Preface

The Society of Statistics, Computer and Applications (SSCA), founded in 1998 in honour of great legendry Late Professor M.N. Das on the occasion of his 75th birthday, continues to navigate among statistical fraternityinnovative application of statistical sciences to other sciences like agriculture, informatics, financial, medical, bio-sciences, management, industrial, etc. The SSCA constitutes a unique think tank and an important forum for harnessing statistical sciences for enhancing the quality of research of statistical fraternity around the globe, who have keen interest in the dissemination and fusion of statistical sciences with other sciences. The society has since emerged as a vibrant national statistical sciences organization devoted to promoting and popularizing statistical research, education and knowledge pool towards a human activity with a human purpose that must evolve within a social, or human, system promote human welfare, and improve quality of life and wellbeing by advancing the discovery and effective use of knowledge from data. The SSCA has been organizing national conferences every year along the length and breadth of the country. It has organized thus far 21 conferences.

The SSCA among other scientific activities 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). The readers can view full paper online, download it, save it and print it without any cost. The journal publishes research papers after a rigorous review process. The journal aims at facilitating applications of statistics for providing services in agricultural, social, biological, medical, industrial, financial and other similar sectors and also for applied research activities in statistics. It is intended to provide a platform for interaction between statisticians and subject matter specialists who use statistics for their activities. It also aims at exposition of suitable theoretical activities in a user-friendly manner. The journal also brings out special volumes on emerging thematic areas. Volume 16(1) [2018] on "Survey Methodology and Applications" was a special volume to felicitate and honour Professor J.N.K. Rao on his 80th birthday. Volume 15 (2017) was also a special volume on "Randomized Response Techniques and Their Applications." Volume 13 (2015) was a special volume on "Statistical Concerns in Child health and Nutrition."

Recently Professor Arun Kumar Nigam (popularly known as Arun) celebrated his 75th birthday. The Editorial Board of "Statistics and Applications" decided to felicitate and honour ProfessorArun Nigam on his 75th birthday by bringing out a Special Volume containing invited papers from contributors all around the globe. The Guest Editors of this special volume in close discussion with the Chair Editor and Editorial Board of "Statistics and Applications," and Arun K. Nigam prepared a list of potential authors to be invited to submit their research for publication in this special volume. The authors invited were essentially Arun Nigam's collaborators, his students, friends and colleagues around the globe. It gives us unbounded pleasure to mention here that the response obtained was quite overwhelming. As is well known, Arun Nigam is a giant of statistical sciences with a towering stature, and filled with traits of humanity like gentleness, kindness, humbleness and gratitude. His contributions to theory and applications of survey sampling are unparalleled, especially his exceptional contributions to child health and nutrition, hunger and poverty, education and hygiene. Arun Nigam has been the first in the country to use the randomised response technique in large scale surveys. His path breaking contributions to the child health, nutrition, hunger and poverty have been nationally and globally acclaimed. Any amount of appreciation for his contributions towards advancement of statistical sciences and their

innovative applications will never be enough to describe the impression he has made on the fraternity of statisticians.

A valiant effort has been made to include an article in this special volume on Arun K. Nigam ~ a living legend. The article brings at one place a list of publications of Arun Nigam. The help received from Arun Nigam in preparation of this article and the list of his publications is highly appreciated, acknowledged and recorded. The response received for this special volume was remarkable. After the usual review process 20 research papers have been accepted for publication and are published in this volume. We would like to express our sincere thanks to all the authors for responding to our request. In fact, this volume has been possible because of the contribution from each one of them. The reviewers have also made a very big contribution by way of finishing the review process in a short span of time. We are indebted to all the reviewers and thank them profusely for their support. We would like to place on record our highest admirations for Dr. Aloke Dey, Chair Editor, Dr. Rajender Parsad, Executive Editor and Dr. L.M. Bhar, Managing Editor, Statistics and Applications for their support and entrusting faith in the Guest Editors for bringing out this special issue. In fact the Guest Editors feel honoured by the responsibility entrusted to them for bringing out this special volume. The help received from Dr. Ranjit Paul, Dr. B.N. Mandal, Dr. Saurav Guha and Ms. Swati Gupta for bringing the papers in the format of the journal is highly appreciative. It is hoped that the volume will sufficiently honour the much celebrated Arun Nigam, an honour which he very richly deserves. We wish Arun Nigam a long and healthy life so that the union of statisticians keep benefitting from his intelligence, knowledge, experience and wisdom.

> Guest Editors V.K. Gupta Hukum Chandra

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