ICMAT 2011

This is a special issue of JMPEE formed with five selected papers from the symposium entitled, “Microwave in Science and Engineering Applications”, included in the International Conference on Materials for Advanced Technologies (ICMAT 2011) that was held in Singapore during June 26 - July 1, 2011.

Microwave processing of materials is emerging as an innovative technology for future applicable to many diverse fields and variety of materials. Recent developments in this field worldwide are attracting attention of various diverse industries. The symposium aimed to provide to the relevant and interested industries to such recent developments, commercialization of the microwave technology in the area of ceramics, composites, metals, etc. Various topics covered other microwave applications also especially related to chemistry, waste processing, and alternative and unconventional energy sources.

Interest has been gradually increased worldwide on the applications of microwaves in various areas such as materials processing, chemistry, biological sciences, medicine, communications, waste remediation, etc. Research on the application of microwave energy in materials processing is being carried out in many universities and industries worldwide to explore the new applications of microwaves and build prototype microwaves systems for practical applications. The main focus of the symposium was to share and exchange the ideas on the recent developments of microwaves applications in numerous diverse fields. There were 20 invited talks, 30 contributed talks and 5 posters covering various fields of microwave research. Over 50 representatives from Singapore, China, USA, Ukraine, Malaysia, Japan, India, Italy, Taiwan and other countries attended the symposium. This symposium offered the opportunity to interchange the ideas and state-of-art information among the researchers from academia and industries. Overall, it was a very successful symposium sharing the knowledge and the most updated investigations on microwaves for science and engineering applications in the region of Southeast Asia.

Prof. Dinesh Agrawal
Pennsylvania State University, University Park, USA

Prof. Manoj Gupta
National University of Singapore, Singapore