

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

The 6th AIGE/IIETA International Conference and 15th AIGE 2021 Conference

on "Energy Conversion, Management, Recovery, Saving, Storage
and Renewable Systems" will be held in
Ancona, Italy on June 10 – 11, 2021

ABOUT THE CONFERENCE

The **6th AIGE/IIETA International Conference** and **15th AIGE 2021 Conference** on "**Energy Conversion, Management, Recovery, Saving, Storage and Renewable Systems**" is organized under the joint auspices of the AIGE and IIETA with the aim of providing technical information to their members and to the scientific and industrial community at large.

Traditionally the joint Conferences will give the opportunity to discuss the state of the art and to present experimental, analytical and numerical results in Energy Conversion Systems, in Energy Management, in Energy Recovery Systems, in Energy Saving Techniques, Energy Storage Systems and Renewable Systems, with a particular attention to the engineering, environmental and economic aspects.

After unprecedented COVID-19 pandemic the Conference Organizing Committee has been felt the need to introduce a new conference topic regarding the impact of virus diffusion in the energy context. In our intentions this section is focused in the study of virus diffusion mechanisms, new design and management methodologies for energy systems with the aim to mitigate virus transmission and to the economic aspects related to the previous issues.

The following list of topics indicate topics that fall within the aim of the conference.

1 - Thermodynamics and Heat Transfer:

Heat Exchangers – Conduction, Convection and Radiation Heat Transfer - Boiling Heat Transfer - Heat Transfer in Fission and Fusion Nuclear Facilities – Exergy Analysis - Entropy Generation Minimization – Heat and Mass Transfer Processes – Thermodynamic Modelling and Optimization – Computational Heat Transfer and Fluid Dynamics -

2 - Energy Conversion and Management:

Analysis and optimization of energy processes - Cogeneration and combined heat, power and refrigeration - Combustion improvements and combustion of new fuels - Industrial and domestic use of energy - Energy conversion and storage – Energy Efficiency in Buildings – Improvement of Indoor Air Quality – Energy Saving in Transportations – Power Plants and Equipment – Refrigeration and Air-Conditioning – Low Enthalpy Energy Sources – Energy Harvesting

3 - Energy and Environmental Policy:

Energy Analysis - Energy Planning and Management - Energy supply security – Climate Change Politics – Energy Scenarios – Energy Forecasting modeling - Integrated Energy Systems - Optimal Use of Energy Resources

4 - Power Systems and Networks:

Electricity Supply and Demand: Transmission, Distribution, Network Operation, Data Monitoring and Control Systems– District Energy networks – Natural Gas Supply – Power Plants: Automation Control and Metering - Smart Grids – Nuclear Power plants - Hydrogen Production Technology - Fuel Cells

5 - Renewable Energy Sources:

Wind Energy - Solar Energy: Thermal and Photovoltaic systems - Hydroelectric power - Biomass and Bioenergy - Geothermal Energy Systems – Tide and Waves Energy

6 – Effects of the Pandemic on Energy Systems:

Saliva droplets diffusion – Bioaerosols – Personal protective equipment efficiency – Rooms Sanitizing efficiency – HVAC systems: new design and management methodologies – Effects of the Pandemic on the power generation and distribution systems

LOCATION

Faculty of Engineering – Marche Polytechnic University, Ancona

ABSTRACTS SUBMISSION DEADLINE: December 19, 2020

AWARDS

3 Certificates of Merit will be assigned during the Conference, to be devoted to young graduates, PhD and post PhD students and young researchers, who have carried out significant research work on the Conference issues and present their results with a paper, in oral or poster sessions: 1 for young graduates who present the results of their thesis, 1 for PhD and post-PhD students provided they are under 32 years old, 1 for the best paper presented by young researchers under 35 years old.

CONFERENCE CHAIRS

Renato Ricci, Università Politecnica delle Marche, Italy (Organizer)

Valerio D'Alessandro, Università Politecnica delle Marche, Italy (Organizer)

Enrico Lorenzini, Università di Bologna, AIGE President, IIETA Directive Board Component

Andrew Zhang, International Information and Engineering Technology Association, IIETA, Canada

LOCAL ORGANIZING COMMITTEE

Fabio Polonara, Costanzo Di Perna, Giovanni Di Nicola, Paolo Principi, Alessia Arteconi, Giorgio Passerini, Francesco Corvaro, Gabriele Comodi, Flavio Caresana, Leonardo Pelagalli, Luca Giammichele, Matteo Falone, Marco Ottaviani, Antonella Rossi, Michela Mengaroni, Sara Carbonari, Maila Goffi, Giulia Sbanò, Maria Scala Notaristefano, Alessandro Gavetti, Daniele Ciccarelli, Maurizio Spegni, Gabriele Gabrielli.