



Editorial preface – ATI 2018 – Energy Procedia

The 73rd Conference of the Italian Thermal Machines Engineering Association (ATI) was held in Pisa (Italy) on September 12-14, 2018. The conference was organized by ATI and the University of Pisa. The main topic of this conference edition was:

“Innovation and research for a sustainable energy future”

In the last 10 years, the share of renewable sources in the energy mix of several countries has increased at a steady pace. This led to a revolution in the way energy conversion is conceived and distributed in comparison to a fossil based system. Nowadays, thinking about a 100% renewable energy system is no more just a dream. Nevertheless, the transition to this future implies several critical decisions from the technical and economic point of view. The 73rd ATI conference was the opportunity to discuss these topics, present new frontiers of the energy engineering research and promote the cooperation between researchers. The topics of the conference were:

- Heat Transfer and Fluid Dynamics,
- Energetics of Buildings, Air Conditioning and Refrigeration,
- Environmental Aspects of Energy Conversion,
- Renewable Energy,
- Advanced Energy Conversion and Storage Systems,
- Innovative Propulsion Systems and Internal Combustion Engines,
- Turbomachinery,
- Combustion and Fuels,
- Fluid Power.

This issue of Energy Procedia includes all the papers presented at the conference, 143 in oral form and 20 in the poster session reserved to PhD students. The conference also included a plenary session and two panel sessions with outstanding keynote speakers from both academy and industry.

The Guest Editors of the 73rd Conference of the Italian Thermal Machines Engineering Association

Umberto Desideri

Alessandro Franco

Paolo di Marco

Fabio Fantozzi

Marco Antonelli

Lorenzo Ferrari

University of Pisa