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GUEST EDITORIAL

Progress in nuclear and renewable energy options and efficient energy use

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The main objective of the First International Conference on Nuclear and Renewable Energy Resources (NURER 2009) is to enhance the information on the clean energy systems from the point of fundamental scientists, engineers, technicians, social scientists, decision makers, young academicians, industry leaders and policymakers and to provide a wide forum to discuss the energy-related processes in order to find out better solutions to improve the existing nuclear and renewable energy resources as well as innovative ideas to practice efficiently. This conference, for the first time, underlines the importance to merge up two different energy concepts such as nuclear and renewable ones. The idea behind this is that both of these energy disciplines are specified as 'clean' energies. In addition, this kind of a merge can yield to more efficient and productive 'hybrid systems'. In the present century, both the nuclear and renewable energy disciplines need cutting edge technologies where an intellectual standing of humanity persists.

Meanwhile, another objective of the conference is to improve the efficiency of the conventional energy types, thus the consumption of conventional fossil fuels can be decreased gradually. We believe that NURER conferences will be a very important serial event in the near future due to the coverage of its topics. From an academic point of view, energy researches require an interdisciplinary standing. Strictly speaking, the ideas of scientists and other professionals from different working fields may yield to better energy solutions for different systems. By using alternative solutions, the consumption of conventional fossil fuels can be decreased further. Thus, the negative environmental impacts of such fuels are minimized, indeed.

The organizing committee is proud to inform that NURER 2009 had a respected number of paper submission, although it is the first conference formed behind the above-mentioned ideas. Conference attendance can be summarized as follows: 91 papers from 10 countries. Among these papers, 11 have been extended and peer-reviewed. In the context of the event, top scientists with high international reputation have addressed specific ideas, drawbacks and estimations such as the effective usage of energy, fusion, fission, etc., The conference topics can be summarized as:

- Fission energy
- Fusion energy
- Magnetic confinement and plasma systems
- Accelerators
- Transmutation and fuel cycling
- Radiation safety and security systems
- Energy management and politics
- Solar energy
- Wind energy
- Biomass and biodiesel systems
- Geothermal energy
- Hydrogen energy
- Hydrogen production methods
- Hydrogen storage technologies
- Hydro-energy
- Energy efficiency
- Energy-environment technologies.

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Among the above subjects, fission, fusion, energy efficiency, hydrogen production, fuel cell, solar and wind became strong focal points during the conference. Another feature of NURER 2009 was that The Ministry of Energy and Natural Resources of Turkey participated in the event and gave an opening talk in the audience. The conference also took some interest from the media as well as the energy sector. All accepted and presented papers were published in a proceedings book and a CD record.

Consequently, we are thankful for the contribution and devotion of the Co-Chairmen Prof. Dr İlhami Çolak and Assoc. Prof. Dr Erol Kurt during the NURER 2009 conference.

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