FOREWORD

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Optimization is an integral part of an engineering design process. Every good design is optimized either intuitively or through rigorous analysis followed by a suitable optimization technique. The need for optimization through scientific techniques is becoming more pertinent in globalized world. Today the human civilization is facing the challenge of depleting natural resources in the form of energy and materials. At the same time, the problem of environmental pollution and waste disposal are posing heretofore unfamiliar challenges. A non-optimized design is detrimental for sustainable development of the world. In this backdrop, the special issue entitled “**Design: Analysis and Optimization**” is very relevant. It is expected that the engineering fraternity will be stimulated for research and practice of scientific optimization techniques through this special issue.

Journal of The Institution of Engineers (India): Series C is growing fast in popularity day by day. This is evident from the huge response of the researchers to the call of the papers for this special issue. Another special issue entitled, “**Modeling and Optimization in Design and Manufacturing**” will be published as the next volume. We are striving hard to improve the quality and impact of the journal.

I sincerely thank Prof. Uday S. Dixit, Department of Mechanical Engineering, Indian Institute of Technology Guwahati and Prof. Amitava De, Department of Mechanical Engineering, Indian Institute of Technology Bombay for guest-editing this issue. Readers are welcome to send their feedbacks on this special issue. They can also interact with the authors for more discussions in the related areas.