14TH INTERNATIONAL CONFERENCE ON

# RENEWABLE & NON-RENEWABLE ENERGY

JUNE 24-25, 2020 | KUALA LUMPUR, MALAYSIA



Energy 2020

# Invitation

Dear Attendees,

Meetings International proudly announces the 14th International Conference on Renewable & Non-Renewable Energy scheduled during June 24-25, 2020 in Kuala Lumpur, Malaysia The conference emphasizes the theme "Research at the Interface of Energy and Sustainability".

The Global Trends in Renewable Energy Investment 2018 report, published by UN Environment. Last year was the eighth in a row in which global investment in renewable exceeded $200 billion – and since 2004, the world has invested $2.9 trillion in these green energy sources. Overall, China was by far the world's largest investing country in renewable, at a record $126.6 billion, up 31 per cent on 2016. Solar energy dominated global investment in new power generation like never before in 2017. The world installed a record 98 gig watts of new solar capacity, far more than the net additions of any other technology – renewable, fossil fuel or nuclear and solar power attracted far more estment, at $160.8 billion, up 18 per cent, than any other technology.



Sincerely,

Operating Committee

Energy 2020

https://www.meetingsint.com/conferences/energy

# Conference Highlights

- Renewable Energy
- Green Energy and Economy
- Hybrid Renewable Energy Approaches
- Biofuels and Bioenergy
- Solar, Wind and Marine Energy
- Hydro Power Generation and Geothermal Energy
- Waste to Energy and Smart Grid Systems
- Global Impacts of Using Non-Renewable Resources
- Fossil and Radioactive Fuels
- Petroleum Engineering and Natural Gas Recovery
- Advanced Materials for Energy Storage, Generation and Transmission











# Previous Speakers 2018



**Christopher Niezrecki**
University of Massachusetts Lowell
USA



**Davis L Ford**
The University of Texas at Austin
USA



**Jesus Toribio**
University of Salamanca
Spain



**Vance N Owens**
South Dakota State University
USA



**Ramesh K Agarwal**
Washington University in St. Louis
USA



**Yihuai Hu**
Shanghai Maritime University
China



**Martin Mittelbach**
University of Graz
Austria



**Irina Stamo**
IKEM (Institute for Climate Protection, Energy and Mobility)
Germany



**Vance N Owens**
South Dakota State University
USA



**Hyung Taek Kim**
Ajou Uninversity
South Korea



**Minzheong Song**
Hansei University
South Korea



**Thirumany Sritharan**
Nanyang Technological University
Singapore



**Faten H Fahmy**
Electronics Research Institute
Egypt



**Bobbo Nfor Tansi**
Brandenburg University of Technology, Germany



**Enhua Wang**
Beijing Institute of Technology
China

# Previous Speakers 2019



**Adango Miadonye**
Chemical Engineering and Industrial Chemistry in the School of Science & Technology, Canada



**Abhishek Asthana**
Sheffield Hallam University
UK



**Ailin Jia**
Petrochina Research Institute of Petroleum Exploration and Development, China



**Guo Zhi**
PetroChina Research Institute of Petroleum Exploration & Development, China



**Kunio Yoshikawa**
Tokyo Institute of Technology
Japan



**Daniel Lehser-Pfeffermann**
University of applied Sciences
Saarbrucken, Germany



**Zhangisina Gulnur Davletzhanovna**
International Academy of Informatization, Kazakhstan



**Govinda Timilsina**
Development Research Group,
The World Bank, USA



**Abdullatif hakami**
University of South Florida
USA



**Aleksandra Szelag**
AGH University of Science and Technology, Poland



**Joao Santos**
University of Birmingham
UK



**Krzysztof Sornek**
AGH University of Science and Technology, Poland



**Maciej Zoladek**
AGH University of Science and Technology, Poland



**Sylwia Nabozna**
AGH University of Science and Technology, Poland



**AN Liang**
The Hong Kong Polytechnical University, Hong Kong



**Mahmoud Bady**
The Islamic University of Madinah, KSA, Saudi Arabia

# Testimonials

## What people say

I am very much grateful of getting this opportunity of taking part in International Conference on Renewable and Non-renewable Energy during July 16-17 in Las Vegas. We got the chance to meet excellent scholars and professors and discuss various aspects of energy and technology. I wish to see this conference bigger and better in near future.



Enhua Wang
Beijing Institute of Technology, China

The conference was very nice which put together experts in the field of energy from around the world. I am happy to be a part of the conference. I wish to see more engineers in the near future.



Bobbo Nfor Tansi
Brandenburg University of Technology, Germany

I am very honoured and appreciate the effort of organization to organize this conference in Las Vegas. It was very fruitful and eager to participate in the near future.



Yihuai Hu
Shanghai Maritime University, China



# Conference Agenda 2019

**Conference Hall: Royal Palms I**

**09:30-10:10** Registrations

**10:10-10:20** Introduction by Moderator

**10:20-10:55**

Keynote Forum

**Title: Technologies advancement and prospect of natural gas development in China**

**Ailin Jia,** Petrochina Research Institute of Petroleum Exploration and Development, China

**Networking & Refreshment Break 10:55-11:15 @ Foyer**

**11:15-11:45**

Keynote Forum

**Title: Reserves classification and well pattern infilling adjustment in tight sandstone gas field**

**Guo Zhi,** PetroChina Research Institute of Petroleum Exploration & Development, China

**11:45-12:20**

**Title: Principles of establishing waste to energy plants in developing countries**

**Abhishek Asthana,** Sheffield Hallam University, UK

**12:20-12:55**

**Title: Renewable energy based cogeneration on the example of micro scale installation with biomass-fired boiler and modified Rankine cycle**

**Krzysztof Sornek,** AGH University of Science and Technology, Poland

**Group Photo 12:55-13:00**

**Lunch Break 13:00-14:00 @ Restaurant**

**Oral Session I:**
**Trends in Renewable Energy | Green Energy and Economy | Advanced Materials for Energy Storage |Generation and Transmission |Hybrid Renewable Energy Approaches | Biofuels and Bio-energy**

Session Chair: **Ailin Jia,** Petrochina Research Institute of Petroleum Exploration and Development, China
Session Co-chair: **Adango Miadonye,** Cape Breton University, Canada

**14:00-14:25** **Title: Investigation and evaluation of aerodynamic efficiency improvement measures for vertical axis small wind turbines**
**Daniel Lehser-Pfeffermann**, University of applied Sciences Saarbrucken, Germany

**14:25-14:50** **Title: Experimental and numerical analysis od wind turbines operation- Polish case**
**Maciej Zoladek**, AGH University of Science and Technology, Poland

**14:50-15:15** **Title: Selection of batteries and optimatization of energy consumption during AGH solar plane fight**
**Aleksandra Szelag** and **Sylwia Nabozna**, AGH University of Science and Technology, Poland

**15:15-15:40** **Title: Experimental analysis and dynamic simulations of the operation of the photovoltaic cells installed in unmanned aircraft "AGH solar plane**
**Krzysztof Sornek** and **Dawid Karpinski**, AGH University of Science and Technology, Poland

**15:40-16:05** **Title: Analysis of general Rotor-Flux oriented vector control systems**
**Abdullatif Hakami**, University of South Florida, USA

**16:25-16:50** **Title: Flame propagation of pulverised biofuels of varying size distribution fractions**
**Muhammad Azam Saeed**, University of Engineering and Technology, Pakistan

**16:50-17:15** **Title: Disruptive Innovation and Opportunities in the Use of Renewable Energy for Sustainable Development in Nigeria**
**Benjamin Anabaraonye**, Benjy Poetry and Music Global Concepts, Nigeria

**Networking & Refreshments 16:05-16:25 @ Foyer**

**Session Adjournment**

**May 21, 2019** **Conference Agenda** **Day 2**

**Conference Hall: Royal Palms I**

**10:00-10:10** **Introduction by Moderator**

**10:10-10:45** **Keynote Forum**
**Title: Analysis and Forecasts of world renewable energy markets**
**Abhishek Asthana**, Sheffield Hallam University, UK

**Networking & Refreshment Break 10:45-11:05 @ Foyer**

**11:05-11:40** **Keynote Forum**
**Title: Flow characteristics of heavy crude oil diluted with alcohols**
**Adango Miadonye**, Cape Breton University, Canada

**11:40-12:15** **Title: Analysis of NISMOD a modeling tool for governance of sustainable infrastructure assets for developing and emerging economies**
**Renee Gotopo**, The Branch Sustains, LLC, USA

**Oral Session II:**
**Sustainable Nuclear Energy | Solar and Wind Energy | Hydro Power Generation | Geothermal Energy | Marine -Tidal and Wave Energy | Smart Grid Systems | Global Impacts of Using Nonrenewable Resources | Waste to Energy | Fossil and Radioactive Fuels**

Session Chair: **Abhishek Asthana**, Sheffield Hallam University, UK
Session Co-chair: **Guo Zhi**, Petrochina Research Institute of Petroleum Exploration and Development, China

**12:15-12:40**
**Title : Thermo-Catalytic Reforming (TCR) of Lignocellulosic Biomass using steel slags (SS) as catalyst**
**Joao Santos**, University of Birmingham, UK

**12:40-13:05**
**Title: Dangers of climate change on food security and economy of developing countries case study: Uganda**
**Kwesiga Evadio**, Makerere University, Uganda

**Lunch Break 13:05-14:05 @ Restaurant**

**14:05-14:30**
**Title: The use of international laws as a means of acting as universal environmental regulator in developing case study: Nigeria**
**Kamuganga Gilbert**, Makerere University, Uganda

**14:30-14:55**
**Title: Application of laser-induced breakdown spectroscopy (LIBS) on oilfield scales- A comparative study**
**Ghada Bassioni**, Ain Shams University, Egypt

**14:55-15:20**
**Title: How small solar powered autonomous container ships could affect maritime transport and environment**
**Izabela Swatek** and **Mieszko Mierunski**, AGH University of Science and Technology, Poland

**15:20-15:45**
**Title: AGH Solar Boat as sustainable solution to combat climate change**
**Karolina Stuchly** and **Aleksandra Skolarz**, AGH University of Science and Technology, Poland

**15:45-16:05**
**Title: The effect of encapsulation layer on thermo-electrical parameters of photovoltaic panels**
**Maciej Borowicz** and **Witold Gebarowski**, AGH University of Science and Technology, Poland

**Networking & Refreshment Break 16:05-16:25 @ Foyer**

**Conference Adjournment**

# Conference Agenda 2018

**08:30-09:00** Registration

**Conference Hall: Palm B**

**09:00-09:25** Opening Ceremony

**09:25-09:40** Introduction

**09:40-10:20** Keynote Presentation

**Title: Recent developments in wind turbine sensing for structural health monitoring**

**Christopher Niezrecki**, University of Massachusetts Lowell, USA

**10:20-11:00**

**Title: The role of enhanced oil & gas recovery in the United States and International development & the effects on pricing International development, exports, and imports**

**Davis L Ford**, The University of Texas at Austin, USA

**Group Photo**

**Networking & Refreshment Break 11:00-11:15 @ Palm Hallway**

**11:15-11:55** Keynote Presentation

**Title: Strong-acid compatible, earth-abundant-element, molecular water oxidation catalysts for solar fuel production**

**Craig L Hill**, Emory University, USA

**Oral Session I: Wind Energy | Sustainable Energy | Conversion Systems for Renewable Energies | Solar Energy Systems | Green Energy and Economy | Bioenergy, Biofuels and Biomass**

Session Chair: **Craig L Hill**, Emory University, USA
Session Co-chair: **Enhua Wang**, Beijing Institute of Technology, China

**11:55-12:20**

**Title: Transition toward renewables in developed countries**

**Hasan Kadri**, Immortal Energy, Lebanon

**12:20-12:45**

**Title: Aerodynamic analysis and experimental study on walker sail for sail-assisted ships**

**Yihuai Hu**, Shanghai Maritime University, China

**12:45-13:10**

**Title: Biofuels – Sunfuels – Synthetic Fuels: Who makes the run?**

**Martin Mittelbach**, University of Graz, Austria

**Lunch Break 13:10-14:10 @ Restaurant**

**14:10-14:35**

**Title: P2G as a tool for sector coupling and energy transition in Germany**

**Irina Stamo**, IKEM (Institute for Climate Protection, Energy and Mobility), Germany

| | |
|---|---|
| 14:35-15.00 | **Title: Investigation on the thermal and power performance of vacuum BIPV glazing and its optimization potential in high-rise buildings**<br>**Xi Chen**, The Hong Kong Polytechnic University, Hong Kong |
| 15.00-15.25 | **Title: A case study on nest's "Smart Home Energy" business model: Based on strategic choices for connected product**<br>**Minzheong Song**, Hansei University, South Korea |
| 15.25-15.50 | **Title: Design of a modified egyptian solar house using PV energy**<br>**Faten H Fahmy**, Electronics Research Institute, Egypt |

**Networking & Refreshment Break 15:50-16:10 @ Palm Hallway**

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|---|---|
| 16:10-16:35 | **Title: The global carbon cycle: A case study investigation of the use of charcoal & variables delaying fermentation in wet beans slurry**<br>**Adewole Mayowa**, Sapienza University of Rome, Italy |
| 16.35-17.00 | **Title: Modelling and incorporating environmental externalities in future electricity mix of Pakistan**<br>**Gordhan Das Walasai**, Quaid -e- Awam University of Engineering, Pakistan |

**Sessions Adjournment**

**July 17, 2018** **Day 2**

**Conference Hall: Palm B**

| | |
|---|---|
| 09:55-10:00 | **Session Introduction** |
| 09:40-10:20 | **Keynote Presentation**<br>**Title: Fracture and structural integrity issues in wind turbines: Recalling miguel de cervantes and antonio vivaldi**<br>**Jesus Toribio**, University of Salamanca, Spain |
| 10:20-11:00 | **Title: Potential yield of dedicated energy crops: Results and outcomes of the Sun Grant regional feedstock partnership**<br>**Vance N Owens**, South Dakota State University, USA |

**Networking & Refreshment Break 11:00-11:15 @ Palm Hallway**

| | |
|---|---|
| 11:15-11:55 | **Keynote Presentation**<br>**Title: Aerodynamic optimization of wind turbine blades and wind energy**<br>**Ramesh K Agarwal**, Washington University in St. Louis, USA |

**Oral Session II: Advanced Materials for Energy Storage, Generation and Transmission | Recycling of Waste Energy | Bioenergy, Biofuels and Biomass | Green Energy and Economy | Bioenergy, Biofuels and Biomass**

Session Chair: **Jesus Toribio**, University of Salamanca, Spain
Session Co-chair: **Thirumany Sritharan**, Nanyang Technological University, Singapore

| | |
|---|---|
| 11:55-12:20 | **Title: Nanoscale engineering of hematite and bismuth vanadate photoanodes for water splitting in PEC**<br>**Thirumany Sritharan**, Nanyang Technological University, Singapore |
| 12:20-12:45 | **Title: Study on combustion of sewage sludge solid fuel alternative to coal for Sustainable energy future**<br>**Hyung Taek Kim**, Ajou Uninversity, South Korea |
| 12:45-13:10 | **Title:An innovative closed cycle osmotic - heat Machine (OHM) for green power generation Hameed B Mahood**<br>**Anees A Khadom**, College of Applied Science- Sohar, Oman |

**Lunch Break 13:10-14:10 @ Restaurant**

**Young Researcher Forum**

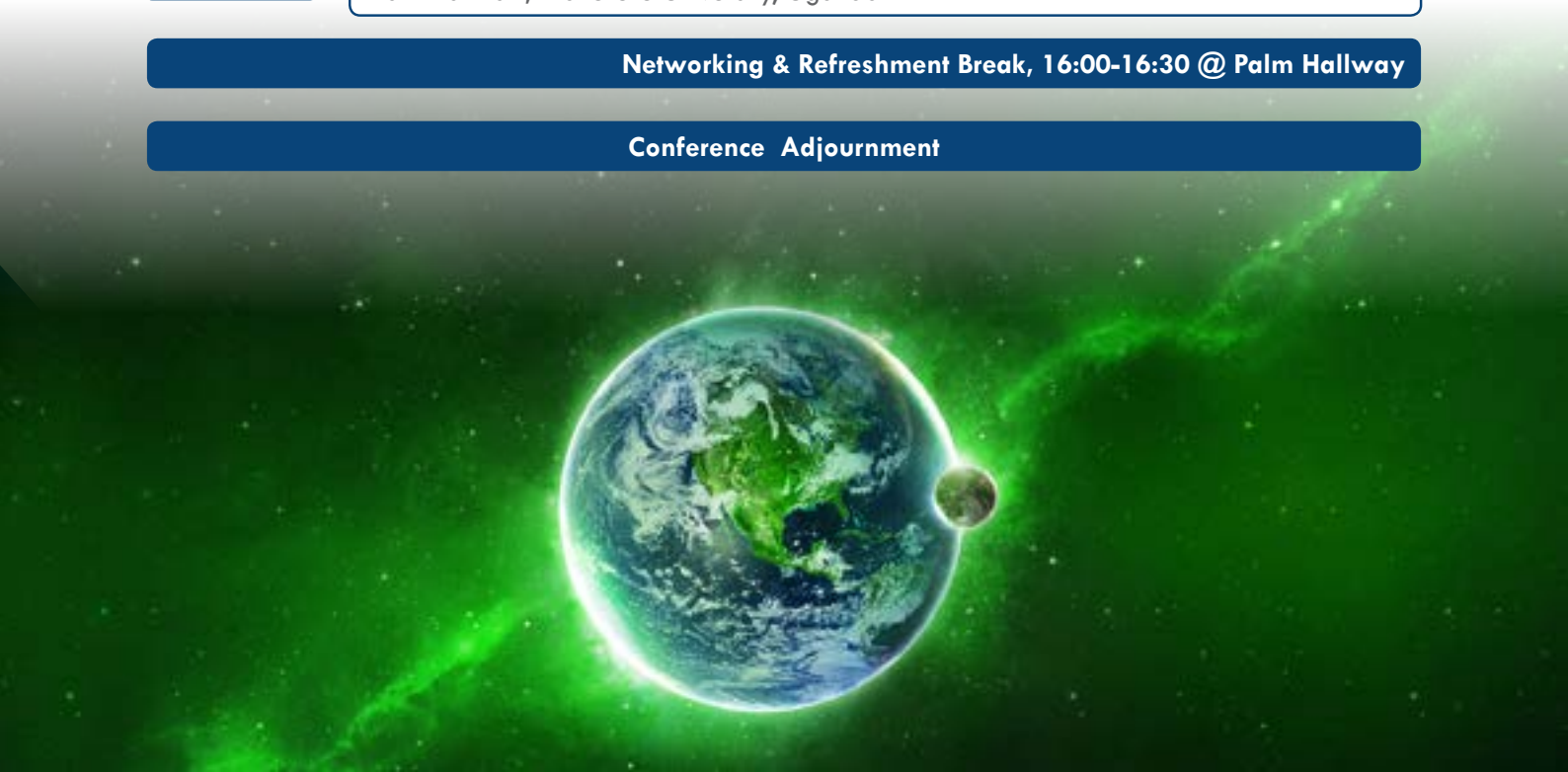
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| 14:10-14:35 | **Title: The role of residues from the Palm oil production process in a sustainable energy system**<br>**Bobbo Nfor Tansi**, Brandenburg University of Technology, Germany |
| 14:35-15.00 | **Title: Oil exploration activities and their prospectivity on biodiversity and ecosystem in Albertine Graben-Western Uganda**<br>**Aijuka Nicholas**, Makerere University Kampala, Uganda |
| 15.00-15.25 | **Title: The oil boom in Uganda as a major factor for economy takeoff**<br>**Levis Ngabirano**, Makerere University Kampala, Uganda |

**Poster Presentations (15.25-16.00)**

| | |
|---|---|
| E-01 | **Title: A supercritical power cycle using carbon dioxide for low temperature geothermal sources**<br>**Enhua Wang**, Beijing Institute of Technology, China |
| E-02 | **Title: Morphological behavior and power generation capacity in prickly pear**<br>**Wilgince Apollon**, Autonomous University of Santo Domingo, Mexico |
| E-03 | **Title: The effects of increase in global fuel prices on the global economy and GDP**<br>**Kahima Ivan**, Makerere University, Uganda |

**Networking & Refreshment Break, 16:00-16:30 @ Palm Hallway**

**Conference Adjournment**



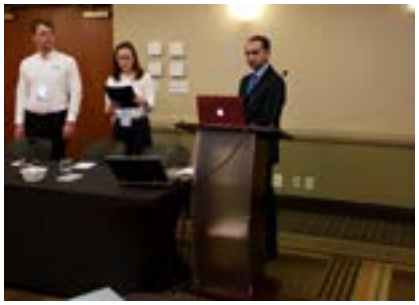
# Glimpses of Energy events











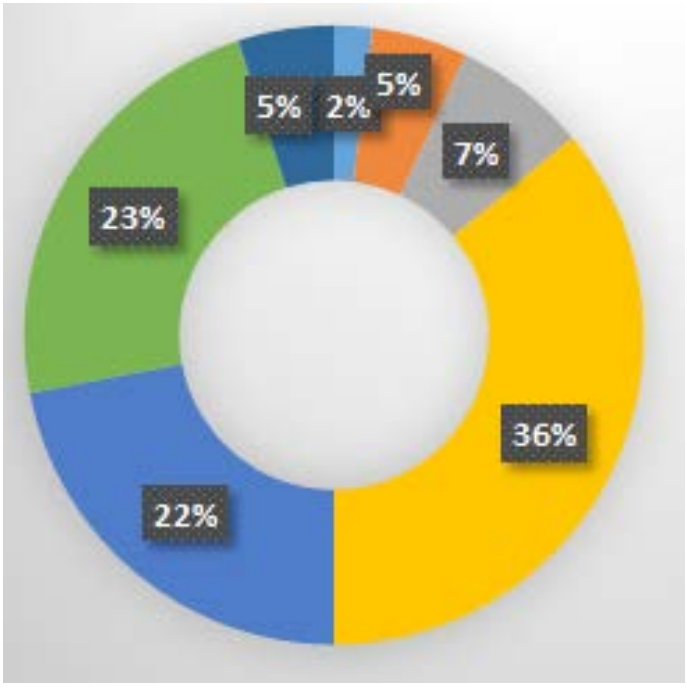





To identify the future directions of research

Peer review and high quality publication

Quality research



# Explore kuala Lumpur

Kuala Lumpur is the capital city of Malaysia, boasting gleaming skyscrapers, colonial architecture, charming locals, and a myriad of natural attractions. Divided into numerous districts, its main hub is called the Golden Triangle which comprises Bukit Bintang, KLCC and Chinatown. KL is widely recognised for numerous landmarks, including HYPERLINK “http://www.kuala-lumpur.ws/attractions/petronas-twin-tower.htm” Petronas Twin Towers (the world’s tallest twin skyscrapers), Petaling Street flea market, and Batu Caves, which is over 400 million years old.

# Kuala Lumpur Attractions



# Venue




# Important Dates

*Early Bird:* ***October 30, 2019***

*Registration Open:* ***August 10, 2019***

*Abstract Submission Open:* ***August 10, 2019***

*On Spot Registration:* ***June 24, 2020***

# Useful Links

***Home Page***
*https://www.meetingsint.com/conferences/energy*

***Registration***
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***Abstract Submission***
*https://www.meetingsint.com/conferences/energy/abstract-submission*

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