

PREFACE

The Society of Statistics, Computer and Applications (SSCA) was established in 1998 with the aim of creating a platform for advancing and disseminating research in statistics while incorporating information technology. It sought to engage both theoretical and applied statisticians with a strong interest in the innovative applications of statistics across various fields, including agriculture, biological sciences, medical sciences, financial statistics, and industrial statistics. Over the years, the Society has undertaken numerous activities and played a pivotal role in promoting the development of theoretical and applied research in statistical sciences.

One of SSCA's primary initiatives has been the organization of annual national and international conferences across the country. Additionally, SSCA publishes an open-access journal called "Statistics and Applications," which is available on the Society's website (www.ssca.org.in). The journal offers free access to full-length papers, which can be viewed and downloaded at no cost. In addition to regular volumes, the journal also brings out special volumes focusing on emerging thematic areas of global or national significance.

The twenty-fifth Annual Conference of SSCA took place from 15th to 17th February 2023, at the Department of Statistics, University of Jammu, Jammu. The conference was themed "Significance of Statistical Sciences in Emerging Scenario (SSSES 2023)" and served as a platform for renowned international and national statisticians to present significant research findings. The conference featured several noteworthy events, including a pre-conference workshop and various technical sessions. These sessions encompassed the M.N. Das Memorial Lecture and a dedicated session on Financial Statistics, where distinguished statisticians and leading practitioners in the field shared their insights on various finance-related topics. Moreover, the conference included three endowment lectures: the B.K. Kale Memorial Endowment Lecture, J.K. Ghosh Memorial Endowment Lecture, and Bikas Kumar Sinha Endowment Lecture. These lectures were delivered by speakers closely associated with, collaborated with, or were students of the respective honourees. Additionally, there was the V.K. Gupta Endowment Award Lecture for Achievements in Statistical Sciences and Practice, which was presented by Bikas Kumar Sinha. The special proceedings of these sessions have been assigned the ISBN #: 978-81-950383-2-9.

The Executive Council of SSCA made the decision to publish the "Special Proceedings" of the conference, which would feature selected talks, including those presented in the Financial Statistics session. The Guest Editors, nominated by the Society's Executive Council - V.K. Gupta, Baidya Nath Mandal, R. Vishnu Vardhan, Ranjit Kumar Paul, Rajender Parsad, and Dipak Roy Choudhury - were responsible for curating these special proceedings. They invited authors based on their presentations during the conference to submit full papers for consideration in the Special Proceedings.

Distinguished speakers who were shortlisted for contributing to the special proceedings were invited to submit their research papers. After a rigorous review process, 15 research papers were accepted for publication and included in the special proceedings. We owe special debt to all the reviewers for their significant contribution in completing the review process within a short time frame. Our heartfelt appreciation goes to all the members and office bearers of SSCA's Executive Council for their support. We are also grateful to Ms. Jyoti Gangwani for meticulously formatting the papers. Furthermore, we warrant our deepest thanks to Prof. Umesh Rai, Vice Chancellor, University of Jammu, and his dedicated team, particularly Dr. Rahul Gupta, Dr. Parmil Kumar, Dr. Pawan Kumar, Dr. V K Shivgotra, and Dr. Sunil Kumar. Each of them, in his own way deserves major credit for the efforts in organizing this

academically enriching conference of SSCA and making their facilities available for the conference.

We expect the readers to benefit from the contents of the special proceedings.

Guest Editors

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