

Preface

This LNEE volume contains the papers presented at the International Conference on Power Electronics and Renewable Energy Systems (ICPERES 2014) held during April 25 and 26, 2014 at Rajalakshmi Engineering College, Chennai, India. ICPERES 2014 received 250 paper submissions from various countries across the globe. After a rigorous peer-review process, 110 full-length articles were accepted for oral presentation at the conference. This corresponds to an acceptance rate of 44 % and is intended for maintaining the high standards of the conference proceedings. The papers included in this LNEE volume cover a wide range of topics in Wind Energy Electric Conversion Systems, Solar Energy, Fuel Cells, Hybrid Energy Systems, Energy Conservation and Auditing, FACTS, Smart Grid Systems, Power Quality, Power Electronic Converters, Power System Operation and Control, Power Factor and Efficiency improvement, Induction Machines, Special Machines, Optimization Techniques, and their applications for solving problems in these areas.

The conference also featured four distinguished keynote speakers. The lecture by B.K. Panigrahi of IIT Delhi, India on “Applied Swarm Intelligence: A power system perspective” included the application of swarm algorithms to power systems, power electronics and drives. The lecture made an excellent start to the two-day conference. P. Valsalal from Anna University, Chennai, India gave a talk on “Sustainable energy for modern energy requirements.” P. Dananjayan from Pondicherry Engineering College, in his lecture on “Quasi-Resonant converter-fed DC Drives” described in detail various considerations in the design of these drives. G. Uma from Anna University, Chennai in her lecture on “Micro grid and its control algorithms” gave an elaborate explanation of the analysis, modeling, and working of the different components which form the Micro grid. All these lectures generated great interest among the participants of ICPERES 2014 in paying more attention to these important topics in their research work.

We take this opportunity to thank the authors of all the submitted papers for their hard work, adherence to the deadlines and suitably incorporating the changes suggested by the reviewers. The quality of a refereed volume depends mainly on the expertise and dedication of the reviewers. We are indebted to the Program Committee members for their guidance and coordination in organizing the review process.

We would also like to thank our sponsors for providing all the support and financial assistance. We are indebted to the Chairman, Chairperson, CEO, Advisor, Principal, Vice-principal, faculty members, and administrative personnel of Rajalakshmi Engineering College for supporting our cause and encouraging us to organize the conference in a grand scale. We would like to express our heartfelt thanks to B.K. Panigrahi and S.S. Dash for providing valuable guidelines and suggestions in the conduct of the various parallel sessions in the conference. We would also like to thank all the participants for their interest and enthusiastic involvement. Finally, we would like to thank all the volunteers, whose tireless efforts in meeting the deadlines and arranging every detail meticulously, made sure that the conference could run smoothly. We hope the readers of these proceedings find the papers useful, inspiring, and enjoyable.

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