## Preface

Advances in Smart Grid and Renewable Energy is a compilation of papers presented in the two-day International Conference on 'Emerging Trends and Advances in Electrical Engineering and Renewable Energy–ETAEERE 2016,' organized by the Department of Electrical and Electronics Engineering (EEE) of Sikkim Manipal Institute of Technology (SMIT), Majhitar, Sikkim, India, during December 17–18, 2016. This was a very unique conference which combined renewable energy, electronics, computing, communication, systems, controls, and automations under one roof. Moreover, it is a matter of honor for SMIT to learn that Springer was associated with ETAEERE-2016 as a major publication sponsor for the event. The proceedings of this conference come out with four different book volumes titled under Lecture Notes in Electrical Engineering (LNEE). This volume offers state-of-the-art chapters on energy management systems (EMS), renewable energy resources, micro-generation, green communications architectures and frameworks, green computing and education as well as energy-aware process optimization.

Eminent speakers like former Jadavpur University vice-chancellor Prof. A Chakrabarti; Prof. A Rajaraman of IIT Chennai; Prof. Gyoo-Shee Chae of Baekseok University, South Korea; Prof. Avinash Konkani of University of Virginia, USA; Prof. Kamani KK (the global economic advisor of Karnataka); Prof. Manjesh of Bangalore University; and Dr. Amitanshu Patnaik of DRDO Delhi shared their knowledge and experience. The conference attended and presented by participants from institutes such as IISc, IITs, NITs, NEHU, BIT, VIT, MIT Manipal, IIEST Kolkata, and abroad deliberated on their research works. In addition, the paper presentations were accompanied by 6 keynote addresses from leading academic and industry researchers around the globe. The paper presentations were taken place in 3 different tracks with 18 parallel sessions. Through the platform of ETAEERE-2016, we got the opportunity to promote the national campaign 'Make In India'.

The review committee has done an excellent job in reviewing the articles and approving the high-quality research articles to be published in the conference proceedings in the Lecture Notes in Electrical Engineering (LNEE), Springer. The editors are thankful to all of the faculty and students of these various committes for their dedication in making this a very successful conference and also to the editors and support staff at Springer for making the compilation possible. We sincerely hope that this volume will inspire researchers.

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