Preface

The 15th International Symposium on Applied Electromagnetics and Mechanics (ISEM 2011)

The International Symposium on Applied Electromagnetics and Mechanics is a well-known international forum in applied electromagnetism, applied mechanics and related interdisciplinary fields. It started in 1988 in Japan and since then it was held in Japan, Korea, the United Kingdom, Germany, Italy, France, Austria, USA and China. This special issue of the International Journal of Applied Electromagnetics and Mechanics contains a selection of full-length papers, which were submitted just after the Symposium. The 15th symposium was organized by the University of Cassino and Lazio Meridionale and the University of Napoli Federico II, with the scientific sponsorship of the Japan Society of Applied Electromagnetics and Mechanics, the Japan Society of Maintenology and the support of the CREATE Research Consortium. It was held at the Royal Continental Hotel in Naples, Italy, from September 7th to 9th, 2011.

The objective of the ISEM series of symposia is to promote and emphasize both basic science and early engineering developments in the application of electromagnetics and mechanics to a number of disciplines ranging from electromagnetic devices to biomedical engineering. For ISEM 2011, around 300 short papers were submitted from authors of 28 different countries. Following an initial review by the Editorial Board of the symposium, 283 two-pages manuscripts were published on the 14th volume of the JSAEM Studies in Applied Electromagnetics and Mechanics and presented at the meeting, including five plenary talks by prominent experts on topics of emerging interest. The present volume contains 144 papers that were selected among the 182 submitted, after a review process, which involved up to three referees per manuscript.


We are particularly grateful to the ISEM International Steering Committee (IISC) for his support and guidance. We would like to thank all the reviewers, including most members of IISC, for their careful review of the full-length papers.

We would like to thank our principal sponsors: the Japan Society of Maintenology, the Japan Society of Applied Electromagnetics and Mechanics, the University of Cassino and Lazio Meridionale and the
Preface

University of Napoli Federico II, the SPIN Institute of the National Research Council (CNR) of Italy and the companies Lecroy, Ansys, Infolytica Europe and Cedrat Groupe. Their generous support made the conference successful.

Many thanks are due to the CREATE consortium and in particular to Dr. Mariella Vetrano and Dr. Chiara Coccorese for providing administrative support and to Dr. Massimo Nicolazzo for the technical support.

Finally we would like to thank JSAEM for providing the opportunity to publish the book containing the Proceedings as a volume of the JSAEM studies book series.

Chairs of the Editorial Board of ISEM 2011
Fabio Villone, Università di Cassino e del Lazio Meridionale, Italy
Toshiyuki Takagi, Tohoku University, Japan

Chairs of ISEM 2011
Guglielmo Rubinacci, Università di Napoli Federico II, Italy
Antonello Tamburrino, Università di Cassino e del Lazio Meridionale, Italy