

Energy Equipment and Systems is an internationally recognized multi-disciplinary scientific and engineering journal with a focus on the broad field of power generation systems.

The journal is aimed to provide a dependable peer review platform for publishing original research articles, review papers and communications aiming to advance the current state of the knowledge about the different aspects of the energy related systems based on the fossil fuel, biofuel and renewable energy sources and mainly highlights the major theoretical achievements, numerical/computational simulations and the experimental investigations of the energy production, conversion and storage equipment and systems.

Energy Equipment and Systems highly encourages contributions in the fields of fluid flow, heat transfer, thermodynamics, CFD, system dynamics and control, optimization, multi-physics modeling, metallurgy and materials science and manufacturing related to the energy analysis, energy modeling and prediction, integrated energy systems and energy efficient systems.

JOURNAL OF ENERGY EQUIPMENT AND

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Preface to the First Issue

It is of great pleasure to present the first issue of the journal of Energy Equipment and Systems (energyequipsys). This journal is devoted to problems raised in power generation both from theoretical aspects and also from application points of view. Its scope is wide enough to address researches in areas ranging from conventional power generation to the emerging fields of renewable energy. Energyequipsys aims to provide a forum for researches as well as practitioners to share ideas; various modeling, solution and optimization techniques in the field; and also to identify new horizons to form future guidelines for research.

The six articles presented in this inaugural volume cover issues in both conventional and emerging fields of power generation. To be more specific, these articles address:

- Simulation of flow induced vibration in heat exchangers
- Film cooling in gas turbines
- Efficiency improvement diagnostics in gas turbines
- Analysis of a hybrid fuel cell-micro turbine power generation and
- Simulation of a solar adsorption system

We would like to express our sincere gratitude to all of the contributing authors, editorial board members and the Mapfan Institute staff. Indeed without their support publication of this issue would not have been possible.

We also hope that this issue will provide a voluble source of information for the readers of energyequipsys and inspire exciting research for further contributions to the journal.

Farshad Kowsary May 2013