			
SESSION CHAIRS: HONGXING YANG, BENGT STRIDH			
TIME	ID	AUTHOR	TITLE
14:10-14:30	605	TOURIA MOUDAKKAR, SÉBASTIEN VAUDREUIL, ZHOR EL HALLAOUI, TIJANI BOUNAHMIDI	DEVELOPMENT AND PERFORMANCE ANALYSIS OF A PHOSPHATE FLASH DRYER INTEGRATED WITH PTC ARRAY
14:30-14:50	657	CHANGCHUN LIU, ZEFENG WANG, WEI HAN, QILAN KANG, MENG LIU	A FLEXIBLE SOLAR HEATING SYSTEM FOR SPACE HEATING IN WINTER AND PRODUCING LOW-PRESSURE STEAM IN NON-HEATING SEASONS
14:50-15:10	918	QILIANG WANG	INDOOR HEAT LOSS AND OUTDOOR THERMAL EFFICIENCY TESTING AND ANALYSES ON THE PARABOLIC TROUGH SOLAR RECEIVERS WITH AN INNER RADIATION SHIELD
15:10-15:30	922	QIN JIANG, JINPING LI	STUDY ON HEAT LOSS OF ALL GLASS VACUUM TUBE SOLAR WATER HEATER AT NIGHT
15:30-15:50	923	TIAN LU SHI, JINPING LI	COMPARISON OF COLLECTOR PERFORMANCE BETWEEN HORIZONTAL AND VERTICAL VACUUM TUBE WATER HEATER

Day 2

Oral Presentations

ROOM: LAMBDA			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS VI			
SESSION CHAIRS: OTTORINO VENERI, CLEMENTE CAPASSO			
TIME	ID	AUTHOR	TITLE
14:10-14:30	105	DONG WEI, HONGWEN HE, JIANFEI CAO, YUNFEI BAI	MULTI-FIELD COUPLING DYNAMIC MODEL FOR PERMANENT-MAGNET SYNCHRONOUS MOTOR BASED ON FORWARD DESIGN
14:30-14:50	125	YUNFEI BAI, HONGWEN HE, SHUANGQI LI, JIANWEI LI	A NOVEL POWER MANAGEMENT IN A PLUG-IN HYBRID ELECTRIC VEHICLE WITH A HYBRID ENERGY STORAGE SYSTEM
14:50-15:10	200	XUEFENG HAN, HONGWEN HE, JINGDA WU, JIANKUN PENG, RUI CHEN	REINFORCEMENT LEARNING-BASED ENERGY MANAGEMENT STRATEGY FOR A SERIES-PARALLEL HYBRID BUS
15:10-15:30	248	RENZONG LIAN, JIANKUN PENG, YUANKAI WU, JIINGDA WU, HUACHUN TAN	DEEP REINFORCEMENT LEARNING BASED ENERGY MANAGEMENT OF HYBRID ELECTRIC VEHICLES WITH EXPERT KNOWLEDGE
15:30-15:50	251	HIDEYUKI CHISAKA, NAOKI SHIRAGA, NOBUSUKE KOBAYASHI, YOSHINORI ITAYA, TSUGUHIKO NAKAGAWA	A NOVEL RAILWAY ENERGY SYSTEM INTEGRATED WITH PHOTOVOLTAIC POWER GENERATION
ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES X			
SESSION CHAIRS: WANDONG ZHENG, CHANGQING TIAN			
TIME	ID	AUTHOR	TITLE
14:10-14:30	207	RASOUL NIKBAKHTI, XIAOLIN WANG, ANDREW CHAN	NUMERICAL SIMULATION OF A NOVEL INTEGRATED ADSORPTION-ABSORPTION (AD-AB) THERMAL DRIVEN REFRIGERATION SYSTEM
14:30-14:50	222	TINGTING JIANG, JING WANG, SHIJUN YOU, HUAN ZHANG, LINGFEI JIANG, SUOLA SHAO, XINGMING ZHU, YARAN WANG	A STUDY OF THERMAL COMFORT ON A NOVEL RADIANT HEAT EXCHANGER BASED ON AIR-CONDITIONING UNIT
14:50-15:10	340	KHALED AMEUR, ZINE AIDOUN, MEHDI FALSAFIOON	EXPERIMENTAL RESULTS OF A TWO-PHASE EJECTOR: NOZZLE GEOMETRY EFFECTS
15:10-15:30	404	ZIYANG ZHANG, CHUNLU ZHANG, FU XIAO	AN ENERGY-EFFICIENT DECENTRALIZED CONTROL STRATEGY FOR MULTI-EVAPORATOR AIR CONDITIONING SYSTEMS
15:30-15:50	420	YUZE DAI, JUN SUI, BOSHEG SU, CONG XU, DANDAN WANG, WEI HAN, HONGGUANG JIN	A NOVEL LIQUID-DESICCANT DEHUMIDIFICATION COMBINED WITH SEA SPRAY AEROSOL REMOVAL SYSTEM DRIVEN BY LOW-TEMPERATURE HEAT SOURCE
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES XI			
SESSION CHAIRS: SHAN-TUNG TU, JIANFEI ZHANG			
TIME	ID	AUTHOR	TITLE
14:10-14:30	584	MARCO GALLO, CARMINE COSTABILE, MARCO SORRENTINO, PIERPAOLO POLVERINO, CESARE PIANESE	COMPREHENSIVE MODEL-BASED METHODOLOGY FOR FAULT DETECTION, ISOLATION AND MITIGATION OF FUEL CELL POWERED SYSTEMS
14:30-14:50	478	CHAOYANG WANG, MING CHEN, MING LIU, JUNJIE YAN	DYNAMIC CHARACTERISTICS OF A SOLID OXIDE CELL STACK UNDERGOING MODE STEP-SWITCHING OPERATION IN AN ADIABATIC ENVIRONMENT
14:50-15:10	1198	JUNG-SIK KIM, MANOJ RANAWEERA	A THIN FILM MULTI-SENSING ARRAY THAT READS SOFCS
15:10-15:30	592	XUNCHENG CHI, SHENGWEI QUAN, YA-XIONG WANG, HONGWEN HE	PEM FUEL CELL-FED BIDIRECTIONAL DC MOTOR SYSTEM TRACKING CONTROL BY USING ADAPTIVE BACKSTEPPING SLIDING-MODE APPROACH
15:30-15:50	444	XIAOLONG WU, YUANWU XU, XIAOBO ZHONG, DONGQI ZHAO, JIANHUA JIANG, ZHONGHUA DENG, XIAOWEI FUXI LI	FAULT DIAGNOSIS OF SOLID OXIDE FUEL CELL SYSTEM BASED ON ADABOOST ALGORITHMS
ROOM: R1-122			
SESSION NAME: SPECIAL SESSION V			
SESSION CHAIRS: DAN WANG, XINWEI SHEN			
TIME	ID	AUTHOR	TITLE
14:10-14:30	397	XINYI ZHAO, XINWEI SHEN, TIAN XIA, QINGLAI GUO, HONGBIN SUN	OPTIMAL DISTRIBUTION SYSTEM PLANNING CONSIDERING REGULATION SERVICES AND DEGRADATION OF ENERGY STORAGE SYSTEMS
14:30-14:50	685	ANINDITA ROY, GOVIND KULKARNI	OPTIMIZATION OF CLEANING PERIODICITY OF SOLAR PHOTO-VOLTAIC POWER PLANTS
14:50-15:10	827	GUSTAVO OSPINA-ALDANA, MOHAMED HASSAN ALI, SGOURIS SGOURIDIS, ALI BOUABID	POWER MODULATION MODELING OF ALUMINUM REDUCTION CELLS FOR RENEWABLE ENERGY INTEGRATION
15:10-15:30	624	QIAN JIANG, YUNFEI MU, MINGSHEN WANG, XIAOHONG DONG, HONGJIE JIA, XIANXU HUO, SHUPENG LI, JIANCHENG YU	A PLANNING METHOD OF INTEGRATED COMMUNITY ENERGY SYSTEM CONSIDERING THE DEFERRABLE LOAD
15:30-15:50	640	ALI ALMANSOORI, ALBERTO BETANCOURT, JENNIFER CHARRY-SANCHEZ, ALI ELKAMEL, PETER FLETT	A MULTI-PERIOD POWER INFRASTRUCTURE AND CHARGING STATION NETWORK PLANNING MODEL

Day 2

Oral Presentations

ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT VIII			
SESSION CHAIRS: BO SHEN, HOLGER SCHLÖR			
TIME	ID	AUTHOR	TITLE
14:10-14:30	1003	MAHMOUD MOBIR, YACINE ALIMOU, NADIA MAIZI, VALENTIN MATHIEU, VINCENT MAZAURIC	A RELIABILITY-CONSTRAINED SCENARIO WITH DECREASING SHARE OF NUCLEAR FOR THE FRENCH POWER SECTOR IN 2050
14:30-14:50	1030	NADIA MAIZI, YACINE ALIMOU, JEAN-YVES BOURMAUD, MARION LI	A MULTI-MODEL APPROACH TO ADDRESS LONG-TERM ELECTRICITY SECURITY OF SUPPLY
14:50-15:10	1071	JING HU, ROBERT HARMSSEN, WINA CRIJNS-GRAUS, ERNST WORRELL	ANALYSIS OF EXTREME RAMP EVENTS IN OPTIMAL VARIABLE RENEWABLE ELECTRICITY PORTFOLIOS USING EXTREME VALUE THEORY
15:10-15:30	1087	WEI WANG, JIAYU CHEN, XIAODONG XU, TIANZHEN HONG	URBAN BLOCK OPTIMIZATION FOR ENERGY EFFICIENCY IN A DISTRICT LEVEL
15:30-15:50	1091	RAPHAËL CLUET, NADIA MAIZI, VINCENT MAZAURIC	SPACE ANALYSIS OF RELIABILITY-CONSTRAINED SCENARIOS WITH INCREASING SHARES OF RENEWABLES FOR THE FRENCH POWER SECTOR IN 2050
ROOM: R1-141			
SESSION NAME: ENERGY MANAGEMENT IX			
SESSION CHAIRS: JENNY PALM, NATASA NORD			
TIME	ID	AUTHOR	TITLE
14:10-14:30	89	TEE LIN, SHAO-HUAN HUANG, BEN-RAN FU, MING-HSUAN HU, SHIH-CHENG HU	INTEGRATION AND APPLICATION OF THE FAB ENERGY SIMULATION (FES) TOOL AND ENERGY CONVERSION FACTORS (ECF) FOR HIGH-TECH FACTORIES
14:30-14:50	141	HONGWEN HE, JIANFEI CAO, DONG WEI	ANALYSIS AND OPTIMIZATION OF POWER FLOW FOR HYBRID ELECTRIC VEHICLE WITH DUAL-PLANETARY GEAR
14:50-15:10	335	ALICE IKUZZE, XIAOHUA XIA, XIANMING YE	OPTIMAL MAINTENANCE PLAN WITH LUMEN DEGRADATION FAILURE FOR ENERGY EFFICIENCY LIGHTING RETROFIT PROJECTS
15:10-15:30	589	JESSICA WALTHER, BASTIAN DIETRICH, EBERHARD ABELE	GENERIC MACHINE LEARNING APPROACH FOR VERY SHORT TERM LOAD FORECASTING OF PRODUCTION MACHINES
15:30-15:50	646	JIXIANG ZHANG	SUPPLY CHAIN OPTIMIZATION OF AGRICULTURAL BIOMASS WASTE FOR CENTRALIZED POWER GENERATION
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS VII			
SESSION CHAIRS: TAEHOON HONG, SHIMING DENG			
TIME	ID	AUTHOR	TITLE
14:10-14:30	206	ANDREW SONTA, RISHEE JAIN	DATA-DRIVEN BUILDING LAYOUT OPTIMIZATION FOR ENERGY EFFICIENCY
14:30-14:50	413	WENZHUO LI, WANG SHENGWEI	MULTI-ROOM OUTDOOR AIR VENTILATION CONTROL STRATEGY IN RESPONSE TO ABNORMAL OCCUPANCY CONDITION
14:50-15:10	602	JARI PULKKINEN, JEAN-NICOLAS LOUIS, EVA PONGRACZ	IMPACT OF CLIMATE CHANGE TO THE TOTAL AND PEAK ENERGY DEMANDS OF A NORTHERN FINNISH BUILDING BY 2050
15:10-15:30	568	OLIVER DOELLE, CHRISTOPH AMENT	AUTOMATED PARAMETER IDENTIFICATION: ROBUST MODEL VALIDATION OF A COMPRESSION CHILLER BASED ON AN UNCERTAINTY AND CONSISTENCY ANALYSIS
15:30-15:50	576	ZHONGLIN CHIAM, ARVIND EASWARAN, MOHIT GUPTA, DAVID MOUQUET	HOLISTIC, REAL-TIME OPTIMIZATION OF THE OPERATIONS OF DISTRICT COOLING SYSTEMS VIA DEEP REINFORCEMENT LEARNING AND MIXED INTEGER LINEAR PROGRAMMING
ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE V			
SESSION CHAIRS: BIN YE, TOMAZ KATRAŠNIK			
TIME	ID	AUTHOR	TITLE
14:10-14:30	176	SHUANGQI LI, HONGWEN HE, HONGWEN HE	BIG DATA DRIVEN LITHIUM-ION BATTERY MODELING METHOD: A DEEP TRANSFER LEARNING APPROACH
14:30-14:50	177	CHANG LIU, YUJIE WANG, CHEN ZONGHAI	LONG CYCLE LIFE ORIENTED BATTERY/ULTRACAPACITOR HYBRID ENERGY STORAGE SYSTEM IN ELECTRIC VEHICLES USING MULTI-OBJECTIVE OPTIMIZATION
14:50-15:10	204	HAO WANG, LAI TSZ CHUN, YANG WEI, YUCHENG LIU, KIM FUNG TSANG, CHUN SING LAI, LOI LEI LAI	A NARROWBAND INTERNET OF THING CONNECTED TEMPERATURE PREDICTION FOR VALUE REGULATED LEAD ACID BATTERY
15:10-15:30	308	MICHAEL K.H. LEUNG, YIYI SHE, JIN LIU, JINSONG ZHOU, HONGKANG WANG, LI LI	EDGE-ENRICHED SULFUR-DOPED POROUS CARBON NANOFLEAKS FOR OXYGEN REDUCTION REACTION IN ZINC-AIR BATTERY
15:30-15:50	604	JIE LIN, HOWIE CHU, CHARLES MONROE, DAVID HOWEY	UNDERSTANDING THE ELECTROCHEMICAL/THERMAL PERFORMANCE OF A LARGE-FORMAT LI-ION POUCH CELL VIA A SCALING ANALYSIS APPROACH
14:10-15:50	PANEL SESSION: FUTURE ENERGY CENTER ROOM: OMEGA		

Day 2

Oral Presentations

ROOM: R1-306			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS VIII			
SESSION CHAIRS: ZHONGYANG LUO, XUDONG ZHAO			
TIME	ID	AUTHOR	TITLE
14:10-14:30	1189	SISI MA, JIANLIN YANG, CIWEI GAO, TAO YU	OPTIMAL TRADING PARTNERS SELECTION STRATEGY AND TRANSACTIVE ENERGY MECHANISM OF VIRTUAL POWER PLANT
14:30-14:50	870	MAXIMILIAN ROITHNER, JANE WUTH, LUIS RAMIREZ CAMARGO	ELECTRICITY DEMAND FORECAST FOR BAVARIA AND THE CZECH REPUBLIC UNTIL 2050: CAN VARIABLE RENEWABLES COPE WITH IT?
14:50-15:10	21	CHANGHUI YANG, JINGJING SHANG	ECONOMIC BENEFIT ANALYSIS OF HOUSEHOLD DISTRIBUTED PHOTOVOLTAIC UNDER DIFFERENT FINANCING MODES
15:10-15:30	1081	DAN WANG, LIN GAO, SHENG LI, SONG HE	COMPARATIVE ANALYSIS OF CCUS CHAIN WITH DIFFERENT TYPES OF SOURCE AND SINK
15:30-15:50	1154	RONALD WENNERSTEN	GLOBAL AND LOCAL CHALLENGES AND NEEDS FOR RESEARCH IN SUSTAINABLE ENERGY – EXPERIENCES FROM SWEDEN
15:50-16:20	TEA/COFFEE BREAK		
ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY XI			
SESSION CHAIRS: KUNIO YOSHIKAWA, MANOSH PAUL			
TIME	ID	AUTHOR	TITLE
16:20-16:40	659	MICHAEL GREENCORN, DAVID JACKSON, JUSTIN HARGREAVES, SOUVIK DATTA, MANOSH PAUL	A NOVEL BECCS POWER CYCLE USING CO2 EXHAUST GAS RECYCLING TO ENHANCE BIOMASS GASIFICATION
16:40-17:00	840	LU DING	COMPARISON ON WET AND DRY CARBONIZATION OF FOOD WASTES: CHAR GASIFICATION REACTIVITY
17:00-17:20	814	FILDAH AYAA, CHENG CHEN, JOHN BAPTIST KIRABIRA, XI JIANG	PREDICTING THE THERMAL PROPERTIES OF CELLULOSE NANOCRYSTAL USING MOLECULAR DYNAMICS
17:20-17:40	668	SAIMAN DING, EFTHYMIOS KANTARELIS, KLAS ENGVALL	PORE STRUCTURE DEVELOPMENT DURING STEAM GASIFICATION OF CHAR RESIDUES FROM WOOD AND ITS EFFECT ON CHAR REACTIVITY
17:40-18:00	924	SHUYUAN GONG	PERFORMANCE TEST OF REGENERATIVE EQUIPMENT WITH SOLID-LIQUID SEPARATION
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY XII			
SESSION CHAIRS: GANG PEI, LUCA CIOCCOLANTI			
TIME	ID	AUTHOR	TITLE
16:20-16:40	947	XIAO REN	EFFECT OF TEMPERATURE ON LONG-TERM EXPERIMENTAL PERFORMANCE OF AN AMORPHOUS SILICON PHOTOVOLTAIC THERMAL SYSTEM
16:40-17:00	961	BO ZHANG	COMPARATIVE STUDY ON INDOOR COMFORT OF COLD TIBETAN AREAS WITH ACTIVE AND PASSIVE SOLAR HEATING SYSTEM
17:00-17:20	962	JUANJUAN HUANG	STUDY ON INFLUENCE OF OPERATION STRATEGIES ON PERFORMANCE OF SOLAR COMPOSITE HEATING SYSTEM
17:20-17:40	970	JINPING LI	STUDY ON HEAT TRANSFER CHARACTERISTICS OF A VOLUMETRIC SOLAR RECEIVERS
17:40-18:00	1193	CHAO CHEN	APPLICATION EVALUATION OF A COMPOUND PARABOLIC CONCENTRATOR FOR THE ACTIVE-PASSIVE VENTILATION WALL WITH PHASE CHANGE MATERIAL
ROOM: LAMBDA			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS IX			
SESSION CHAIRS: XIAOHUA XIA, CHANGWEI JI			
TIME	ID	AUTHOR	TITLE
16:20-16:40	259	JIAYI LUO, JIANKUN PENG, HONGWEN HE	STATE OF CHARGE ESTIMATION OF LITHIUM-ION BATTERY BASED ON EXTENDED KALMAN FILTER AT DIFFERENT TEMPERATURES
16:40-17:00	260	JIANKUN PENG, YONG WANG, YUANKAI WU	VISION-AIDED DEEP REINFORCEMENT LEARNING FOR ENERGY MANAGEMENT OF HYBRID ELECTRIC VEHICLES
17:00-17:20	615	STEFAN BREBAN, MARIUS DRANCA, MARIUS FARTAN	ENERGY EFFICIENT OPERATION OF PERMANENT MAGNET SYNCHRONOUS MACHINES POWERING A RAILWAY ELECTRIC VEHICLE
17:20-17:40	294	YUANKAI WU, HONGWEN HE, JIANKUN PENG, HUACHUN TAN, YUECHENG LI	A DEEP NEUROEVOLUTION BASED ENERGY MANAGEMENT STRATEGY FOR PLUG-IN HYBRID ELECTRIC VEHICLE
17:40-18:00	389	HAN MO, HONGWEN HE, WEI LIU, JIANFEI CAO, HANG QIN, JIANKUN PENG	A CONTROL STRATEGY FOR DUAL-MOTOR POWERTRAIN SYSTEM USING DYNAMIC PROGRAMMING CONSIDERING ENERGY EFFICIENCY

Day 2

Oral Presentations

ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES XII			
SESSION CHAIRS: LISHENG PAN, WEI HAN			
TIME	ID	AUTHOR	TITLE
16:20-16:40	467	MICHAEL JOHN, OLE NYDAL, CUTHBERT KIMAMBO, JOSEPH KIHEDU	THERMAL PERFORMANCE OF A SINGLE BED ACTIVATED CARBON-AMMONIA ADSORPTION REFRIGERATION SYSTEM
16:40-17:00	823	HUIMING ZOU, LI XUAN, TANG MINGSHENG, JIANG WU, CHANGQING TIAN	OPTIMIZATION ANALYSIS AND EXPERIMENTAL INVESTIGATION ON HIGH TEMPERATURE CASCADE HEAT PUMP WITH VAPOR INJECTION
17:00-17:20	975	KE TANG, YIJI LU, ZHI LI, YAODONG WANG	ENHANCEMENT OF THE CHEMISORPTION REFRIGERATION BY NOVEL SORBENTS USING CARBON COATED NI AND FE
17:20-17:40	996	FAHID RIAZ, RAVI RANJAN, SIAW KIANG CHOU, POH SENG LEE	THERMAL ANALYSIS OF A NEW EJECTOR ENHANCED VAPOUR COMPRESSION CYCLE DRIVEN BY LOW-GRADE HEAT
17:40-18:00	457	XUELING LIU, SHUAI LI, JIANG XIN, WEIJUAN FU	EFFECTS OF INJECTION ON THERMAL PERFORMANCE OF BRINE AQUIFERS CONTAINING MONTMORILLONITE
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY CONVERSION TECHNOLOGIES XIII			
SESSION CHAIRS: XINHAI YU, JIN XUAN			
TIME	ID	AUTHOR	TITLE
16:20-16:40	285	ZHIMING BAO, JIAO KUI	TWO-PHASE BEHAVIORS IN METAL FOAM FLOW FIELD WITH INHOMOGENEOUS PORE DISTRIBUTION
16:40-17:00	292	YIQI LIANG, CHASEN TONGSH, XU XIE, ZHIJUN PENG, JIAO KUI	INVESTIGATIONS OF WATER DISTRIBUTION IN DIFFERENT FLOW CHANNEL OF PEM FUEL CELL VIA MICROFOCUS X-RAY TOMOGRAPHY
17:00-17:20	350	BHARGAV PANDYA, VIKRANT VENKATARAMAN, AHMAD EL-KHAROUF, ROBERT STEINBERGER-WILCKENS	CARBON FOOTPRINT AND ECONOMIC ANALYSIS OF FUEL CELL ASSISTED ROAD TRANSPORT REFRIGERATION SYSTEM
17:20-17:40	421	XIAOBO ZHONG, ZEHUA LI, XIAOLONG WU, YUANWU XU, DONGQI ZHAO, JIANHUA JIANG, ZHONGHUA DENGXIAOWEI FU, XI LI	RESEARCH ON POWER OPTIMIZATION CONTROL OF SOLID OXIDE FUEL CELL/LITHIUM BATTERY HYBRID SYSTEM
17:40-18:00	427	YANGBIN SHAO, LIANGFEI XU, XINGWANG ZHAO, JIANQIU LI, ZUNYAN HU, HONGLIANG JIANG, HAIYAN HUANGMINGGAO OUYANG	DYNAMIC MODELING OF DUAL RECIRCULATION PEMFC SYSTEM AND PERFORMANCE ANALYSIS FOR SELF-HUMIDIFICATION
ROOM: R1-122			
SESSION NAME: SPECIAL SESSION VI			
SESSION CHAIRS: DAN WANG, XINWEI SHEN			
TIME	ID	AUTHOR	TITLE
16:20-16:40	661	RANJITHA SHIVARAM, RISHEE JAIN	A FRAMEWORK FOR ESTIMATING THE IMPACTS OF LAND USE CHANGE ON URBAN ENERGY SELF-SUFFICIENCY
16:40-17:00	665	MARCIN PILARCZYK, BOHDAN WĘGLOWSKI, LARS NORD	EXPERIMENTAL VALIDATION OF AN ALGORITHM FOR DETERMINING TRANSIENT STRESSES WITHIN PRESSURE COMPONENTS BY MEANS OF THE TENSOMETRIC METHOD
17:00-17:20	845	YINGRU ZHAO, LI LI, XINGYI ZHU, XUYUE ZHENG, NIANYUAN WU, JIAN LIN	SYSTEM PLANNING AND LAYOUT OPTIMIZATION FOR INTEGRATED ENERGY NETWORKS
17:20-17:40	1086	ANTONIO PANTALEO, CHRISTOS MARKIDES, PANAGIOTIS ROMANOS	ENERGY MANAGEMENT AND ENHANCED FLEXIBILITY OF POWER STATIONS VIA THERMAL ENERGY STORAGE AND SECONDARY POWER CYCLES
17:40-18:00	580	XUAN WANG, FENGYING YAN, GEQUN SHU, HUA TIAN, RUI WANG	OPTIMIZATION OF PLANNING AND OPERATION FOR A LOW-CARBON CITY ENERGY SYSTEM
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT X			
SESSION CHAIRS: PERRY YANG, YOSHIKI YAMAGATA			
TIME	ID	AUTHOR	TITLE
16:20-16:40	1160	ZEYU CHEN	RESEARCH ON CHINESE ENERGY CONSUMPTION USING AN IMPROVED PSO-LSSVR MODEL BASED ON A STOCHASTIC PROCESS
16:40-17:00	288	ALAA KHADRA, JONN ARE MYHREN	INTRODUCING WEIGHT FACTORS INTO A DECISION MAKING TOOL FOR EVALUATING THE SUSTAINABILITY ASPECTS OF BUILDINGS RENOVATION ALTERNATIVES - CASE STUDY USING RENOBUILD
17:00-17:20	95	AMANDA AHL, MASARU YARIME, MIKA GOTO, KENJI TANAKA, DAISHI SAGAWA	PRACTICAL CHALLENGES AND OPPORTUNITIES OF BLOCKCHAIN IN THE ENERGY SECTOR: EXPERT PERSPECTIVES FROM GERMANY
17:20-17:40	107	TAKURO KOBASHI, TAKAHIRO YOSHIDA, KATSUHIKO NAITO, STEFAN PFENNINGER, YOSHIKI YAMAGATA	COST-OPTIMAL PATHWAYS TO DECARBONIZE URBAN ENERGY SYSTEMS WITH PV, BATTERIES, AND ELECTRIC VEHICLES: A CASE STUDY FOR KYOTO, JAPAN
17:40-18:00	296	XUE TAN, JUN LIU, YAN-MING JIN, DI CHEN, HONGLIN DU, ZHOU KAI	THE LOGICAL FRAMEWORK AND EVALUATION SYSTEM OF SUSTAINABLE URBAN ENERGY SYSTEM

Day 2

Oral Presentations

ROOM: R1-141			
SESSION NAME: ENERGY MANAGEMENT XI			
SESSION CHAIRS: PHILIP DE VAAL, MIRKO MORINI			
TIME	ID	AUTHOR	TITLE
16:20-16:40	707	XUE TAN, QIULI ZHAO, DI CHEN, YUE WANG, XIN TIAN	MECHANISM ANALYSIS AND EVALUATION SYSTEM ON REGIONAL COMPREHENSIVE ENERGY SYSTEM'S SYNERGIC DEVELOPMENT
16:40-17:00	772	YUE WANG, PENGFEI ZHANG, WENQIU CAI, ZHUJUN CHEN, LINXIAO DONG, WENDONG WEI	THE IMPACT OF BLACK START ON ECONOMIC RECOVERY AFTER DISASTER: A CASE STUDY OF THE POWER SYSTEM COLLAPSE IN HAINAN PROVINCE
17:00-17:20	1038	DHANRAJ CHITARA, NAND KISHOR MEENA, JIN YANG, ANIL SWARNKAR, K NIAZI, NIKHIL GUPTA, EDUARDO VEGA-FUENTES	SMALL-SIGNAL STABILITY ENHANCEMENT OF MULTI-MACHINE POWER SYSTEM USING CUCKOO AND HARMONY SEARCH OPTIMIZATION TECHNIQUES
17:20-17:40	1190	ALI EL HADI BERJAWI, SARA LOUISE WALKER, CHARALAMPOS PATSIOS, SEYED HAMID REZA HOSSEINI	AN EVALUATION FRAMEWORK FOR WHOLE ENERGY SYSTEMS SCENARIOS
17:40-18:00	637	CHRISTIAN WIETHE, JANNICK TÖPPEL, TIMM TRÄNKLER	THE IMPACT OF ENERGY-ECONOMICAL BEHAVIOR ON LONG-TERM ENERGETIC RETROFITTING ROADMAPS: A VINE COPULA QUANTILE REGRESSION APPROACH
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS X			
SESSION CHAIRS: SHIMING DENG, WANDONG ZHENG			
TIME	ID	AUTHOR	TITLE
16:20-16:40	601	JARI PULKKINEN, JEAN-NICOLAS LOUIS, EVA PONGRACZ	UTILIZING FLEXIBILITY OF ELECTRIC HEATING IN DEMAND SIDE MANAGEMENT PROGRAMS IN FINLAND IN 2050
16:40-17:00	433	YUZHEN PENG, ARNO SCHLÜTER	DATA-DRIVEN OUTDOOR AND INDOOR TEMPERATURE PREDICTION FOR ENERGY-EFFICIENT BUILDING OPERATION
17:00-17:20	784	ZHUANG ZHENG, MUHAMMAD SHAFIQUE, XIAOWEI LUO	SOCKET NILM: A SOCKET-LEVEL NON-INTRUSIVE LOAD MONITORING METHOD FOR HOME APPLIANCE USAGES RECOGNITION
17:20-17:40	844	YUZHEN PENG, ARNO SCHLÜTER	DEMAND-DRIVEN BUILDING CONTROLS: A FRAMEWORK AND LESSONS LEARNT
17:40-18:00	866	OUDOM KEM, FEIROUZ KSONTINI	UNLOCKING DEMAND RESPONSE AT THE BUILDING LEVEL: A DISTRIBUTED ENERGY OPTIMISATION APPROACH
ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE VI			
SESSION CHAIRS: LOI LEI LAI, HONGWEN HE			
TIME	ID	AUTHOR	TITLE
16:20-16:40	679	TOMAŽ KATRAŠNIK, IGOR MELE, KLEMEN ZELIČ	ADVANCED CONTINUUM LI-ION BATTERY MODELLING FRAMEWORK
16:40-17:00	989	LU JIN, JORIS JAGUEMONT, MOHSEN SOKKEH, THEODOROS KALOGIANNIS, JOERI MIERLO, PENG XIE, GENG QIAOYUANLIANG LAN	HYBRID THERMAL MANAGEMENT OF EV BATTERY BASED ON PHASE CHANGE MATERIAL AND LIQUID COOLING PLATE
17:00-17:20	1039	LI WEI	SUPERCAPACITOR LIFETIME MODELING AND RELIABILITY-ORIENTED SYSTEM DESIGN IN ENERGY STORAGE APPLICATION
17:20-17:40	1085	QIANQIAN LIU, ZEHUA LI, XIAOLIN XU, BO CHI, JIANHUA JIANG	COOPERATIVE ESTIMATION OF SOC AND SOH FOR LITHIUM-ION BATTERY BASED ON A THERMO-ELECTRO-AGING MODEL
17:40-18:00	309	BINBIN CHEN, JIN XUAN, GREGORY OFFER, HUIZHI WANG	MICROFLUIDIC MEASUREMENTS OF DIFFUSION COEFFICIENTS OF ZNCL2-DMSO ELECTROLYTES FOR ZN-ION BATTERIES
16:20-16:40	PANEL SESSION: FUTURE ENERGY CENTER ROOM: OMEGA		

Day 2

Oral Presentations

ROOM: R1-306			
SESSION NAME: ENERGY SCIENCES VI			
SESSION CHAIRS: TARIQ SHAMIM, JINGCHUN FENG			
TIME	ID	AUTHOR	TITLE
16:20-16:40	873	NGUYEN BA HUNG, OCKTAECK LIM	A SIMULATION AND EXPERIMENTAL STUDY OF OPERATING CHARACTERISTICS OF A GASEOUS FUEL INJECTION SYSTEM USING A SOLENOID INJECTOR COMBINED WITH AN ELECTRIC PRESSURE REGULATOR
16:40-17:00	376	BO LI, SHU LIU, YUN-PEI LIANG, QING-CUI WAN, YONG-JIANG LUO	OPTIMIZATION OF HYDRATE EXPLOITATION BASED ON HEAT TRANSFER ANALYSIS
17:00-17:20	883	QIUWANG WANG, S.M.A. NAQVI	PERFORMANCE ANALYSIS OF SHELL AND TUBE HEAT EXCHANGER WITH DIFFERENT TUBE AND BAFFLE DESIGNS: THREE-DIMENSIONAL COMPUTATIONAL FLUID DYNAMICS (CFD) AND TWO-WAY FSI ANALYSIS
17:20-17:40	804	TIANQING WU, JOHN MATHEW	ADVANCED POOL BOILING HEAT SINKS MANUFACTURED BY SELECTIVE LASER MELTING AND EFFECT OF HEAT TREATMENT
18:45-22:00	CONFERENCE BANQUET (AROS CONGRESS CENTER)		

Day 3

Oral Presentations

ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY XIII			
SESSION CHAIRS: SILVIO BARBARELLI, DENGJIA WANG			
TIME	ID	AUTHOR	TITLE
08:20-08:40	140	HAO FU, PENG LI, HAO YU, LIGANG ZHAO, ZHIYING WANG, CHENGSHAN WANG	A DESIGN OF REAL-TIME SIMULATOR FOR PMSG BASED WIND FARMS USING PIPELINE TECHNIQUE
08:40-09:00	391	YINGTANG LI	EFFICIENCY-ENHANCED DYNAMIC MPPT FOR WIND POWER SYSTEM UNDER MIDDLE-LOW WIND SPEEDS
09:00-09:20	518	ARUN RAJ SHANMUGAM, CHANG HYUN SOHN	EVALUATION OF AERODYNAMIC NOISE GENERATION BY AN OSCILLATING-WING POWER EXTRACTOR OWPE
09:20-09:40	1082	SANDEEP YADAV, SRINIVAS V VEERAVALLI, SIDH NATH SINGH	COMPARISON OF PREDICTED PERFORMANCE OF VERTICAL AXIS WIND TURBINE USING OVERSET MESH AND SLIDING MESH
09:40-10:00	843	WEI HU, YUCHEN QI	OPTIMAL OPERATION STRATEGY FOR WIND-STORAGE INTEGRATED SYSTEM CONSIDERING TEMPORAL CORRELATION OF WIND POWER
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY XIV			
SESSION CHAIRS: EVA THORIN, GEOFFREY HAMMOND			
TIME	ID	AUTHOR	TITLE
08:20-08:40	111	YUPING LI	MASS, ENERGY AND EXERGY BALANCE ANALYSIS OF LIGHT OLEFIN PRODUCTION PROCESS VIA GASIFICATION AND METHANOL SYNTHESIS FROM FORESTRY RESIDUES
08:40-09:00	217	XIAONAN MA, GEQUN SHU, HUA TIAN, WEN XU, XINGYU LIANG	EXPERIMENTAL EXPLORATION FOR OPTIMAL OPERATION CONDITIONS OF THERMOELECTRIC MODULES
09:00-09:20	392	GENG CHEN, YUFAN WANG, LIHUA TANG, KAI WANG, BRIAN MACE	LARGE EDDY SIMULATION OF SELF-EXCITED ACOUSTIC OSCILLATIONS IN A THERMOACOUSTIC ENGINE
09:20-09:40	472	JOHANNA ANDERSSON, JONAS HELANDER-CLAESSON, JESPER OLSSON	REDUCTION OF HEAT CONSUMPTION IN MESOPHILIC DIGESTION OF – SEWAGE SLUDGE – A FULL-SCALE STUDY
09:40-10:00	305	HANFEI ZHANG, UMBERTO DESIDERI	TECHNO-ECONOMIC EVALUATION OF POWER-TO-AMMONIA SYSTEM
ROOM: LAMBDA			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XI			
SESSION CHAIRS: LIJUN ZHANG, TAKURO KOBASHI			
TIME	ID	AUTHOR	TITLE
08:20-08:40	459	DOMINIK JÖST, HENDRIK ZAPPEN, DIRK UWE SAUER	METHODOLOGY FOR MODEL-BASED BATTERY MANAGEMENT ALGORITHM VALIDATION, BENCHMARKING AND APPLICATION-ORIENTED SELECTION
08:40-09:00	571	XIAOPENG TANG, JINGYI LU, KE YAO, ZHOU LV, FURONG GAO	A 2D-FILTER FOR BATTERY INCREMENTAL CAPACITY CURVE EXTRACTION
09:00-09:20	737	DEBRAJ BHATTACHARJEE, PRABHA BHOLA, PRANAB K DAN	INTEGRATED MODEL PREDICTIVE CONTROL IN HYBRID VEHICLE POWERTRAIN FOR IMPROVING FUEL CONSUMPTION
09:20-09:40	336	WEIHAN LI, DECHENG CAO, DOMINIK JÖST, FLORIAN RINGBECK, MATTHIAS KUIPERS, DIRK UWE SAUER	TOWARDS AN ADVANCED BATTERY MANAGEMENT SYSTEM: PARAMETER SENSITIVITY ANALYSIS UNDER REAL-WORLD DRIVING CYCLES
09:40-10:00	752	XIAOYU LI, ZHENPO WANG, CHANGGUI YUAN, XIAOHUI LI	STATE-OF-HEALTH ESTIMATION OF LITHIUM-ION BATTERY BASED ON GREY RELATIONAL ANALYSIS METHOD
ROOM: KAPPA			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XIV			
SESSION CHAIRS: CHANGWEI JI, XUESONG BAI			
TIME	ID	AUTHOR	TITLE
08:20-08:40	73	SHIJIE XU, XUE-SONG BAI, YAOPENG LI, LEILEI XU, PETER LARSSON, PER TUNESTÅL	MODELING OF AMMONIA SOLUTION SPRAY AND MIXING IN SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM
08:40-09:00	74	SHENGHUI ZHONG, MEHDI JANGI, FAN ZHANG, ZHIJUN PENG, XUE-SONG BAI	LARGE EDDY SIMULATION OF N-HEPTANE PREMIXED FLAME IN LOW TEMPERATURE IGNITION REGIME
09:00-09:20	46	YUHAN LI, BINYANG WU, WANHUA SU	THE EFFECT OF INTAKE PRESSURE AND INJECTION TIMING ON LOW LOAD COMBUSTION PROCESS OF DIRECT INJECTION NATURAL GAS ENGINE
09:20-09:40	673	JEONGWOO SONG, HAN HO SONG	SI ENGINE INTRACYCLE SPEED PROFILE MODULATION FOR MAXIMIZING INDICATED EFFICIENCY UNDER VARIOUS INTAKE MANIFOLD PRESSURE AND SPEED CONDITIONS
09:40-10:00	715	WENBIN YU, WENMING YANG, FEIYANG ZHAO, KUNLIN TAY	EXPERIMENTAL STUDY ON ENGINE SPRAY AND COMBUSTION CHARACTERISTICS FUELED WITH KEROSENE

Day 3

Oral Presentations

ROOM: R1-121			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XV			
SESSION CHAIRS: JUNG-SIK KIM, JIN XUAN			
TIME	ID	AUTHOR	TITLE
08:20-08:40	1056	HANGYUE LI, HANGYUE LI, QINGPING FANG	TEMPORAL AND SPATIAL ANALYSIS ON TEMPERATURES IN A SOFC SHORT STACK
08:40-09:00	1060	ZAN WU	EMPIRICAL MODELLING OF PRESSURE DROP IN GAS CHANNELS OF POLYMER ELECTROLYTE FUEL CELLS
09:00-09:20	735	FRANCESCO LONIS, VITTORIO TOLA, GIORGIO CAU	INTEGRATED ENERGY SYSTEM FOR THE PRODUCTION AND USE OF RENEWABLE METHANOL VIA ALKALINE ELECTROLYSIS AND SOLID OXIDE FUEL CELLS
09:20-09:40	186	GUOZHUO WANG, YOSHIO UTAKA, SHIXUE WANG	APPLICATION OF A MICROPOROUS LAYER WITH PLANAR WETTABILITY TO IMPROVE THE COLD-STARTING PERFORMANCE OF A POLYMER ELECTROLYTE FUEL CELL
09:40-10:00	585	HONGWEN HE, SHENGWEI QUAN, JINZHOU CHEN, YA-XIONG WANG	MODEL PREDICTIVE CONTROL BASED HYDROGEN EXCESS RATIO REGULATION WITH CIRCULATING PUMP FOR POLYMER ELECTROLYTE MEMBRANE FUEL CELL
ROOM: R1-122			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XVI			
SESSION CHAIRS: KOJI TOKIMATSU, LARS NORD			
TIME	ID	AUTHOR	TITLE
08:20-08:40	32	SAMSON SHITTU, GUIQIANG LI, XUDONG ZHAO, XIAOLI MA	GEOMETRY EFFECT ON PHOTOVOLTAIC-THERMOELECTRIC TRANSIENT PERFORMANCE
08:40-09:00	360	YANLEI SUN, JIANYING HU, ERCANG LUO, KAIQI LUO, ZHANGHUA WU, LIMIN ZHANG	GAS-FIRED HEAT-DRIVEN DUPLEX STIRLING DOMESTIC COMBINED HEAT AND POWER SYSTEM
09:00-09:20	677	YUE ZHANG, LI ZHAO, SHUAI DENG, WEICONG XU, XIANHUA NIE, ZHENYU DU	A NOVEL COMBINED POWER AND REFRIGERATION CYCLE BASED ON ZEOTROPIC MIXTURES HYDRATE
09:20-09:40	769	JOHANNA BEIRON, RUBÉN MOCHOLÍ MONTAÑÉS, FREDRIK NORMANN	OPERATIONAL FLEXIBILITY OF COMBINED HEAT AND POWER PLANT WITH STEAM EXTRACTION REGULATION
09:40-10:00	778	SONG HE, SHENG LI, LIN GAO	THERMODYNAMIC ANALYSIS OF A POLYGENERATION SYSTEM BASED ON COAL-STEAM GASIFICATION METHOD
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT XII			
SESSION CHAIRS: CHI ZHANG, ANDREA TRIANNI			
TIME	ID	AUTHOR	TITLE
08:20-08:40	53	KE WANG	MARGINAL ABATEMENT COST CURVE OF CO2 EMISSIONS OF PETROLEUM PROCESSING AND COKING INDUSTRY IN CHINA
08:40-09:00	441	MENG HAN	CONVENIENCE YIELD AND ITS PREDICTIVE POWER ON CARBON SPOT PRICES: EVIDENCE FROM THE EU ETS
09:00-09:20	121	MUI KWOK WAI, WONG LING TIM, CHEUNG C T, SATHEESAN MANOJ KUMAR	COMPARISON OF EXISTING AND NEWLY PROPOSED ELECTRICITY TARIFF AND REBATE SCHEMES IN HONG KONG
09:20-09:40	597	HAKPYEONG KIM, JIMIN KIM, TAEHOON HONG	A STUDY OF PRODUCTIVITY LOSS WITH THE KOREAN INDOOR TEMPERATURE STANDARD IN SUMMER
09:40-10:00	623	TAOYUAN WEI	APPROACHES TO ASSESSING REBOUND EFFECT OF ENERGY INTENSITY: A CRITICAL DISCUSSION
ROOM: R1-141			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XII			
SESSION CHAIRS: FREDRIK WALLIN, JAKUB JURASZ			
TIME	ID	AUTHOR	TITLE
08:20-08:40	636	YUE ZHOU, MENG CHENG, JIANZHONG WU	OPTIMAL CAPACITY TENDERING OF INDUSTRIAL ELECTRIC HEATING LOADS IN THE FREQUENCY RESPONSE MARKET OF GREAT BRITAIN
08:40-09:00	701	YANCHAO ZHANG, MEI SUN, PEIPEI ZHANG, CUIXIA GAO	OPTIMIZATION ANALYSIS OF DEMAND RESPONSE MODEL BASED ON RESIDENT HETEROGENEITY
09:00-09:20	713	CHALERMKIAT NUCHTUREE	FUEL EFFICIENCY IMPROVEMENT FOR A CRUISE SHIP BY OPTIMIZATION OF POWER GENERATION SCHEDULING
09:20-09:40	757	EITY SARKER, MEHDI SEYEDMAHMOUDIAN, SAAD MEKHILEF, ALEX STOJCEVSKI	OPTIMAL SCHEDULING OF APPLIANCES IN SMART GRID ENVIRONMENT USING BPSO ALGORITHM
09:40-10:00	773	JUNXIONG ZHAO, MENGLIAN ZHENG, YI DING	ECONOMIC BENEFITS OF CENTRALIZED AND DISTRIBUTED STORAGE UNDER REDISTRIBUTION TOU DEMAND TARIFF

Day 3

Oral Presentations

ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XIII			
SESSION CHAIRS: JINQING PENG, ZHIBIN YU			
TIME	ID	AUTHOR	TITLE
08:20-08:40	27	YASIR RASHID	THERMALLY ENHANCED GEOPOLYMER CONCRETE TO MITIGATE AIR-CONDITIONING DEMAND IN BUILDINGS
08:40-09:00	214	HANGXIN LI	A MODIFIED MULTI-STAGE DESIGN OPTIMIZATION APPROACH FOR ZERO ENERGY BUILDINGS CONSIDERING UNCERTAINTIES
09:00-09:20	331	MARK KYEREDEY ANSAH, XI CHEN, HONGXING YANG	LIFECYCLE CARBON PERFORMANCE OF LOW ENERGY HIGH-RISE COMMERCIAL BUILDING WITH MAXIMIZED BUILDING INTEGRATED PHOTOVOLTAIC APPLICATIONS
09:20-09:40	368	PEI HUANG, XINGXING ZHANG, ISABELLE LÖFGREN, MATS RÖNNELID, JAN FAHLEN, DAN ANDERSSON, MIKAEL SVANFELDT	DATA CENTERS AS PROSUMERS IN URBAN ENERGY SYSTEM: A REVIEW
09:40-10:00	1095	JOHN CALAUTIT, DOMINIC O'CONNOR, CONRAD ALLAN JAY PANTUA, SHUANGYU WEI, PAIGE WENBIN TIEN, BEN HUGHES	NUMERICAL AND EXPERIMENTAL ANALYSIS OF A NOVEL PASSIVE HEAT RECOVERY WINDCATCHER (PHRW)
ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE VII			
SESSION CHAIRS: NIKLAS HEDIN, ROLAND SPAN			
TIME	ID	AUTHOR	TITLE
08:20-08:40	1029	CHUANG WEN	REAL GAS EFFECTS ON NON-EQUILIBRIUM CONDENSATION OF CARBON DIOXIDE CONTRIBUTING TO CARBON CAPTURE AND STORAGE
08:40-09:00	86	WAN CHEN, GUANGJIN CHEN	HIGH-EFFICIENCY CARBON CAPTURE WITH 2-METHYLIMIDAZOLE-WATER-PROPYLENE CARBONATE MIXTURE SOLVENT
09:00-09:20	178	KE WANG, FENG GU, PETER T. CLOUGH, PENGFEI ZHAO, EDWARD J. ANTHONY	HIGH-PERFORMANCE MACROPOROUS MGO-STABILIZED CAO PELLETS FOR THERMOCHEMICAL ENERGY STORAGE IN CONCENTRATED SOLAR POWER PLANTS
09:20-09:40	208	ZAOXIAO ZHANG	REDUCING CARBON DIOXIDE EMISSION OF COAL-TO-METHANOL CHAIN USING CCS AND CCU WITH P2G SYSTEM
09:40-10:00	396	LIDONG WANG, SHANSHAN LIU, RUJIE WANG, QIANGWEI LI, SHIHAN ZHANG	DMCA-MCA HYBRID WITH HIGH ABSORPTION RATE AND LOW ENERGY PENALTY FOR CO ₂ CAPTURE
ROOM: R1-306			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE VIII			
SESSION CHAIRS: ERIK DAHLQUIST			
TIME	ID	AUTHOR	TITLE
08:20-08:40	618	YALU FU, BIAO ZHANG, XUN ZHU, DINGDING YE, RONG CHEN	PORE-SCALE MODELING OF OXYGEN TRANSPORT IN THE AIR-BREATHING CATHODE OF MEMBRANELESS MICROFLUIDIC FUEL CELLS
08:40-09:00	1000	QING WANG, LIANGFEI XU	STUDY ON INHOMOGENEITY OF LARGE FORMAT PEM FUEL CELL
09:00-09:20	1206	YASHAR S. HAJIMOLANA, BART NUMAN, KONDRAD MOTYLINSKI, JAKUB KUPECKI, VIKRANT VENKATARAMAN, P.V. ARAVIND	DYNAMIC MODELLING OF REVERSIBLE SOLID OXIDE CELL FOR GRID STABILISATION APPLICATIONS
09:20-09:40	124	TAO LV, XIAO-SEN LI, ZHAOYANG CHEN, YU ZHANG, KEFENG YAN, JING CAI	GAS PRODUCTION FROM HYDRATE RESERVOIR IN SHENHU AREA OF SOUTH CHINA SEA BY DEPRESSURIZATION AND MULTI-VERTICAL WELL PATTERNS
09:40-10:00	334	YI WANG, JING-CHUN FENG, XIAO-SEN LI	RESERVOIR FORMATION DAMAGE DURING HYDRATE DISSOCIATION IN SAND-CLAY SEDIMENT
10:00-10:30	TEA/COFFEE BREAK		
ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY XV			
SESSION CHAIRS: JAY LIU, MONICA ODLARE			
TIME	ID	AUTHOR	TITLE
10:30-10:50	167	CHRISTOFFER WADSTRÖM, GAZI SALAH UDDIN, JOSE AREOLA HERNANDEZ, ANUPAM DUTTA, ALI AHMED	HOW DOES UNCERTAINTY IMPACT BIOFUEL PRICES?
10:50-11:10	805	MOHAMMADAMIN ZAREI, JAY LIU	OPTIMIZING THE MACROALGAE-BASED BIOFUEL SUPPLY CHAIN UNDER MULTIPLE UNCERTAINTIES – KOREAN CASE STUDY
11:10-11:30	79	ROFICE DICKSON, JAY LIU, BORIS BRIGLJEVIC, HANKWON LIM, JUN HYUNG RYU	OPTIMAL DESIGN FOR THE UTILIZATION AND CONVERSION OF MACROALGAE INTO ENERGY AND VALUE-ADDED CHEMICALS
11:30-11:50	686	TONG HAN	BIO-FUELS AND MAGNETIC ACTIVATED CARBON PRODUCTION VIA CO-PYROLYSIS OF LIGNIN AND FERROUS SALTS AND STEAM ACTIVATION OF PRODUCED BIO-CHAR
11:50-12:10	1026	GEOFFREY HAMMOND, RACHEL OWEN, RICHARD RATHBONE	AN INDICATIVE APPRAISAL OF HYDROGEN PRODUCTION FROM BIOGENIC MUNICIPAL WASTE

Day 3

Oral Presentations

ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY XVI			
SESSION CHAIRS: JOHANNA ANDERSSON, EVA NORDLANDER			
TIME	ID	AUTHOR	TITLE
10:30-10:50	755	POBITRA HALDER, SAZAL KUNDU, SAVANKUMAR PATEL, RAJARATHINAM PARTHASARATHY, JORGE PAZ-FERREIRO, KALPIT SHAH	NEW FINDINGS ON THE DELIGNIFICATION OF AUSTRALIAN RICE HUSK USING LOW-COST AMINO ACID BASED IONIC LIQUID
10:50-11:10	882	DAN LI	STUDY OF MECHANISM AND PRODUCT DISTRIBUTION ON WASTE TIRES PYROLYSIS
11:10-11:30	891	LASINIDU JAYARATHNA, PHILIP HOBSON, IAN O'HARA, GEOFF KENT	BIOELECTRICITY GENERATION FROM SUGARCANE WASTE IN QUEENSLAND: MODEL FOR OPTIMAL SITING AND SIZES FOR BIOMASS ENERGY PLANTS
11:30-11:50	895	CHUAN WANG, GUANGWEI WANG, JIANLIANG ZHANG, HAIPENG TENG, NAN ZHANG	CONVERSION OF MAIZE STRAW TO BLAST FURNACE INJECTED FUEL BY HYDROTHERMAL CARBONIZATION
11:50-12:10	1162	AUBREY BECKINGHAUSEN, JONATHAN REYNDERS, RYAN MERCKEL, SEBASTIAN SCHWEDE	COMPARISON OF BIOCHAR ENHANCEMENTS FOR AMMONIA (NH ₄ -N) SORPTION FROM CONCENTRATED WASTEWATER
ROOM: LAMBDA			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XIV			
SESSION CHAIRS: OTTORINO VENERI, CLEMENTE CAPASSO			
TIME	ID	AUTHOR	TITLE
10:30-10:50	785	LISHUO LIU, XUNING FENG, DONGXU GUO, XUEBING HAN, MINGXUAN ZHANG, LANGUANG LU, XIANGMING HEMINGGAO OUYANG	A STUDY ON THE BEHAVIORS OF INTERNAL SHORT CIRCUIT IN LITHIUM-ION BATTERIES
10:50-11:10	793	JIN ZHANG, ZHENPO WANG, PENG LIU, XIAOYU LI	ANALYSIS ON INFLUENCE FACTORS OF ENERGY CONSUMPTION OF ELECTRIC VEHICLES BASED ON REAL-WORLD DRIVING DATA
11:10-11:30	600	SOURABH MANDOL, PRANAB K DAN, MANOJ KUMAR MONDAL	TRANSMISSION POWER MANAGEMENT IN POWER-SPLIT HYBRID ELECTRIC VEHICLE USING RESPONSE SURFACE METHOD AND DATA DRIVEN DESIGN SYNTHESIS
11:30-11:50	856	DONGXU GUO, GENG YANG, GUANGJIN ZHAO, DONGSHENG REN, MENGCHAO YI, XUNING FENG, XUEBING HANLANGUANG LU, MINGGAO OUYANG	IDENTIFICATION OF DIFFERENTIAL CAPACITY IN LITHIUM-ION BATTERIES BY DECONVOLUTION OF ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY
11:50-12:10	898	YUJIE WANG, CHANG LIU, RUI PAN, CHEN ZONGHAI	STATE-OF-CHARGE ESTIMATION OF HYBRID ENERGY STORAGE SYSTEM USING FRACTIONAL ORDER MODELS
ROOM: KAPPA			
SESSION NAME: ENERGY SCIENCES VII			
SESSION CHAIRS: KOK KEONG CHONG, XIAOSEN LI			
TIME	ID	AUTHOR	TITLE
10:30-10:50	65	QIANG YU, YUANWEI LU, XIAOPAN ZHANG, YUTING WU	NOVEL NANO-SIO ₂ / NANO ₃ -KNO ₃ / EXPANDED GRAPHITE COMPOSITE HEAT STORAGE MATERIAL WITH HIGH SPECIFIC HEAT CAPACITY AND LARGE THERMAL CONDUCTIVITY
10:50-11:10	66	VIVEKH PRABAKARAN, DUC THUAN BUI, KIAN JON CHUA	EXPERIMENTAL PERFORMANCE INVESTIGATION OF SUPERABSORBENT POLYMER AND POTASSIUM FORMATE COATED HEAT EXCHANGERS
11:10-11:30	188	YUFEI HUANG, XIAOWEN ZHANG, HONGXIA GAO, YANGQIANG HUANG, PAITOO TONTIWACHWUTHIKUL, ZHIWU LIANG	CATALYTIC PERFORMANCE AND MECHANISM OF MESO-MICROPOROUSMATERIAL BETA-SBA-15 SUPPORTED FEZR CATALYSTS FOR CO ₂ DESORPTION IN CO ₂ LOADED AQUEOUS AMINE SOLUTION
11:30-11:50	635	ZIJING LIN, CHANGMING KE, SHIXUE LIU	A DEEP LEARNING ASSISTED ALLOY CATALYST DESIGN METHOD: THE PREDICTION OF COKE RESISTANT STEAM METHANE REFORMING CATALYSTS
11:50-12:10	816	ZEYU LI, ANDREAS KAISER, WENJING ZHANG	HIGHLY STRUCTURED ZEOLITIC IMIDAZOLATE FRAMEWORKS-8 (ZIF-8) ON ELECTROSPUN NANOFIBER SCAFFOLD FOR GAS STORAGE
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XVII			
SESSION CHAIRS: ZHIGUO QU, ZAN WU			
TIME	ID	AUTHOR	TITLE
10:30-10:50	655	YUANWU XU, XIAOLONG WU, XIAOBO ZHONG, DONGQI ZHAO, JIANHUA JIANG, ZHONGHUA DENG, XIAOWEI FUXI LI	SOH ESTIMATION AND RUL PREDICTION FOR SOFC BASED ON THE FRAMEWORK OF DATA-DRIVEN AND DEGRADATION MODEL
10:50-11:10	942	OMID BABAIE RIZVANDI, SERHAT YESILYURT	EFFECTS OF PEM FUEL CELL DEGRADATION ON THE TRANSPORT PROPERTIES OF THE CATHODE CATALYST LAYER
11:10-11:30	981	HUIZE LIU, CHUAN FANG, LIANGFEI XU, JIANQIU LI, ZUNYAN HU, MINGGAO OUYANG, HAIYAN HUANG	WATER CONTENT ESTIMATION OF PEM FUEL CELLS BASED ON EXHAUST BACK PRESSURE
11:30-11:50	995	JIANHUEI ZHANG, JUNMING HU, LIANGFEI XU, JIANQIU LI, ZUNYAN HU, YONGZHAN WANG, MINGGAO OUYANG	ANALYSIS OF OPTIMAL HUMIDIFICATION CHARACTERISTICS ABOUT PEMFC
11:50-12:10	1024	XUECHAO WANG, JINZHOU CHEN, SHENGWEI QUAN, HONGWEN HE, YA-XIONG WANG	DEEP LEARNING BASED HIERARCHICAL PREDICTIVE CONTROL FOR OXYGEN STOICHIOMETRY OF PROTON EXCHANGE MEMBRANE FUEL CELL ENGINE

Day 3

Oral Presentations

ROOM: R1-122			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XVIII			
SESSION CHAIRS: MOHSEN ASSADI, MINGFA YAO			
TIME	ID	AUTHOR	TITLE
10:30-10:50	854	AYYAPPAN PUNAMALAI RAMASANKARAN	INFLUENCE OF SPLIT INJECTION MASS AND INJECTION PRESSURE ON METHANOL/DIESEL RCCI COMBUSTION IN A COMPRESSION IGNITION ENGINE
10:50-11:10	786	HAN JIANG, ANAS A. RAHMAN, XIAOQING ZHANG	PREDICTION OF THE PERFORMANCE FOR ALPHA-TYPE STIRLING ENGINE THROUGH ARTIFICIAL NEURAL NETWORK TECHNIQUE
11:10-11:30	103	QINJIE LIN, KUN LIN TAY, WENMING YANG	COMBUSTION AND EMISSIONS OF POLYOXYMETHYLENE DIMETHYL ETHER 3 BLENDED WITH DIESEL AND GASOLINE IN A HOMOGENEOUS CHARGE COMPRESSION IGNITION ENGINE: A NUMERICAL STUDY
11:30-11:50	831	ANAS A. RAHMAN, XIAOQING ZHANG	IMPROVED PREDICTIONS OF ONSET TEMPERATURE IN TWIN THERMOACOUSTIC HEAT ENGINE BY NEURAL NETWORK BASED CALIBRATED THERMOACOUSTIC MODEL
11:50-12:10	929	JIALE CAO, TIE LI	A PRELIMINARY STUDY OF APPLICATION OF SMART THERMAL INSULATION COATING ON IMPROVING THERMAL EFFICIENCY IN A MARINE LOW-SPEED DIESEL ENGINE
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT XIII			
SESSION CHAIRS: CHI ZHANG, YINGRU ZHAO			
TIME	ID	AUTHOR	TITLE
10:30-10:50	654	EUNJI YOO, WONJAE CHOI, HAN HO SONG	EVALUATION OF NEW GREENHOUSE GAS EMISSION STANDARDS FOR LIGHT DUTY VEHICLES THROUGH A WELL-TO-WHEEL ANALYSIS
10:50-11:10	944	YE HANG, QUNWEI WANG, YIZHONG WANG	CONTRIBUTIONS TO INDUSTRIAL SO ₂ EMISSIONS TREATMENT IN CHINA: A MULTI-REGION DECOMPOSITION AND ATTRIBUTION ANALYSIS
11:10-11:30	971	GILDAS SIGGINI, EDI ASSOUMOU, SOPHIE DEMASSEY	INVESTMENT CHOICES AND CAPACITIES AT RISK IN DECARBONIZING THE EU ELECTRIC SYSTEM
11:30-11:50	979	JINKAI LI, JIN ZHANG, LIANRUI MA	THE POLICY PROCESS AND POLICY EFFECT OF CHINESE URBAN ENVIRONMENTAL POLICY-A CASE OF ZHENGZHOU CITY
11:50-12:10	1065	JIEHUI YUAN, XUNMIN OU	AN EVALUATION OF THE EFFECTS OF TOURISM AND DISTRIBUTED ENERGY ON CO-DEVELOPMENT
ROOM: R1-141			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XV			
SESSION CHAIRS: JIANZHONG WU, FULIN WANG			
TIME	ID	AUTHOR	TITLE
10:30-10:50	875	HUILI WU, GUOQING XU	RESEARCH ON KEY TECHNOLOGY OF EXTENDING POWER SUPPLY RADIUS IN SPARSE AREA
10:50-11:10	902	YUAN ZHAO, XIAOPING HE	COST OF VOLUNTARY LOAD INTERRUPTION: CASE STUDY OF SUMMER ELECTRICITY PEAK IN XI'AN CITY
11:10-11:30	460	YIXUE LI, LEI HUANG, QIONG CUI, JIE SHU	A BI-LEVEL OPTIMAL CONFIGURATION OF CCHP SYSTEM CONSIDERING THERMAL CHARACTERISTICS
11:30-11:50	865	CHUN SING LAI	COORDINATED OPERATION OF GAS AND ELECTRICITY NETWORKS
11:50-12:10	412	COSTANZA SALETTI, MIRKO MORINI, AGOSTINO GAMBAROTTA	AN OVERVIEW OF EUROPEAN RESEARCH PROJECTS FOR SMART CONTROL OF ENERGY SYSTEMS
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XVI			
SESSION CHAIRS: YUNFEI MU, XIANDONG XU			
TIME	ID	AUTHOR	TITLE
10:30-10:50	133	LUO XU, QINGLAI GUO, ZHONGGUAN WANG, TIANYU YANG, HONGBIN SUN	MODELING AND STABILITY ANALYSIS OF DISTRIBUTED CYBER-PHYSICAL POWER SYSTEMS WITH TIME DELAY
10:50-11:10	195	SHUANGCHEN YUAN, SHOUXIANG WANG, KAI WANG	AFFINE ANALYSIS FOR UNCERTAINTY OF GAS LOAD IN INTEGRATED ELECTRICAL AND NATURAL-GAS SYSTEM
11:10-11:30	233	DANIEL RODRIGUES, XIANMING YE, XIAOHUA XIA, BING ZHU	ENERGY STORAGE SIZING AND OPERATION OPTIMISATION IN A PEER-TO-PEER ENERGY SHARING COMMUNITY
11:30-11:50	245	XUE HU, JUNHONG YANG	OPERATION SIMULATION WITH FLOWMASTER AND VISUALIZATION WITH MATLAB FOR DISTRICT HEATING SYSTEM
11:50-12:10	747	DAVID SEVERIN RYBERG, HEIDI URSULA HEINRICH, DETLEF STOLTEN, MARTIN ROBINIUS	OCCURRENCE OF VARIABLE RENEWABLE ENERGY SYSTEM GENERATION LULLS IN A FUTURE EUROPEAN CAPACITY SCENARIO

Day 3

Oral Presentations

ROOM: R1-302			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE IX			
SESSION CHAIRS: XIAOYAN JI, NIKLAS HEDIN			
TIME	ID	AUTHOR	TITLE
10:30-10:50	986	CAROLINA FONT PALMA, GEORGE LYCHNOS, PAUL WILLSON	PRODUCTION OF BIOMETHANE FROM AGRICULTURAL WASTE USING A CRYOGENIC CARBON CAPTURE PROCESS
10:50-11:10	54	YUNLEI ZHAO, BO JIN, ZHIWU LIANG	EXPERIMENTAL INVESTIGATION ON A NOVEL COMBINED CHEMICAL LOOPING REFORMING PROCESS
11:10-11:30	1027	MOHAMMED NAZEER UL HASAN KHAN, SCHALK CLOETE, SHAHRIAR AMINI	EFFICIENCY IMPROVEMENT THROUGH PROCESS INTEGRATION OF CHEMICAL LOOPING COMBUSTION AND MEMBRANE ASSISTED CHEMICAL LOOPING REFORMING
11:30-11:50	1166	NAN WANG, XIAOYAN JI	IMPACTORS EVALUATION OF MEA-BASED CO ₂ CAPTURE IN CEMENT INDUSTRY
11:50-12:10	390	NITHIN B. KUMMAMURU	ADSORPTION STUDY OF CARBON DIOXIDE IN 'L' SHAPED SLIT PORES AT HIGH TEMPERATURES AND PRESSURES USING MONTE CARLO SIMULATIONS
ROOM: R1-306			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XIX			
SESSION CHAIRS: TAO MA			
TIME	ID	AUTHOR	TITLE
10:30-10:50	491	TORSTEN BERNING, HENRIK SØRENSEN, MADS PAGH NIELSEN	A COMPUTATIONAL FLUID DYNAMICS ANALYSIS OF AN INDIRECT EVAPORATIVE COOLER EMPLOYING THE PARTICLE TRANSPORT METHOD
10:50-11:10	820	ISAM JANAJREH JANAJERH, SOMAYYA ELSHABRAWI, MOHAMMED HUSSAIN	THERMO-ACOUSTIC ENGINE PRESSURE WAVE: ANALYSIS OF WORKING FLUID EFFECT
11:10-11:30	726	XU PING	STUDY ON COOPERATIVE MATCHING PERFORMANCE OF PUMP IN MARINE BIOMASS DIESEL ENGINE-ORGANIC RANKINE CYCLE COMBINED SYSTEM BASED ON GT-SUITE
11:30-11:50	997	QIANG LIU, ZHIGANG LAN, TING YU, YONGHU WU	THERMODYNAMIC ANALYSES OF DUAL-PRESSURE ORGANIC RANKINE CYCLES FOR OCEAN THERMAL ENERGY CONVERSION (OTEC)
11:50-12:10	160	JIE ZHANG, DAMING SUN, YUN QI, HONGHAO PAN	ACOUSTIC MATCH OF A FREE-PISTON STIRLING ENGINE AND A LINEAR ALTERNATOR BASED ON THERMOACOUSTIC THEORY
12:10-13:30	LUNCH		
ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY XVII			
SESSION CHAIRS: KUNIO YOSHIKAWA, XUESONG BAI			
TIME	ID	AUTHOR	TITLE
13:30-13:50	1006	WEI LV, WEIQI MAI, JING LIU, LONGLONG MA, WANG CHENGUANG, YING XU	HYDRODEOXYGENATION OF LIGNIN-DERIVED AROMATICS OVER BI-FUNCTIONAL RUMOOX/C UNDER MILD CONDITION
13:50-14:10	892	JOHN NIKKO SALVILLA, ANALIZA ROLLON, MARK DANIEL DE LUNA	CO-PYROLYSIS OF CORN STOVER WITH LOW-DENSITY POLYETHYLENE (LDPE), AND POLYPROPYLENE (PP): OPTIMIZATION BASED ON SYNERGY
14:10-14:30	109	ZHENWEI LI, HONGPENG XU, WENMING YANG	SYNERGISTIC EFFECT BETWEEN CO ₂ AND H ₂ O ON BIOMASS CHEMICAL LOOPING GASIFICATION WITH HEMATITE AS OXYGEN CARRIER
14:30-14:50	990	LINWEI WANG, AINUL NADIRAH IZAHARUDDIN, NADER KARIMI, MANOSH PAUL	ENHANCED SYNGAS PRODUCTION FROM CO ₂ GASIFICATION OF BIOMASS
14:50-15:10	756	TARAS KOTURBASH, VLADIMIR KUTCHEROV, ANNA GULIN	COST-EFFICIENT MEASUREMENT OF ENERGY CONTENT OF PROPANATED BIOMETHANE
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY XVIII			
SESSION CHAIRS: EVA THORIN, LARA CARVALHO			
TIME	ID	AUTHOR	TITLE
13:30-13:50	64	HAIQUAN YU, LARS NORD, JIANXIN ZHOU, FENGQI SI	PART-LOAD PERFORMANCE ANALYSIS OF A COMBINED CYCLE PLANT CO-FIRING BIOGAS AND NATURAL GAS
13:50-14:10	993	XIAOYAN JI	TOWARDS NEGATIVE CARBON DIOXIDE EMISSIONS: CAPTURE OF CARBON IN BIOSYNGAS BY AQUEOUS PENTAETHYLENEHEXAMINE
14:10-14:30	174	HAO ZHANG, HUIZHI WANG, JIN XUAN	A PH-DIFFERENTIAL PHOTOELECTROCHEMICAL SYSTEM FOR BIAS-FREE CARBON DIOXIDE REDUCTION: A MODELING STUDY
14:30-14:50	921	YU HE, QIN JIANG	METHANE PRODUCTION WITH BROUSSONETIA PAPYRIFERA BY ANAEROBIC DIGESTION
14:50-15:10	366	KILSU PARK, TAEGYU KIM	CO ₂ ACTIVATION IN LOW CURRENT ARC PLASMA COMBINED WITH CATALYST FOR HIGH ENERGY EFFICIENCY

Day 3

Oral Presentations

ROOM: LAMBDA			
SESSION NAME: RENEWABLE ENERGY XIX			
SESSION CHAIRS: PIETRO CAMPANA, PATRIK KLINTENBERG			
TIME	ID	AUTHOR	TITLE
13:30-13:50	848	SILVIO BARBARELLI, MARIO AMELIO, FRANCESCO IOVINO, NINO MICHELE SCORNAIENCHI, ALFREDO MEOMARTINI	STUDY OF THE SHAPE OF A VERTICAL AXIS MICRO WIND TURBINE WITH WOODEN BLADES
13:50-14:10	675	XINGTIAN WANG, SHIWEN HOU, SHIFENG WANG, JUNFENG ZHU	STUDY ON WIND-SOLAR COMPLEMENTARY WATER SUPPLY TECHNOLOGY FOR ARID PASTURES IN NORTH CHINA
14:10-14:30	741	BIN YE, MIN ZHOU, JINGJING JIANG, MINHUA ZHOU	COMPARATIVE ANALYSIS OF ENERGY STORAGE MODES FOR DIFFERENT RENEWABLE ENERGY SYSTEMS: A CASE STUDY ON LIUGONG ISLAND
14:30-14:50	1036	KRISHAN PANDEY, T. JOJI RAO	RENEWABLE PURCHASE OBLIGATIONS (RPO) MIX DETERMINATION: A CASE OF WEST BENGAL, INDIA
14:50-15:10	270	JIQIANG ZHANG, YONG SUN	INTEGRATED MULTI-ENERGY SYSTEM: A SOLUTION TO REDUCE RENEWABLE ENERGY POWER CURTAILMENT IN WESTERN CHINA
ROOM: KAPPA			
SESSION NAME: ENERGY SCIENCES VIII			
SESSION CHAIRS: PRAVEEN LINGA, ZHIMING XIA			
TIME	ID	AUTHOR	TITLE
13:30-13:50	205	WEI WANG, QIYU HUANG, DONGXU ZHANG	EFFECT OF WAX ON HYDRATE FORMATION IN OIL-DOMINATED SYSTEM
13:50-14:10	388	GAURAV BHATTACHARJEE, HARI PRAKASH VELUSWAMY, RAJNISH KUMAR, PRAVEEN LINGA	STUDYING THE KINETICS OF MIXED CH ₄ -THF HYDRATE FORMATION AT AMBIENT TEMPERATURE
14:10-14:30	508	YI WANG, JING-CHUN FENG, XIAO-SEN LI	LARGE-SCALE EXPERIMENTAL INVESTIGATION OF INFLUENCE OF DEPRESSURIZATION RATE ON HYDRATE DISSOCIATION IN SANDY SEDIMENT
14:30-14:50	329	YIQUN ZHANG, KEXIAN ZHAO, XIAODONG HU, XIAOYA WU, GENSHENG LI	NUMERICAL INVESTIGATION ON THE EROSION PROCESS OF HYDRATE MATERIALS USING WATER JET
14:50-15:10	171	XUAN KOU, YI WANG, XIAO-SEN LI	PORE-SCALE INVESTIGATION OF GAS HYDRATE DISTRIBUTION CHARACTERISTICS IN POROUS SEDIMENTS WITH MICRO X-RAY CT
ROOM: R1-121			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XX			
SESSION CHAIRS: JUNG-SIK KIM, ZAN WU			
TIME	ID	AUTHOR	TITLE
13:30-13:50	512	MEITING GUO, ZIJING LIN	MULTI-PHYSICS MODELING ANALYSIS OF A KW-CLASS SOLID OXIDE FUEL CELL STACK FUELED BY HYDROGEN AND METHANE
13:50-14:10	159	RUI PAN, DUO YANG, YUJIE WANG, CHEN ZONGHAI	GRAPHICAL THERMAL MODEL OF PROTON EXCHANGE MEMBRANE FUEL CELL SYSTEM BASED ON ENERGETIC MACROSCOPIC REPRESENTATION
14:10-14:30	210	NING CAI, SUNWEN XIA, XIONG ZHANG, ZIHAN MENG, HAIPING YANG, PIETRO BARTOCCI, HAOLIN TANGHANPING CHEN, PAUL T. WILLIAMS	IRON AND NITROGEN CO-DOPED CARBON NANOTUBES PRODUCED FROM WASTE PLASTICS FOR OXYGEN REDUCTION REACTION CATALYSIS
14:30-14:50	1068	HANGYUE LI, JIANZHONG ZHU	MULTI-TIME SCALE DYNAMICS DECOMPOSITION AND ANALYSIS OF FUEL CELL POWER SYSTEM
14:50-15:10	283	LINHAO FAN, JIAO KUI	EFFECTS OF PERFLUOROSULFONIC ACID SIDE CHAIN LENGTH ON PEM FUEL CELL CATALYST LAYER STRUCTURE: A MOLECULAR DYNAMICS APPROACH
ROOM: R1-122			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XXI			
SESSION CHAIRS: NATASA NORD, LIJUN ZHANG			
TIME	ID	AUTHOR	TITLE
13:30-13:50	67	SHAOWEI QING, WEN CHEN, ZHOU HU, XIAOLONG GOU, SHENLI TANG	DESIGN, EXPERIMENT AND MODELLING OPTIMIZATION FOR A HIGH-TEMPERATURE AND MEDIUM-TEMPERATURE COUPLED TEG SYSTEM DRIVEN BY DIRECT COMBUSTION HEAT SOURCE
13:50-14:10	151	DMITRY PASHCHENKO	EFFICIENCY OF THE THERMOCHEMICAL HEAT RECOVERY SYSTEMS: HEAT- AND FLOW-DYNAMIC FEATURES
14:10-14:30	824	FRANCESCO DALL'ORTO, NATHAN ZIMMERMAN, AMIR VADIEE, KONSTANTINOS KYPRIANIDIS	ECONOMIC ASPECT OF HYBRID HEATING AND COOLING SYSTEMS IN A RESIDENTIAL BUILDING
14:30-14:50	956	XIAONAN YU, ZHI LI, YIJI LU, RUI HUANG, XIAOLI YU, TONY ROSKILLY	FESIBILITY STUDY OF PUMPED THERMAL ELECTRICITY STORAGE INTEGRATED WITH ORGANIC RANKINE CYCLE DURING CHARGING PROCESS
14:50-15:10	1018	HANMIN CAI, MEYSAM QADRAN, MUDITHA ABEYSEKERA, SHI YOU, JIANZHONG WU, HENRIK BINDNER	OPTIMAL OPERATION OF A MULTI-ENERGY SYSTEM: A CASE STUDY OF WARWICK UNIVERSITY CAMPUS

Day 3

Oral Presentations

ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT XIV			
SESSION CHAIRS: RONALD WENNERSTEN, GANG HE			
TIME	ID	AUTHOR	TITLE
13:30-13:50	400	YUANTAO YANG, BIN ZHANG, BO WANG, ZHAOHUA WANG	VARIATIONS OF PROVINCIAL CO2 EMISSIONS UNDER MULTIPLE PERSPECTIVES IN CHINA
13:50-14:10	511	FULGENCE MAKONELAH	ANALYSIS OF FACTORS CONTRIBUTING TO THIRD-PARTY DAMAGE OF NATURAL GAS DISTRIBUTION PIPELINE
14:10-14:30	627	SAHEED GBADAMOSI, AZIZAT GBADEGESIN, NNAMDI NWULU, YANXIA SUN	OPTIMISING FUEL EFFICIENCY FOR RENEWABLE ENERGY-BASED SYSTEMS INCORPORATING HYBRID ENERGY STORAGE
14:30-14:50	709	TATSUYA HANAOKA, TOSHIHIKO MASUI, TOMOKI HIRAYAMA, GO HIBINO	COBENEFITS AND INVESTMENT COSTS OF ALTERNATIVE DECARBONIZATION PATHWAYS TOWARD 2 DEGREE TARGETS IN CHINA AND INDIA
14:50-15:10			
ROOM: R1-141			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE X			
SESSION CHAIRS: XIAOYAN JI, LIANG WANG			
TIME	ID	AUTHOR	TITLE
13:30-13:50	68	ZHIMING XIA, RAN YAN, ZHAOYANG CHEN, XIAO-SEN LI, KEFENG YAN	CO2/H2/H2O HYDRATE FORMATION WITH 13X MOLECULAR SIEVE COUPLED TBAB SOLUTION
13:50-14:10	369	LIJUAN HE, SONGPING MO, FAN WU, LISI JIA, YING CHEN	MICROENCAPSULATION OF D-MANNITOL BY A SOL-GEL PROCESS
14:10-14:30	150	CHAO CHEN, ANREN YAO, CHUNDE YAO, HUI WANG, MINGKUAN LIU, ZHUANGZHUANG LI, GUOFAN QU	EFFECT OF THE PROPERTY AND INLET TEMPERATURE OF DIESEL OXIDATION CATALYSTS ON THE CATALYTIC EFFICIENCIES OF EXHAUST GAS FROM A DIESEL METHANOL DUAL FUEL ENGINE
14:30-14:50	152	YUANYUAN ZHANG, YANG YE, JING DING, WEILONG WANG, JIANFENG LU	PERFORMANCE OPTIMIZATION OF MOLTEN SALT THERMOCLINE STORAGE SYSTEM WITH COUPLING THERMAL RESISTANCE
14:50-15:10	641	YANG YE	NUMERICAL SIMULATION ON HEAT TRANSFER AND STORAGE PERFORMANCE OF HYDROGEN-HEAT STORAGE UNITS
ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XVII			
SESSION CHAIRS: FREDRIK WALLIN, YANLI LIU			
TIME	ID	AUTHOR	TITLE
13:30-13:50	935	HUNGJEN HSU, XIANG LIU, DONGSHENG REN, YU WANG, XUNING FENG, LANGUANG LU, XIANGMING HEMINGGAO OUYANG	THE THERMAL STABILITIES OF LI-ION BATTERIES WITH NICKEL-RICH CATHODE EFFECTS OF CATHODE MORPHOLOGY AND STATE OF HEALTH
13:50-14:10	952	ZHONGBAO WEI, HONGWEN HE	A NOISE COMPENSATED METHOD FOR MODEL PARAMETERIZATION OF LITHIUM-ION BATTERY
14:10-14:30	1012	CLEMENTE CAPASSO	OVERVIEW OF ENERGY MANAGEMENT STRATEGIES FOR HYBRID LEISURE BOATS
14:30-14:50	1020	LIJUN ZHANG, XIANMING YE, FARSHAD BARZEGAR, XIAOHUA XIA	A RECEDING HORIZON ECO-DRIVING STRATEGY FOR ELECTRIC VEHICLES CONSIDERING TRAFFIC FLOW AND SIGNAL INFORMATION
14:50-15:10	930	LEANDRO JANKE, SÖREN WEINRICH, SHANE MCDONAGH, JERRY MURPHY, DANIEL NILSSON, PER-ANDERS HANSSON, ÅKE NORDBERG	MODELING ELECTRICITY MARKET FOR POWER-TO-X APPLICATIONS IN SWEDEN: EFFECTS OF DIFFERENT BIDDING STRATEGIES ON PLANT PERFORMANCE

Day 3

Oral Presentations

ROOM: R1-302			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XVIII			
SESSION CHAIRS: JIANZHONG WU			
TIME	ID	AUTHOR	TITLE
13:30-13:50	885	LIN LI, QIAN JIANG, ZILI YIN, GONGLIN ZHANG, YUNFEI MU	A DISTRIBUTION STRATEGY OF RELIEF AND REPAIR MATERIALS FOR DISTRIBUTION NETWORK IN TYPHOON SCENARIOS
13:50-14:10	1032	JIA SI, QIAN XIAO, YUNFEI MU, JINYU WANG, YU JIN, PENGFEI HU, CHAOYU DONGXINYU WANG, HONGJIE JIA	A NOVEL POWER REGULATION SCHEME FOR MEDIUM-VOLTAGE HYBRID AC/DC MICROGRID UNDER UNBALANCED GRID CONDITIONS
14:10-14:30	613	MURILO MIRANDA, CARLOS RUFIN, GUILHERME DANTAS, LUCCA ZAMBONI, NATHALIA PEDREIRA, MATHEUS GUERRA, PRISCILA MENDESJAIRO ALVARES	INTERNATIONAL REVIEW OF REGULATORY ASPECTS RELATED TO ELECTRICITY LOSS IN DISTRIBUTION SECTOR
14:30-14:50	249	MIAO LI, MAOJUN ZHOU, HAILIN MU, XIAOYU LIU, KUN XU, HONGWEI GAO	AN OPTIMIZATION FOR DISTRIBUTED ENERGY SYSTEM INTEGRATED WITH DISTRICT ELECTRICITY NETWORK
14:50-15:10			
ROOM: R1-306			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE XI			
SESSION CHAIRS: MOHSEN ASSADI, PHILIP DE VAAL			
TIME	ID	AUTHOR	TITLE
13:30-13:50	598	YANPING DU	AN INNOVATIVE MODEL FOR CRITICAL HEAT FLUX PREDICTION IN SATURATED POOL BOILING BASED ON BUBBLE BEHAVIORS ON DRY HOT SPOTS
13:50-14:10	821	ISAM JANAJREH JANAJERH, KHADIJE EL KADI, SHERIEN ELAGROUDY	EXPERIMENTAL AND NUMERICAL INVESTIGATION OF DESALINATION BY INDIRECT DIRECTIONAL FREEZING
14:10-14:30	443	YU TAN, XUN ZHU, HONG WANG, YIWEN LV, XIAN-YAN HE, QIANG LIAO	CENTRIFUGAL GRANULATION OF MOLTEN BF SLAG IN FILM FORMATION MODE DURING WASTE HEAT RECOVERY PROCESS
14:30-14:50	663	LUMING CHA, QIHONG FENG, SEN WANG	FORCE CHAIN NETWORK ANALYSIS OF GRANULAR MATERIAL BASED ON THE COMMUNITY DETECTION METHOD
14:50-15:10	1044	DAMOLA S ADELEKAN, OHUNAKIN OS, JATINDER GILL, OPEMIPO ATIBA	COMPARATIVE PERFORMANCE OF R600A-AI2O3-MO NANOFUIDS IN A DOMESTIC REFRIGERATOR USING R134a WORKING FLUID
ROOM: R1-151			
SESSION NAME: ENERGY MANAGEMENT XV			
SESSION CHAIRS: JINQING PENG			
TIME	ID	AUTHOR	TITLE
13:30-13:50	733	REZA NADIMI, MIKA GOTO, KOJI TOKIMATSU	IMPACT OF DISTRIBUTED GENERATION TECHNOLOGIES' SIZING ON ENERGY POVERTY REDUCTION
13:50-14:10	872	JOYASHREE ROY, HASAN MAHMUD, MOHSEN ASSADI	DRILLING TECHNOLOGY SYSTEM: A WIN-WIN SOLUTION FOR JUST TRANSITION, LEAPFROG AND INTERNATIONAL PARTNERSHIP CASE STUDY OF BANGLADESH
14:10-14:30	969	LIJUN WANG, DONGLAN ZHA, DEQUN ZHOU	ANALYSES ON RESIDENTIAL ENERGY DEMAND AND ENVIRONMENTAL EMISSION CHARACTERISTICS IN URBAN CHINA
14:30-14:50	748	ELAHEH JALILZADEHAZHARI, GEORGIOS PARDALIS, AMIR VADIEE, KRUSHNA MAHAPATRA	PROFITABILITY OF VARIOUS ENERGY SUPPLY SYSTEMS WHEN RENOVATING A SINGLE-FAMILY HOUSES IN SWEDEN: CASE STUDY
14:50-15:10			
15-10-15:40			TEA/COFFEE BREAK

Day 3

Oral Presentations

ROOM: BETA			
SESSION NAME: RENEWABLE ENERGY XX			
SESSION CHAIRS: SEBASTIAN SCHWEDE, TAMER ISMAIL			
TIME	ID	AUTHOR	TITLE
15:40-16:00	1083	AUBREY BECKINGHAUSEN, ERIK DAHLQUIST, SEBASTIAN SCHWEDE, NOORA LINDROOS, RISTO RETKIN, REINO LAATIKAINEN, ELIAS HAKALEHTO	DOWNSTREAM PROCESSING OF BIOREFINED LACTATE FROM LAKE BOTTOM ZERO FIBER DEPOSIT - A TECHNO-ECONOMIC STUDY ON ENERGY EFFICIENT PRODUCTION OF GREEN CHEMICALS
16:00-16:20	399	TINGYU WEI, LUO ZHONGYANG, YI YANG, GUOXIANG LI, KONGYU LU, WENBO WANG, WENJIE GUAN	UPGRADING OF BIO-OIL IN SUPERCRITICAL CO ₂ : EXPERIMENTAL RESEARCH AND LIFE CYCLE ASSESSMENT
16:20-16:40	550	KAIYUAN LEI, DEZHEN CHEN	IDENTIFICATION HYDROGEN TRANSFER DURING CHAR/VOLATILE REFORMING PROCESS TO IMPROVE ENERGY PRODUCTS
16:40-17:00	23	MOSÈ ROSSI, NICOLA PIACENTE, GABRIELE COMODI, MASSIMILIANO RENZI	ENERGY RECOVERY IN AN ITALIAN OIL REFINERY BY MEANS OF A HYDRAULIC POWER RECOVERY TURBINE (HPRT) INSTALLED IN A H ₂ S REMOVAL PROCESS
17:00-17:20	877	OCKTAECK LIM, VU DINH NAM	SOOT AND IGNITION INVESTIGATION ON GASOLINE-BIODIESEL BLENDED FUEL IN A CONSTANT-VOLUME CHAMBER
ROOM: GAMMA			
SESSION NAME: RENEWABLE ENERGY XXI			
SESSION CHAIRS: WENQIANG SUN, BENGT STRIDH			
TIME	ID	AUTHOR	TITLE
15:40-16:00	1022	ZHANG BAI, QIBIN LIU, JING LEI	THERMODYNAMIC AND ECONOMIC EVALUATION OF THE THERMOCHEMICAL RECUPERATION PROCESS IN A SOLAR-ASSISTED CCHP SYSTEM
16:00-16:20	31	YUSHI WANG, JIALING ZHU, YIFAN SUI, YUJIAO LEI	A STUDY OF HYBRID SOLAR-GEOTHERMAL POWER GENERATION SYSTEM
16:20-16:40	881	OCKTAECK LIM, KIM KIHYUN	INVESTIGATION ON THE SPRAY DEVELOPMENT PROCESS OF GASOLINE-BIODIESEL BLENDED FUEL SPRAYS IN A CONSTANT VOLUME CHAMBER
16:40-17:00	927	XIAOYU YANG	EXPERIMENT STUDY ON THE ENERGY SUPPLY SYSTEM PERFORMANCE OF SYSTEM COMBINED HEATING, POWER AND BIOGAS IN GANNAN TIBETAN AREA
17:00-17:20	147	CHENG CHEN, XI JIANG	AN INVESTIGATION OF CHEMICAL REACTION IN BIODIESEL UTILISATION BY REACTIVE MOLECULAR SIMULATION
ROOM: LAMBDA			
SESSION NAME: RENEWABLE ENERGY XXII			
SESSION CHAIRS: ERIK DAHLQUIST, KOK KEONG CHONG			
TIME	ID	AUTHOR	TITLE
15:40-16:00	581	FANG-SIAN LIN, MANI SAKTHIVEL, MIAO-SYUAN FAN, JIANG-JEN LIN, RU-JONG JENG, KUO-CHUAN HO	DEVELOPMENT OF MULTIFUNCTIONAL ADDITIVE COMBINED ELECTROSPUN CARBON NANO FIBERS INTEGRATED BIMETALLIC COPPER COBALT PHOSPHIDE AS AN INTERFACIAL LAYER FOR HIGH-PERFORMANCE DSSC
16:00-16:20	766	KOK KEONG CHONG, KAI JEAT HONG	ANALYTICAL METHODOLOGY TO PREDICT OUTDOOR POWER CONVERSION EFFICIENCY WITH ON-SITE VERIFICATION IN MALAYSIA
16:20-16:40	497	JIAQI ZHANG, XINLI LU, HAO YU, TAIDOU WANG	HEAT EXTRACTION PERFORMANCE INVESTIGATION OF A COAXIAL DOUBLE-PIPE HEAT EXCHANGER IN A DEEP GEOTHERMAL WELL
16:40-17:00	1078	HOSEIN KALANTARI, GHOREISHI-MADISEH SEYED ALI, AMIN SHADI, SAJJAN POKHREL, AGUS SASMITO	NUMERICAL STUDY OF MINE WATER HEAT RECOVERY SYSTEM USING COUPLED HEAT EXCHANGER UNITS
17:00-17:20	626	ZI LIN, XIAOLEI LIU	IDENTIFICATION OF FLOW PATTERNS IN UPWARD INCLINED TWO-PHASE FLOWS BY ARTIFICIAL NEURAL NETWORK
ROOM: KAPPA			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE XII			
SESSION CHAIRS: JINGCHUN FENG, DENGJIA WANG			
TIME	ID	AUTHOR	TITLE
15:40-16:00	201	XUCEN WANG, ZEKUN LIU, YUN LI	ENERGY CONSUMPTION AND REFRIGERANT COMPOSITION OPTIMIZATION FOR SMALL-SCALE SKID-MOUNTED C ₃ -MR LIQUEFACTION PLANT
16:00-16:20	515	ANDREA VECCHI, ADRIANO SCIACOVELLI	DESIGN OF A LIQUID AIR ENERGY STORAGE - ECONOMIC VS THERMODYNAMIC CRITERIA
16:20-16:40	588	MUHAMMAD ABDUL QYYUM, JUNAID HAIDER, KINZA QADEER, MOONYONG LEE	PERFORMANCE ENHANCEMENT OF OFFSHORE LNG PROCESSES BY INTRODUCING OPTIMAL MIXED REFRIGERANT SELF-COOLING RECUPERATOR
16:40-17:00	705	GUILIAN LIU	ENERGY CONVERSION OF CHEMICAL PROCESS EMPLOYING AZEOTROPES
17:00-17:20	999	MICHAEL K.H. LEUNG, HONG XIAOQIANG, ZHANYING ZHENG, JINGYU CAO, JIN XUAN	THERMODYNAMIC ANALYSIS OF SOLAR ORGANIC RANKINE CYCLE WITH TWO-STAGE EVAPORATION

ROOM: R1-121			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XXII			
SESSION CHAIRS: PIETRO CAMPANA			
TIME	ID	AUTHOR	TITLE
15:40-16:00	1094	MUHAMMAD WAKIL SHAHZAD	MEMBRANE BASED LIQUID DESICCANT DEHUMIDIFICATION TO ACHIEVE SUSTAINABLE COOLING
16:00-16:20	445	JULIUS EZRA GUNDRAN, ALVIN CULABA, ARISTOTLE UBANDO	DESIGN OF AN ELECTRIC VEHICLE BATTERY COOLING SYSTEM WITH ECONOMIC CONSIDERATIONS USING GENETIC ALGORITHM
16:20-16:40	808	CHANGWEI JI, SHUOFENG WANG, CHUANQI TANG, ZIXUAN YANG, JIACHENG SONG, YIFAN ZHAI	DEVELOPMENT AND PERFORMANCE OF A PLUG-IN HYBRID HYDROGEN VEHICLE
16:40-17:00	156	HAO LI, JUN ZHAO, MINXIA LI, SHENGYUAN ZHONG, WENJIA LI, FUZHONG WANG	COMPARISON OF THE TRANSMISSION OF THE UNCERTAINTY IN THE THEORETICAL MODEL AND DATA-DRIVEN MODEL: TAKE PV FOR EXAMPLE
17:00-17:20	1209	SHULI LIU, CHENG ZENG, ASHISH SHUKLA, LIU YANG, XIAOJING HAN	INVESTIGATION OF AN INNOVATIVE THREE-PHASE THERMOCHEMICAL REACTOR FOR BUILDING'S APPLICATION
ROOM: R1-122			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XXIII			
SESSION CHAIRS: FAHID RAIZ, LARA CARVALHO			
TIME	ID	AUTHOR	TITLE
15:40-16:00	1215	JINSHAN WANG, SYED MUHAMMAD RAZA NAQVI, HAILONG LI, BIN WANG	POTENTIAL ENVIRONMENTAL BENEFITS OF FLUE GAS QUENCH INTEGRATION WITH EXISTING BIOMASS/WASTE-FUELLED CHP PLANT
16:00-16:20	963	KUNYANG XUAN	EFFECT OF INNER AND OUTER COILS ON HEATING PERFORMANCE OF ANAEROBIC FERMENTATION TANK
16:20-16:40	590	ADELA SYIKILILI	EFFECTS OF PIPELINE INCLINATION ON TWO PHASE FLOW PATTERNS
16:40-17:00	223	EE SANN TAN, KUMARAN PALANISAMY, NUR AFIQAH FAUZAN, GRACE PUA FEI LING, GOPINATHAN MUTHAIYIAH	EFFECT OF ACID CATALYST TYPES AND CONCENTRATION ON ESTERIFICATION PRE-TREATMENT OF NON-EDIBLE OIL FOR BIODIESEL PRODUCTION
17:00-17:20	164	BIN WANG, ANREN YAO, CHUNDE YAO, CHAO CHEN, HUI WANG	AN IN-DEPTH COMPARISON OF DIESEL AND DIESEL METHANOL DUAL FUEL COMBUSTION MODE
ROOM: R1-131			
SESSION NAME: ENERGY MANAGEMENT XVI			
SESSION CHAIRS: BO SHEN, HADI FARABI-ASL			
TIME	ID	AUTHOR	TITLE
15:40-16:00	813	ABDUL RAUF, JIN ZHANG, FAYYAZ AHMAD, ZHANGJ17@MAILS.TSINGHUA.EDU.CN JIN, WAQAS AMIN	THE NEXUS BETWEEN RENEWABLE ENERGY, ECONOMIC GROWTH, TRANSPORTATION AND ENVIRONMENTAL DEGRADATION IN THE ASEAN-5 UNDER BELT AND ROAD INITIATIVE: LOOKING FOR ASYMMETRIES AND NONLINEARITIES
16:00-16:20	1042	TANUSHREE SHARMA	WHAT OILS THE WHEEL OF ELECTRICITY THEFT- PERSPECTIVE OF INDIAN DISCOMS
16:20-16:40	1043	PHILIP DE VAAL, HOWARD BENADE	ENERGY-EFFICIENT AND ENVIRONMENTALLY-CONSCIOUS INDUSTRIAL LUBRICATION
16:40-17:00	749	ELAHEH JALILZADEHAZHARI, AMIR VADIEE, PETER JOHANSSON	THE PROFITABILITY OF VARIOUS ENERGY SUPPLY SYSTEMS CONSIDERING VARIATIONS IN FUTURE CLIMATE CONDITIONS
17:00-17:20			
ROOM: R1-141			
SESSION NAME: CLEAN ENERGY TECHNOLOGIES XXIV			
SESSION CHAIRS: MOHSEN ASSADI, LIANG WANG			
TIME	ID	AUTHOR	TITLE
15:40-16:00	806	SALMAN AHMAD, BING XU, BEN KOLOSZ, PHIL GREENING, JAMAL OUENNICHE, JOHN ANDRESEN, MERCEDES MAROTO-VALER	A VALUE TREE FOR MULTI-CRITERIA EVALUATION OF SUSTAINABLE AVIATION FUELS
16:00-16:20	1195	JAVIER CAMPILLO, JUAN DOMÍNGUEZ	IMPACT ANALYSIS FROM DRIVING PATTERNS AND ENVIRONMENTAL CONDITIONS ON THE OPERATIONAL RANGE OF ELECTRIC VEHICLES
16:20-16:40	35	RUILI KANG, JIANSHEG CHEN, YINGZONG LIANG, XIANGLONG LUO, JIANYONG CHEN, ZHI YANG, YING CHEN	INTEGRATION AND OPTIMIZATION OF SOLAR ENERGY DRIVEN SUPERCRITICAL CO2 CYCLE AND ORGANIC RANKINE CYCLE
16:40-17:00	1002	CLEMENTE CAPASSO, OTTORINO VENERI	EXPERIMENTAL CHARACTERIZATION OF LITHIUM-ION CAPACITORS FOR APPLICATIONS ON ROAD HYBRID VEHICLES
17:00-17:20	58	XIN JIN, LI LIN, SHASHA WANG, HAO LUO, LIYUN ZHU	LONG-TERM STABLE OPERATION CONTROL METHOD FOR DUAL-BATTERY ENERGY STORAGE SYSTEM FOR SMOOTHING WIND POWER FLUCTUATIONS

ROOM: R1-142			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XIX			
SESSION CHAIRS: YUE ZHOU, CHAO LONG			
TIME	ID	AUTHOR	TITLE
15:40-16:00	230	RAMESH BANSAL	DYNAMIC ENERGY MANAGEMENT STRATEGY UNDER PRICE-BASED DEMAND RESPONSE SCHEME
16:00-16:20	234	SHANGSHANG WEI, YIGUO LI, JUNLI ZHANG, XIAO WU	CHANCE-CONSTRAINED OPERATION STRATEGY FOR CCHP MICROGRID
16:20-16:40	280	RUITING WANG, FULIN WANG	OPTIMIZATION OF CHARGING/DISCHARGING STRATEGY OF DISTRIBUTED BATTERY STORAGE SYSTEM IN BUILDINGS USING DYNAMIC PROGRAMMING
16:40-17:00	450	THOMAS WEBER, THOMAS KOHNE, NINA STROBEL, JAKOB WOLBER, MARLENE SACHS, EBERHARD ABELE	INFORMATION THEORETICAL EVALUATION OF AGGREGATION METHODS IN THE MATHEMATICAL OPTIMIZATION OF OPERATING STRATEGIES
17:00-17:20	295	HONGXUN HUI, YI DING, YONGHUA SONG, SAIFUR RAHMAN	MODELLING AND DYNAMIC PERFORMANCE ANALYSIS OF THE POWER SYSTEM UNDER UNIT CONTINGENCY SHUTDOWN ACCIDENTS CONSIDERING DEMAND RESPONSE
ROOM: R1-302			
SESSION NAME: INTELLIGENT ENERGY SYSTEMS XX			
SESSION CHAIRS: YI DING, YUNFEI MU			
TIME	ID	AUTHOR	TITLE
15:40-16:00	801	BANDAR ALQAHTANI, DALIA PATINO-ECHEVERRI	OPTIMAL ELECTRICITY SUPPLY SOLUTIONS FOR REMOTE AREAS IN KSA
16:00-16:20	832	TENGLONG ZHAO, HONGGUANG ZHANG	MODELLING AND SIMULATION ANALYSIS OF A FREE PISTON EXPANDERLINEAR GENERATOR FOR WASTE HEAT RECOVERY SYSTEM
16:20-16:40	1063	JAVIER VALDES, LUIS RAMIREZ CAMARGO, WOLFGANG DORNER	GENERATING CONSUMER LOAD PROFILES TO ASSESS DEMAND SIDE MANAGEMENT POTENTIAL OF INDUSTRIES
16:40-17:00	146	YUXIONG HUANG, GENGFENG LI, JINSHI WANG	PERCEPTRON LEARNING MODEL BASED RELIABILITY EVALUATION METHOD OF MEDIUM VOLTAGE ELECTRICAL DISTRIBUTION NETWORKS
17:00-17:20	612	DANTE INGA NARVAEZ, TATIANE SILVA COSTA, HUGO SOEIRO MOREIRA, MARCELO GRADELLA VILLALVA, FREDRIK WALLIN	DESIGN, SIZING AND SIMULATION OF A HYBRID AC-DC MICROGRID FOR IMPROVING ENERGY EFFICIENCY IN RESIDENTIAL APPLICATIONS
ROOM: ALFA			
SESSION NAME: MITIGATION TECHNOLOGIES AND ENERGY STORAGE XXIII			
SESSION CHAIRS: ANDERS AVELIN, WANDONG ZHENG			
TIME	ID	AUTHOR	TITLE
15:40-16:00	1155	PEI XIE, XIAOLAN WEI	TWO NEW CHLORIDE EUTECTIC MIXTURES AND THEIR THERMO-PHYSICAL PROPERTIES FOR HIGH TEMPERATURE THERMAL ENERGY STORAGE
16:00-16:20	1015	JUWON KIM, DAEJUN CHANG	THERMODYNAMIC PERFORMANCE ANALYSIS AND OPTIMIZATION OF LIQUID AIR ENERGY STORAGE SYSTEM BY ENUMERATION
16:20-16:40	143	VIGNESHWARAN K, GURPREET SINGH SODHI, MUTHUKUMAR PALANISAMY, ANURAG GUHA, S. SENTHILMURUGAN	EXPERIMENTAL STUDY AND DYNAMIC THERMAL MODELING OF SOLID SENSIBLE HEAT STORAGE SYSTEM
16:40-17:00	955	BIN DING, ZE-KAI GU, YONG GUO, LIANG GONG	HOW MUSHY ZONE AFFECT THE THERMAL PERFORMANCE OF LOW-MELTING ALLOY
17:00-17:20	573	BERNARDINA CICINELLI, TAMRYN WOLFF, KYLE DELLAR, WILLEM LE ROUX, ADRIANO SCIACOVELLI	POWER GENERATION FOR AFRICAN RURAL COMMUNITIES: INITIAL ASSESSMENT OF HIGH TEMPERATURE THERMAL ENERGY STORAGE FOR SMALL SCALE SOLAR BRAYTON SYSTEM
ROOM: R1-306			
SESSION NAME: RENEWABLE ENERGY XXIII			
SESSION CHAIRS: CHUAN WANG, PATRIK KLINTENBERG			
TIME	ID	AUTHOR	TITLE
15:40-16:00	676	CHAWKI AMEUR MENAD, RABAH GOMRI, RAFIK MANACER	HYDROGEN FROM THERMAL SOLAR ENERGY IN ALGERIA
16:00-16:20	761	LINGNA LIU	DYNAMIC CHANGE OF ECOLOGICAL FOOTPRINT IN BEIJING-TIANJIN-HEBEI REGION FROM 1996 TO 2020
16:20-16:40	841	FEI HUANG, DEQUN ZHOU, QUNWEI WANG	INTEGRATED AIRLINE PRODUCTIVITY PERFORMANCE EVALUATION WITH CO2 EMISSIONS AND FLIGHT DELAYS
16:40-17:00	1171	BARTLOMIEJ CIAPALA	WIND POWER-DRIVEN PIPELESS DISTRICT HEATING AS A MEAN OF FAST TRANSITION TO ZERO-EMISSION HEATING SOURCES – ASSESSMENT OF POTENTIAL FOR URBAN AND SUBURBAN AREA ON THE EXAMPLE OF KRAKÓW CITY (POLAND)
17:00-17:20	118	GETACHEW BEKELE	INVESTIGATION OF WIND FARM INTERACTION WITH ETHIOPIAN ELECTRIC POWER'S GRID:A CASE STUDY AT ASHEGODA WIND FARM

Day 1

Oral Presentations-SIMS

13:30-14:10		60th International Conference of Scandinavian Simulation Society (SIMS) - HISTORY AND FUTURE ESKO JUUSO AND ERIK DAHLQUIST ROOM: ALFA	
ROOM: ALPHA			
60th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: CONTROL			
SESSION CHAIRS: BERNT LIE			
TIME	ID	AUTHOR	TITLE
14:10-14:30	S-22	BERNT LIE	SURROGATE AND HYBRID MODELS FOR CONTROL
14:30-14:50	S-5	ITSASO MENCHACATORRE, ROSHAN SHARMA, BEATHE FURENES AND BERNT LIE	FLOOD MANAGEMENT OF LAKE TOKE: MPC OPERATION UNDER UNCERTAINTY
14:50-15:10	S-3	LIUBOMYR VYTVYTSKYI AND BERNT LIE	STRUCTURAL ANALYSIS IN JULIA FOR DYNAMIC SYSTEMS IN OPENMODELICA
15:10-15:30	S-9	MATHS HALSTENSEN, JOACHIM LUNDBERG, PER IVAN JANUSCHAS AND HANS-PETTER HALVORSEN	ON-LINE MONITORING OF VISCOUS PROPERTIES OF ANTI-ICING FLUID BASED ON MULTIVARIATE REGRESSION MODELING
15:30-15:50	S-36	TORBJÖRN TROSTEN, ERIK DAHLQUIST, HENRIK MOSSKULL, DANIEL JANSSON AND MAHER AZAZA	COMPARISON AND ANALYSIS MAGNETIC NOISE AND DRIVE LOSSES USING DIFFERENT PWM METHODS
15:50-16:10		TEA/COFFEE BREAK	
ROOM: ALPHA			
60th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: BUILDING			
SESSION CHAIRS: BERNT LIE			
TIME	ID	AUTHOR	TITLE
16:20-16:40	S-19	MARIUS SALEN AND DIETMAR WINKLER	IMPACT OF DISTRIBUTED POWER GENERATION AT THE CUSTOMER
16:40-17:00	S-21	NILS-OLAV SKEIE AND JØRUND MARTINSEN	BUILDING OCCUPATION MODELLING USING MOTION SENSOR DATA
17:00-17:20	S-1	OLE MAGNUS BRASTEIN, ROSHAN SHARMA AND NILS-OLAV SKEIE	SENSOR PLACEMENT AND PARAMETER IDENTIFIABILITY IN GREY-BOX MODELS OF BUILDING THERMAL BEHAVIOUR
17:20-17:40	S-4	CASPER AMANDUS JOHANSEN, BERNT LIE AND NILS-OLAV SKEIE	MODELS FOR CONTROL OF THERMAL ENERGY IN BUILDINGS
17:40-18:00	S-34	S. FIROUZIFAR, E.DAHLQUIST	THE OPTIMIZATION OF A DISTRIBUTION AND OVER DISTRIBUTION LINES STRUCTURE
18:00-18:10	S-33	S. FIROUZIFAR, E.DAHLQUIST	ELECTRICAL CHARACTERISTIC OF NEW CALCULATION IN SUB-TRANSMISSION LINE WITH SIMULATION
18:10-21:00		60th International Conference of Scandinavian Simulation Society (SIMS) – PANEL SESSION	

Day 2

Oral Presentations-SIMS

ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: MEASUREMENT AND PROPERTIES			
SESSION CHAIRS: LARS ØI			
TIME	ID	AUTHOR	TITLE
08:20-08:40	S-12	SUMUDU KARUNARATHNE AND LARS ØI	DENSITY AND VISCOSITY CORRELATIONS FOR AQUEOUS 3-AMINO-1-PROPANOL AND MONOETHANOL AMINE MIXTURES
08:40-09:00	S-13	SUMUDU KARUNARATHNE, DAG EIMER AND LARS ØI	UNCERTAINTY COMPARISON OF VISCOSITY MEASUREMENTS OF CO ₂ LOADED MEA AND WATER MIXTURES IN A COAXIAL RHEOMETER USING MONTE CARLO SIMULATION AND GUM METHOD
09:00-09:20	S-14	SUMUDU KARUNARATHNE AND LARS ØI	APPLICABILITY OF NRTL MODEL FOR PREDICTION OF THE VISCOSITY OF MEA + H ₂ O AND AMP + MEA + H ₂ O MIXTURES
09:20-09:40	S-31	INGRID BOKN HAUGLAND, JANA CHLADEK AND MATHS HALSTENSEN	MONITORING OF EROSION IN A PNEUMATIC CONVEYING SYSTEM BY NON-INTRUSIVE ACOUSTIC SENSORS – A FEASIBILITY STUDY
09:40-10:00	S-28	MADELEINE MARTINSEN, ERIK DAHLQUIST, ANDERS LÖNNERMARK AND ÖRJAN SÄKER	GAS SENSORS FOR EARLY DETECTION OF FIRE HAZARDS CAUSED BY VEHICLES IN UNDERGROUND MINES
10:00-10:30	TEA/COFFEE BREAK		
ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: OIL PRODUCTION			
SESSION CHAIRS: LARS ØI			
TIME	ID	AUTHOR	TITLE
10:30-10:50	S-2	CHRISTIAN BERG, JON ÅGE STAKVIK, BERNT LIE, KNUT VAAGSAETHER AND GLENN-OLE KAASA	PRESSURE WAVE PROPAGATION IN MANAGED PRESSURE DRILLING- MODEL COMPARISON WITH REAL LIFE DATA
10:50-11:10	S-26	SIMON SALVESEN HOLTE, JAN VIDAR E. KNUSTEN, ROY SØMME OMMEDAL AND BRITT MARGRETHE EMILIE MOLDESTAD	SIMULATION OF ENHANCED OIL RECOVERY WITH CO ₂ INJECTION
ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: BIO-PROCESSES			
SESSION CHAIRS: ESKO JUUSO			
TIME	ID	AUTHOR	TITLE
11:10-11:30	S-30	ERIK DAHLQUIST, CHRISTIAN WALLIN, EVA NORDLANDER, ANDERS AVELIN AND EVA THORIN	CONTROL OF WASTE WATER TREATMENT COMBINED WITH IRRIGATION
11:30-11:50	S-10	TERJE BRÅTHEN, LARS ERIK ØI AND JON HOVLAND	SIMULATION OF DEW POINTS IN RAW BIOGAS USING PR AND SRK EQUATIONS OF STATE
11:50-12:10	S-23	EVGHENI ERMOLAEV, ERIK DAHLQUIST, CECILIA LALANDER, BJÖRN VINNERÅS AND EVA THORIN	MODEL SELECTION FOR WASTE CONVERSION EFFICIENCY AND ENERGY DEMANDS IN A PILOT FOR LARGE-SCALE LARVAE TREATMENT
12:10-14:10	LUNCH & SIMS BOARD MEETING IN ROOM R1-343		
ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: BIO-PROCESSES			
SESSION CHAIRS: ESKO JUUSO			
TIME	ID	AUTHOR	TITLE
14:10-14:30	S-27	ZAHRA NIKBAKHTKENARSARI, NIRMAL GHIMIRE, RUNE BAKKE AND WENCHE HENNIE BERGLAND	THERMOPHILIC ANAEROBIC DIGESTION MODELING OF LIGNOCELLULOSIC HOT WATER EXTRACT USING ADM1
14:30-14:50	S-32	ESKO JUUSO	INTELLIGENT DYNAMIC SIMULATION OF FED-BATCH FERMENTATION PROCESSES
ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: BIO-PROCESSES			
SESSION CHAIRS: ESKO JUUSO			
TIME	ID	AUTHOR	TITLE
14:50 - 15:10	S-8	ESHETU JANKA, RUNE BAKKE, CARLOS DINAMARCA, VASAN SIVALINGAM, OSAMA IBRAHIM, SERGEY KUKANKOV, BABAFEMI OMODARA, HILDEGUNN HAUGEN AND SHUAI WANG	CHEMICAL EQUILIBRIUM MODEL TO INVESTIGATE SCALING IN MOVING BED BIOFILM REACTORS (MBBR)
15:10-15:30	S-15	RAMESH TIMSINA, BRITT MOLDESTAD, MARIANNE SØRFLATEN EIKELAND AND RAJAN K THAPA	SIMULATION OF AIR-BIOMASS GASIFICATION IN A BUBBLING FLUIDIZED BED USING CPFD MODEL
15:30-15:50	S-7	RAMESH TIMSINA, RAJAN K THAPA AND MARIANNE SØRFLATEN EIKELAND	ASPEN PLUS SIMULATION OF BIOMASS GASIFICATION FOR DIFFERENT TYPES OF BIOMASS
15:50-16:20	TEA/COFFEE BREAK		

Day 2

Oral Presentations-SIMS

ROOM: ALPHA			
60th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: FLUID BEDS			
SESSION CHAIRS: BRITT MOLDESTAD			
TIME	ID	AUTHOR	TITLE
16:20-16:40	S-11	CORNELIUS AGU AND BRITT MARGRETHE EMILIE MOLDESTAD	EFFECT OF SUPERFICIAL GAS VELOCITY ON BUBBLING FLUIDIZED BED BEHAVIOUR IN A BIOMASS GASIFIER
16:40-17:00	S-17	RAJAN JAISWAL, NORA C.I. S. FURUVIK, RAJAN K. THAPA AND BRITT M.E. MOLDESTAD	INVESTIGATION OF THE SEGREGATION AND MIXING BEHAVIOR OF BIOMASS IN A BUBBLING FLUIDIZED BED REACTOR USING A CPFD MODEL
17:00-18:00	ANNUAL SIMS MEETING IN ROOM R1-343		
18:45-22:00	CONFERENCE BANQUET (AROS CONGRESS CENTER)		

Day 3

Oral Presentations-SIMS

ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: FLUID BEDS			
SESSION CHAIRS: BRITT MOLDESTAD			
TIME	ID	AUTHOR	TITLE
08:20-08:40	S-18	RAJAN K. THAPA, SAROJ THAPA, RAJAN JAISWAL, NORA C.I.S. FURUVIK AND BRITT M.E. MOLDESTAD	EXPERIMENTAL AND COMPUTATIONAL STUDY ON EFFECT OF ASH DEPOSITION ON FLUID DYNAMIC BEHAVIOR IN A BUBBLING FLUIDIZED BED GASIFIER
08:40-09:00	S-24	NORA CECILIE IVARSDATTER FURUVIK, RAJAN JAISWAL, RAJAN THAPA AND BRITT MARGRETHE EMILIE MOLDESTAD	STUDY OF AGGLOMERATION IN FLUIDIZED BED GASIFICATION OF BIOMASS USING CPFD SIMULATIONS
09:00-09:20	S-25	JANITHA BANDARA, BRITT MOLDESTAD AND MARIANNE EIKELAND	ANALYZING THE EFFECTS OF GEOMETRICAL AND PARTICLE SIZE UNCERTAINTY IN CIRCULATING FLUIDIZED BEDS USING CPFD SIMULATION
ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: ELECTRICAL APPLICATIONS			
SESSION CHAIRS: ERIK DAHLQUIST			
TIME	ID	AUTHOR	TITLE
09:20-09:40	S-6	MADHUSUDHAN PANDEY, THOMAS ØYVANG AND BERNT LIE	STATE ESTIMATION OF A THERMAL MODEL OF AIR-COOLED SYNCHRONOUS GENERATOR
09:40-10:00	S-20	PRABESH KHAKDA, DIETMAR WINKLER AND THOMAS ØYVANG	ONLINE MONITORING OF A SYNCHRONOUS GENERATOR'S CAPABILITY WITH MATLAB
10:00-10:30	TEA/COFFEE BREAK		
ROOM: ALPHA			
60 th International Conference of Scandinavian Simulation Society (SIMS) - SESSION NAME: ELECTRICAL APPLICATIONS			
SESSION CHAIRS: ERIK DAHLQUIST			
TIME	ID	AUTHOR	TITLE
10:30-10:50	S-29	ANAHITA DAVOODI, PETER JOHANSSON, MYRIAM ARIES AND THORBJÖRN LAIKE	CURRENT USE OF LIGHTING SIMULATION TOOLS IN SWEDEN
10:50-11:10	S-16	HELGE NORDAL AND IDRIS EL-THALJI	OPERATIONS DYNAMICS OF GAS CENTRIFUGAL COMPRESSOR: PROCESS, HEALTH AND PERFORMANCE INDICATORS
11:10-11:30	S-37	LUKAS LUNDSTRÖM, ERIK DAHLQUIST	UNCERTAINTY IN HOURLY READINGS FROM DISTRICT HEAT BILLING METERS
11:30-12:10	PANEL DISCUSSION ON FUTURE DIRECTIONS OF SIMS IN ROOM ALPHA		
12:10-13:30	LUNCH		

POSTER SESSION I			
POSTER ID	PAPER ID	AUTHOR	PAPER TITLE
P-1-1	135	JING FAN, SHUANGSHUO LIU, FENHONG SONG, HONGWEI LI, WENPENG HONG	EXPERIMENTAL STUDIES ON THE THERMAL CONDUCTIVITY OF METHYL LAURATE COMPONENT OF BIODIESEL WITH THREE HIGHER ALCOHOLS
P-1-2	279	XUE HU, TAIAN YUE	OPTIMIZATION OF PREPARATION PROCESS PARAMETERS OF PELLET FUEL DERIVED FROM APPLE TREE PRUNING
P-1-3	567	ZHIQIANG WU	THERMAL EFFECT AND KINETIC ANALYSIS ON CO-PYROLYSIS OF LOW-RANK COAL WITH CELLULOSE FROM BIOMASS
P-1-4	781	HAO ZHAN	STAGE-PYROLYSIS OF STRAW WASTES: FORMATION AND CONTROL OF NOX PRECURSORS
P-1-5	921	YU HE, QIN JIANG	METHANE PRODUCTION WITH BROUSSONETIA PAPYRIFERA BY ANAEROBIC DIGESTION
P-1-6	31	YUSHI WANG, JIALING ZHU, YIFAN SUI, YUJIAO LEI	A STUDY OF HYBRID SOLAR-GEOTHERMAL POWER GENERATION SYSTEM
P-1-7	189	JUN LIU, FENGHAO WANG	EFFECTS OF HEATING LOAD ON HEAT TRANSFER PERFORMANCE OF MEDIUM-DEEP BOREHOLE HEAT EXCHANGER
P-1-8	306	HAN CHEN	OPTIMIZED CONFIGURATION OF ENERGY STORAGE IN AC-DC DISTRIBUTION SYSTEM WITH HIGH PENETRATION PVS INTEGRATED
P-1-9	520	TAIDOU WANG, XINLI LU, HAO YU, JIAQI ZHANG, YUNCHENG GU, CHANGYOU GENG	A STUDY ON SELECTING OPTIMUM OPERATION MODE FOR A HYBRID GEOTHERMAL AND SOLAR POWER GENERATION SYSTEM
P-1-10	634	HAIBING ZHAO, DEMIN CUI, HUAIYUAN TIAN, ZHAOYU LI, WENHAO GAO, YANG GE, XIAOBO LIHAITAO SUN	A BI-LAYER OPTIMAL CONFIGURATION METHOD FOR DISTRIBUTION NETWORK INCORPORATING TIDAL CURRENT GENERATOR
P-1-11	671	KINZA QADEER, ASHFAQ AHMAD, MUHAMMAD ABDUL QYYUM, MOONYONG LEE	RELATIVE HUMIDITY ESTIMATION: MACHINE LEARNING APPROACH-RANDOM FOREST-BASED PREDICTION MODEL
P-1-12	934	YIFAN SUI, JIALING ZHU, YUSHI WANG, YUJIAO LEI	NUMERICAL INVESTIGATION OF HEAT TRANSFER PERFORMANCE OF DEEP BOREHOLE HEAT EXCHANGERS
P-1-13	941	YANFENG GE, TONG SUN, CHUANG LIU, CHENQI WANG, JINNING SHAN, XIN WANG	THIRD-ORDER SYNCHRONOUS MACHINE MODEL BASED ACTIVE SUPPORT CONTROL OF BESS AND ITS CONTRIBUTION ANALYSIS FOR PRIMARY FREQUENCY RESPONSE
P-1-14	18	YEONG-LEY TSAY	ENHANCEMENT OF HEAT DISSIPATION FROM PHOTOVOLTAIC CELLS INSIDE A 3-D CABINET TO AN AMBIENT NATURAL CONVECTIVE AIR STREAM WITH INSTALLATION OF FINS
P-1-15	310	WEI WEI, JINGWEN WU, YUNFEI MU, JIANZHONG WU	TWO-STAGE ROBUST ALLOCATION MODEL OF SOLAR ENERGY EQUIPMENTS IN DISTRICT INTEGRATED ENERGY SYSTEMS
P-1-16	499	PRATIMA KUMARI, DURGA TOSHNIWAL	HOURLY SOLAR IRRADIANCE PREDICTION FROM SATELLITE DATA USING LSTM
P-1-17	607	XIJUN GAO	RESEARCH ON MITIGATION OF ARC FLASH FOR MICROGRID WITH PHOTOVOLTAIC POWER PLANT CONNECTED
P-1-18	1153	JINQING PENG	STUDY ON THE OVERALL ENERGY PERFORMANCE OF A NOVEL C-SI BASED SEMITRANSSPARENT SOLAR PHOTOVOLTAIC WINDOW
P-1-19	817	YI FAN	ENERGY, ECONOMIC AND ENVIRONMENTAL PERFORMANCE ANALYSIS OF A NOVEL SOLAR-POWERED ZERO-BILL RURAL HOUSE SPACE HEATING SYSTEM
P-1-20	1164	MENG GAO, DENGJIA WANG	A STUDY ON THERMAL CHARACTERISTICS OF A NOVEL GLAZED TRANSPIRED SOLAR COLLECTOR
P-1-21	268	ZIHAN MENG, RUOCHEN WANG, DING LUO, WEI YU	PERFORMANCE INVESTIGATION OF PARALLEL-PLATE BASED THERMOELECTRIC GENERATOR WITH DIFFERENT THERMOELECTRIC MODULE LAYOUTS
P-1-22	792	HAIYU MENG, SHUZHONG WANG, ZHIQIANG WU, JUN ZHAO, LIN CHEN, JIAKE LI	PORE AND MICROCRYSTAL STRUCTURE OF CO-PYROLYSIS CHAR FROM POLYVINYL CHLORIDE AND BITUMINOUS COAL
P-1-23	218	CHEN LI, YUAN ZENG	RESEARCH ON OPTIMAL ALLOCATION METHOD OF RENEWABLE ENERGY GENERATION CONSIDERING OPERATION RISK
P-1-24	266	FAN JIA, YUAN ZENG, CHANG JIANGTAO	A TRANSIENT PREVENTIVE CONTROL METHOD FOR WIND POWER-DC TRANSMISSION SYSTEM BASED ON PHASE TRAJECTORY ANALYSIS
P-1-25	275	HUILAN JIANG, JIZHAO CAI, YULING BAI	TRANSIENT STABILITY ANALYSIS OF POWER SYSTEM WITH DFIG BASED ON TRANSIENT ENERGY FUNCTION METHOD
P-1-26	276	HUILAN JIANG, YULING BAI, JIZHAO CAI, CHI ZHANG	THE INFLUENCE OF DFIG ACCESS LOCATION ON THE TRANSIENT ANGLE STABILITY OF MULTI-MACHINE SYSTEM
P-1-27	324	YUE LIU, FENGZHANG LUO	DYNAMIC RECONFIGURATION METHOD OF DISTRIBUTION NETWORK BASED ON VOLTAGE FLUCTUATION DEVIATION OF TIME INTERVALS
P-1-28	925	DAN XU, JOHN SORAGHAN, ALASDAIR MCDONALD	WIND TURBINE PITCH SYSTEM FAILURE PREDICTION BASED ON SOM AND RBF NEURAL NETWORK
P-1-29	572	XIAOEN LI, YOU ZHOU, C.C. CHAN, CHEN WU, SHI YOU	A DEMONSTRATION OF BUILDING AND TRANSPORTATION INTEGRATION SYSTEM FOR SMART CITY
P-1-30	138	SHAOYUN GE, JIFENG LI, HONG LIU, ZHIYING LU, ZAN YANG, JUN YAN	COORDINATED SCHEDULING OF MULTI-ENERGY MICROGRID BASED ON MULTI-AGENT GAME THEORY AND REINFORCEMENT LEARNING
P-1-31	426	LUKUN GE, KAI HOU, HONGJIE JIA, LEWEI ZHU, YUNFEI MU, XIAODAN YU, DAN WANG	A DISTRIBUTION SYSTEM RELIABILITY ASSESSMENT APPROACH CONSIDERING MULTI-FAULTS BY IMPACT INCREMENT BASED MONTE CARLO

P-1-32	777	YANG ZHANG	DATA-DRIVEN ANALYSIS OF WEATHER IMPACT ON THE OUTAGES IN URBAN POWER DISTRIBUTION SYSTEM
P-1-33	847	HONG LIU, CHENXIAO ZHAO, SHAOYUN GE, YUCHEN CAO, JINGYI LIU	RELIABILITY ASSESSMENT OF RURAL CLEAN ENERGY SUPPLY SYSTEM BASED ON ACCURATE MODELING OF USER DEMAND
P-1-34	889	JINSHI WANG, HAIBO DAI, YANJUN GUO, MING LIU, JUNJIE YAN	MULTI-OBJECTIVE CONFIGURATION OPTIMIZATION OF DCCHP SYSTEM BY NSGA-II
P-1-35	85	TONG QING, HAI LIU, XIUXIU SUN, HANZHENGAN YU, ZAIZHOU WANG	ENERGY CONSUMPTION ANALYSIS OF PARALLEL PHEV WITH DIFFERENT CONFIGURATIONS BASED ON RULE CONTROL STRATEGY
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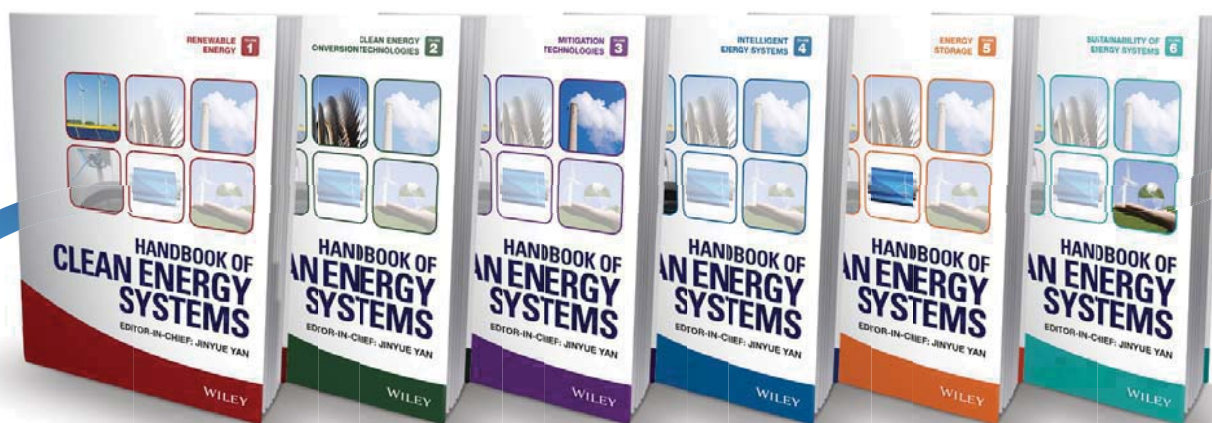
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