
Editorial

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Biographical notes: Antonio F. Miguel received his PhD degree in Applied Physics from the Wageningen Universiteit (the Netherlands), in 1998. He has been Associate Professor of Physics at University of Evora (Portugal) since 2003. His work covers a diversity of topics including transport phenomena in porous media, tree-shaped flow networks (animate and inanimate), aerosol transport and deposition, and constructal theory and design. He is the author or coauthor of over 40 peer-refereed articles and the book *Porous and Complex Flow Structures in Modern Technologies* (Springer, New York, 2004).

Antonio Heitor Reis graduated in Physics at the University of Lisbon, received his MSc in Mechanical Engineering from the Technical University of Lisbon (IST) and his PhD in Physics from the University of Évora. From 1981 to 1986, he did research on energy at the National Laboratory for Engineering and Technology. In 1986, he joined the University of Évora where he teaches physics and engineering topics. Currently, he holds the position of Vice-Rector for Research and Technology of the University of Évora. His current research interests are, energy issues, atmospheric physics, flows in porous media (animate and inanimate) and constructal theory.

Energy and exergy are unifying concepts that span all sciences, and are of fundamental importance in issues of social concern such as climate change and environment, and use of energy resources. The 3rd International Energy, Exergy and Environment Symposium (IEEES-3), held at the University of Evora, Portugal, from 1 to 5 July 2007, followed the footsteps of the previous two editions in Izmir, Turkey (2003), and Kos, Greece (2005). The IEEES series of symposiums founded by Professor Ibrahim Dincer have provided a forum for exchanging ideas, presentation of technical achievements, and discussion of future directions on energy, exergy and environmental research.

The IEEES-3 symposium attracted over 150 delegates from Algeria, Australia, Belgium, Brazil, Canada, China, Czech Republic, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Iran, Israel, Italy, Japan, Jordan, Kingdom of Saudi Arabia, Malaysia, Mexico, Morocco, Netherlands, Portugal, Republic of South Africa, Romania, Russia, South Korea, Switzerland, Tunisia, Turkey, UK and USA. A total of seven plenary lectures and 141 papers were presented at the symposium.

In this special issue entitled *Recent Advances in Exergy Research*, we present a selection of papers aiming to provide the reader with a cross-section of the work devoted to exergy analysis presented at the symposium.

The guest editors wish to thank all authors that contributed to this special issue, as well as the international referees that reviewed the manuscripts and gave valuable advices. We look forward to the next conference in this series, scheduled for Dubai, UAE in April 2008.