Editorial

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Biographical notes: Essam O. Assem worked as the Manager of the Building and Energy Technologies Department at the Kuwait Institute for Scientific Research. He received his PhD in 1993 from the University of Strathclyde, Scotland, with specialisation in the practical simulation of buildings and air-conditioning systems in the transient domain. His research interests include energy simulation, efficiency and conservation.

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Sustainable energy, one of the solutions to the world's escalation in energy consumption, is becoming an important R&D area. In countries like China and India, the industrial growth experienced has led to a significant increase in the demand for primary energy. In addition, the economic boom currently experienced by countries in the Middle East has led to the development of many mega construction projects which dramatically increased the energy requirements, and in some countries beyond their limits. This scenario raises concerns about sustaining such growth in many nations. This special issue of the journal discusses topics related to energy sustainability. The papers presented reflect some of the research currently conducted by individuals and institutions in their respective countries. The scope of the work covered by the papers listed below focuses on three areas: energy efficiency, energy management and policies, and the applications of renewable technologies.

1 Energy efficiency

• Thermal impact of sinking residential buildings in hot regions-Kuwait as a case study, A.E. Ben-Nakhi and R.M. El Shiaty

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2 E.O. Assem and A.I. ElSherbini

- Smart operation of air-conditioning (A/C) and lighting systems for national load management, G.P. Maheshwari, F. Al-Ragom, D. Al-Nakib and H. Al-Taqi
- Energy efficient operation of two-pipe fan-coil unit system with independent fresh air supply, J.W. Wan and W.M. Zhang
- The effect of reinforced concrete frames on the thermal performance of residential villas in hot climates, E.O. Assem and F. Al-Ragom
- 2 Energy management and policy
 - Energy efficiency management in India: a supply side perspective, N. Sinha and N.V. Kumar
 - Market operations in future Indian restructured power system scenario, P. Kanakasabapathy and K.S. Swarup
 - Energy management program for the State of Kuwait, G. P. Maheshwari, A. Al-Mulla and Y. Al-Hadban
- 3 Applications of renewable energy
 - Optimal scheduling and operation of hybrid biomass/wind/PV energy system for rural areas, P. Balamurugan, S. Ashok and T.L. Jose
 - Omani Bedouins' readiness to accept solar thermoelectric refrigeration systems, S.A. Abdul-Wahab, A. Elkamel, A.M. Al-Damkhi, I.A. Al-Habsi, H.S. Al-Rubai'ey, A.K. Al-Battashi, A.R. Al-Tamimi, K.H. Al-Mamari and M.U. Chutani.

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