

## Preface

The Society of Statistics, Computer and Applications (SSCA) was founded in 1998 with a goal to provide a platform for promotion and dissemination of research in Statistics, blended with information technology, among both the theoretical and applied statisticians, who have keen interest in the applications of Statistics in varied fields like agriculture, biological sciences, medical sciences, finance statistics, industrial statistics, etc. Since then the Society has been performing several activities and promoting and popularizing development of theoretical and applied research work in statistics and informatics.

Organizing national conferences every year is one of the major activities of the SSCA. The society has organized twenty-one conferences thus far. The society also brings out a journal called *Statistics and Applications*. This is an open access journal and is available at the website of the SSCA ([www.ssca.org.in](http://www.ssca.org.in)). The readers can download, save and print full length paper free of cost. Besides bringing out regular volumes of the journal, special volumes on thematic areas of global / national importance are also brought out from time to time.

The twenty-first Annual Conference of the SSCA was organized during 29-31 January 2019 at the Department of Statistics and Computer Applications, SV Agricultural College (ANGRAU), Tirupati, Andhra Pradesh. The theme of the conference was *Challenges and Opportunities in Statistics and Informatics for Futuristic Humanosphere Especially in Agriculture* (COSIFHA-2019). The conference was academically very enriching. There were some very interesting and important presentations made by scientists of international repute and eminence. Among the many technical sessions organized, was a session on Financial Statistics, National Bank for Agriculture and Rural Development, IIT, Academia, made presentations.

The Executive Council of the Society decided to bring out "Special Proceedings" of the conference covering important talks including those presented in the Financial Statistics session. The Executive Council of the Society nominated V.K. Gupta, Baidya Nath Mandal, Ranjit Paul, Rajender Parsad, Hukum Chandra, and Dipak Roy Choudhury as the Guest editors for bringing out these special proceedings.

Distinguished speakers shortlisted for making contributions to the special proceedings were invited to submit their research papers for possible inclusion in the special proceedings. After the usual review process, 12 research papers were accepted for publication and are included in the special proceedings. We would like to express our sincere thanks to all the authors for responding to our request and submitting their research for publication in these special proceedings in time. The reviewers have also made a very big contribution by way of finishing the review process in a short span of time and it is a pleasure to thank each one of them individually. The enormous support received from Professor Aloke Dey, Chair Editor, Statistics and Applications is highly appreciated and acknowledged. We would like to place on record our gratitude to all members and office bearers of Executive Council of the Society for their support. We would also like to express our sincerest thanks to Dr. P. Ramesh Babu, Dr. V. Srinivasa Rao, Dr. G. Mohan Naidu and Dr. Ravindra Reddy for organizing the Conference..

### Guest Editors

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