



SHER-E-KASHMIR UNIVERSITY OF AGRICULTURAL SCIENCES AND TECHNOLOGY OF KASHMIR (SKUAST-K)
 FACULTY OF HORTICULTURE
 DIVISION OF AGRICULTURAL STATISTICS

STATISTICS AND MACHINE LEARNING FOR BIG DATA ANALYTICS

73rd
 ANNUAL CONFERENCE OF ISAS
 (IN HYBRID MODE)



DATE: 14-16
 NOVEMBER 2022

ORGANIZED BY:
 INDIAN SOCIETY OF AGRICULTURAL STATISTICS IN
 COLLABORATION WITH DIVISION OF AGRICULTURAL STATISTICS,
 FOH, SKUAST-K SHALIMAR, SRINAGAR, J&K, INDIA-190025

INDIAN SOCIETY OF AGRICULTURAL STATISTICS

India is proud of its heritage eminent statisticians who contributed significantly to the welfare of the humanity in India and abroad. Due to their untiring efforts, Agricultural Statistics in the country stands on a fairly sound footing. Recognizing the efforts of statisticians and the importance of statistics in agricultural research, the Indian Society of Agricultural Statistics was founded on January 03, 1947 with the then Agriculture Minister, Dr. Rajendra Prasad as its Founder President. Dr. Rajendra Prasad continued to preside over the activities of the Society for 16 years even after becoming the President of Republic of India. The basic objective of the Society has been to disseminate research conducted in Agricultural Statistics to meet the challenges in agricultural research in the country. As per the need to meet the challenges, Informatics along with Agricultural Statistics has also been encompassed in the ambit of the Society. The Society publishes "Journal of the Indian Society of Agricultural Statistics" with ISSN 0019-6363 which serves as vehicle for the researchers in statistical sciences to disseminate their research work aimed at overall development of agriculture in the country. This is a unique journal that encourages applied research in Statistics with applications focussed at enhancing the quality of agricultural research.

REGISTRATION AND ACCOMMODATION

The registration fee can be paid through online mode. Bank details are given as:

Name of Bank: Jammu & Kashmir Bank
Account no.: 0242040520000159
Account Name: 73rd Annual Conference of ISAS
IFSC: JAKA0SKUAST
Branch: SKUAST-K

LINK FOR REGISTRATION <https://forms.gle/h2XZSZVbVuzAA8EM7>

Note: Screenshot/receipt to be uploaded in the registration form

Members/Non-Members	5000
Students	2000
Online Participants	1000
Online Students	300

Last date for registration/abstract submission is 20th October 2022. This fee covers the cost of conference kit, lunch and sessional tea and transport facilities from hotel to the venue and vice versa. The out-station participants will be provided with the boarding and lodging facilities on sharing basis and as per availability in the university guest houses and in nearby hotels. The accommodation charges shall be borne by the participants.

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STATISTICS AND MACHINE LEARNING FOR BIG DATA ANALYTICS

The best way to satisfy the growing food demand without using more land and resources is to use the already existing farmland more efficiently with the purpose to increase yields. Data science is used to build digital maps for soil types and properties, which help in deciding what crops to grow. Knowing the exact fertilizer rate is a science and requires a thorough analysis of multiple factors. Data science is now able to advise the farmers with the right quantity of fertilizers. In modern agriculture, advanced algorithms are used to identify the patterns and behaviour of nature that helps in forecasting the invasion of pests and the spread of microscopic diseases. Advanced analytics in agriculture are informing how farmers should manage pests. Digital tools and data analysis in agriculture are being utilized to scientifically deal with harmful insects. Disease detection can be done by taking images of the field using drones and processing them to detect areas within the field that are infected. Weather prediction can be also be used in the automated irrigation system. Big data offers opportunities for smart and precise pesticides application, helping the farmer to easily make decisions on what pesticide to apply, when, and where. Such monitoring helps food producers to avoid the overuse of chemicals. Besides, it increases farmers' profits by cutting costs on unnecessary pesticides use.

Emerging concept of smart farming makes agriculture more efficient and effective with the help of high-precision algorithms. The mechanism that drives it is Machine Learning—the scientific field that gives machines the ability to learn without being strictly programmed. It has emerged together with big data technologies and high-performance computing to create new opportunities to unravel, quantify, and understand data intensive processes in agricultural operational environments.

Machine learning is everywhere throughout the whole growing and harvesting cycle. It begins with a seed being planted in the soil—from the soil preparation, seeds breeding and water feed measurement—and it ends when robots pick up the harvest.

ABOUT THE CONFERENCE

In association with the Indian Society of Agricultural Statistics (ISAS), the Division of Agricultural Statistics, Faculty of Horticulture, SKUAST-K is organizing the 73rd ISAS Annual Conference at SKUAST-K Shalimar, Srinagar, Jammu and Kashmir, India, during **November 14-16, 2022**. The theme of the Conference is **Statistics and Machine Learning for Big Data Analytics**.

Data off-late is compared to Oil, which is still one of the most important natural resources of a country. In the present era, data like Scientific/Experimental/Survey Data, Geo-referenced data, Sequence/Genome Data, Real time inflow of data through Internet of things (IoT), drones, remote sensing, robotics, nanotechnology, crowd sourcing have given Big data as the buzz word of the today's age. Increasing availability of data, reduction in cost of storage and high-performance computing are changing the world. The impact is going to be felt in every sphere be it business, research, governance and agriculture will be no exception. It is going to change the entire system including research, education, extension, farming, agri-business, etc. The National Agricultural Research and Education

System (NARES) should take necessary actions and reap benefits from data explosion for our country and also lead the way forward for other developing countries. Keeping in mind the importance of data one of the key goal of the event is to explore the scope of Big data analytics, machine learning, and artificial intelligence and their applications in agriculture. Dr. Rajendra Prasad Memorial and Dr. V.G. Panse Memorial Lectures would be delivered by the researchers of International distinction. The Conference shall include Technical sessions, contributed sessions and student sessions.

TECHNICAL SESSIONS

- Dr. Daroga Singh Centenary Celebration Session
- Dr. Lalmohan Bhar Memorial Session
- Dr. Hukum Chandra Memorial Session
- Big Data Analytics, Machine Learning and Artificial Intelligence and their Applications in Agriculture
- Online Agricultural Education and Extension
- Statistical Modelling and Forecasting in Agriculture
- Statistical Approaches for Development of Hunger and Poverty Index
- Remote Sensing, UAV, IoT and GIS and their Applications in Crop Yield Estimation in Agriculture
- Statistical Inference and Multivariate Analysis
- Bioinformatics.

CONTRIBUTED PAPER SESSIONS

- Statistical Modelling
- Design of Experiments
- Informatics
- Sample Surveys and Applications
- Inference and Multivariate/Methods
- Statistical Genetics/Bioinformatics

CALL FOR PARTICIPATION

The Conference solicits the contribution of abstracts and oral presentations that address the themes and topics of the conference. Participants are required to submit their research abstracts online. Research contributions describing original and unpublished results in all fields of data science and machine learning are invited for presentation in the Conference.

CALL FOR PAPERS

The delegates/participants desirous to make presentation, are requested to submit the abstract (not exceeding 200 words) using the registration link.



Kashmir is a region of the Union Territory of Jammu and Kashmir, lying in the Northern Western part of the Indian subcontinent. The region is a land of snow-capped mountains, alpine lakes, evergreen forests, and high river valleys. Owing to the landscape and natural beauty, the valley is famous for its various tourist destinations worldwide. The city of Srinagar is considered the heart of the valley with a picturesque landscape, famous for its Mughal Gardens and Lakes. Srinagar city is connected by road and air transport.

Srinagar has a subtropical climate. The valley is surrounded by the Himalayas on all sides. Winters are cool, with daytime temperature averaging 2.5°C (36.5 °F), and drops below freezing point at night. Moderate to heavy snowfall occurs in winter. Summers are warm with a July daytime average of 24.1°C (75.4 °F). The month of November is mostly a dry month with an average maximum daytime temperature of around 15°C and an average minimum night temperature of around 1°C

CONFERENCE LOCATION/VENUE

The Conference is being organized in hybrid mode. SKUAST-K Shalimar is located in the lap of the beautiful Zabarwan mountain range at a distance of nearly 10 km from Srinagar city. The SKUAST-K campus is situated on the back side of the world-famous Mughal garden, "Shalimar" and is sighted on the right banks of the famous Dal lake.

The Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST-K), Shalimar is a multicampus University established in 1982 with its headquarters at Shalimar, Srinagar and its territorial jurisdiction over the Kashmir region and UT of Leh. The university is committed to impart education in agriculture and allied sectors. The varsity also undertakes initiatives for the development of human resources, innovative technologies and their dissemination so as to serve the farming community with dedication and zeal.

INVITATION

On behalf of the Organizing Committee and Indian Society of Agricultural Statistics, New Delhi, you are invited to attend 73rd Annual Conference of the Indian Society of Agricultural Statistics being organized at SKUAST-Kashmir, Srinagar, J&K during November 14-16, 2022. Kindly confirm your participation by filling up the Registration form. For more details visit www.isas.org.in.