

Call for papers for a special issue of E3

on

“Improving Energy Efficiency in Engineering Applications”

in conjunction with the “International Energy and Engineering Conference 2016” (Oct 13-14, 2016)

Adem Atmaca^{a*} and Nihat Atmaca^b

a) Energy Systems Engineering, Gaziantep University, Turkey.

b) Vocational School of Technical Sciences, Gaziantep University, Turkey.

*) Corresponding author

1. Call for papers on "International Energy and Engineering Conference 2016"

Known energy sources have been exhausted rapidly nowadays and so, efficient and effective utilization of energy has started to gain a vital importance. Finite fossil resources imply a definite limit on the amount of available energy that can be made available for public consumption. Fossil fuels will be depleted at a certain point in the future. For this reason, the collection and evaluation of periodical data concerning industry and other final energy consuming sectors are the primary conditions in the determination of targets for the studies on energy saving (Atmaca and Kanoglu, 2012; Atmaca and Yumrutaş, 2014).

The energy systems engineering is a growing field of interest in engineering and science communities. Practical preparation and development of technological energy systems is essential to the continued operation of the daily life of mankind (Dodoo et al., 2012).

Energy systems include renewable energy, but are not limited to, wind energy, solar energy, geothermal systems, tidal, hydrostatic systems, piezoelectric effects and other sources. The scope of the special issue surrounds energy consumption in industrial applications, the energy and environmental impact caused by construction of buildings, transportation, use and demolition stages, Environmental Safety and Health, Life Cycle Assessment, Ecological Sustainability, Green Buildings, Green Economy and Sustainable Economic Development (Atmaca and Atmaca, 2015; Atmaca and Atmaca, 2016).

This Special Issue will provide a multi-disciplinary and comprehensive analysis of energy systems in engineering applications (including mechanical, civil, electrical and electronics, food, computer, industrial engineering) supporting the green economy transition by means of targeting

low-carbon energy systems and offering a forum for academicians, researchers and practitioners to share insights on innovation and development of new technological methods for conservation of energy.

2. Topic areas

In this special issue, we invite submission of review articles and research articles based on quantitative and qualitative methods, theoretical and methodological development, and case studies in all engineering disciplines. Topics of interest include, but are not limited to:

Energy, Modeling of Energy and Systems, Energy Transport, Power & Fuels, Energy Systems, Energy Supply and Demand, Renewable Energy Resources and Technologies, Energy Audit and Rational Use of Energy, Advanced Energy Technologies, Energy-Saving Technologies, Electrical and Electronics Engineering, Civil engineering, green building, smart grid and cities, Climate Change and Global Warming, Environmental engineering, Environmental Systems and Telecommunications, Environmental Safety and Health, Water Resources and Future Conflicts, Solid Waste, Waste Treatment and Management, Soil pollution, Air Pollution Control, Noise and Vibration Control, Planning & Sustainable Development Policy, Environmental Policy, Planning and Economy, Energy Policy, Planning and Economics, Computer engineering, Global Climate Change, International cooperation to reduce carbon emissions, Industrial Engineering, Sustainable Materials, More Sustainable Product Design, Science for Sustainable Development, Social Security, Process Safety and Hazard Management, Waste Assessment and Treatment, Sustainable Urban Development, Mechanical and Structural Systems, Sustainable Chemical Processes Tools to plan, design and operate integrated green technology, Adsorption and Gas Storage Materials, Sustainable Agriculture and Organic Farming; Green Agriculture Technology, Food engineering, Food Safety and Organic Food, Nanotechnology for Sustainability, Life Cycle Assessment, Computation, Modeling and Simulation, ecological Sustainability, Management, Green Economy and Sustainable Economic Development.

3. Tentative schedule for this Special Issue

Contributors with proposals for papers are encouraged to communicate with the guest editors by e-mail. The following schedule applies:

- Call for papers: June 2016 – December 2016.
- Authors submit ‘peer-review ready’ documents to Springer via the editorial system by December, 2016.
- Peer review/paper revision process December 2016– April 2017.
- Submission of final version of all revised papers May 2017.
- Publication of Special Issue June 2017.

4. Contributions

Researchers and practitioners in the field are invited to submit full-length papers within the proposed deadline. Paper submissions should be between 9000 and 11,000 words for comprehensive reviews, between 6000 and 8000 words for original research papers and between 4000 and 5500 words for case studies. All contributions need to be developed based on the editorial guidelines provided in the instructions for authors of E3, which can be accessed via the website: <http://www.springer.com/energy/journal/40974>. Upon receipt of the completed documents, a number of independent reviews will be obtained for each document during the first round of the review/revision process. Revised, accepted manuscripts will be published in this Special Issue of E3.

5. Editorial Team

Dr. Bin Chen (chenb@bnu.edu.cn), Professor of Environmental Sciences, School of Environment, Beijing Normal University, China.

Dr. Adem Atmaca (aatmaca@gantep.edu.tr), Asst. Professor of Energy Systems Engineering, Faculty of Engineering, University of Gaziantep, Turkey.

Dr. Nihat Atmaca (atmaca@gantep.edu.tr), Asst. Professor of Vocational School of Technical Sciences, University of Gaziantep, Turkey.

6. References

Atmaca, A., Atmaca, N. (2015). Life cycle energy (LCEA) and carbon dioxide emissions (LCCO_{2A}) assessment of two residential buildings in Gaziantep, Turkey. *Energy and Buildings* 102, 417–431.

Atmaca, A., Atmaca, N. (2016). Comparative life cycle energy and cost analysis of post-disaster temporary housings. *Applied Energy*, 171, 429-443.

Atmaca, A., Kanoglu, M. (2012). Reducing energy consumption of a raw mill in cement industry, *Energy*, 42, 261–9.

Atmaca, A., Yumrutaş, R. (2014). Analysis of the parameters affecting energy consumption of a rotary kiln in cement industry, *Applied Thermal Engineering*, 66, 434-444.

Dodoo A, Gustavsson L, Sathre R. (2012). Effect of thermal mass on life cycle primary energy balances of a concrete- and a wood-frame building, *Applied Energy*, 92, 462–72.