



# International Conference on Statistics, Probability, Data Science and Related Areas

## ICSPDS2023



In conjunction with

**42<sup>nd</sup> Annual Convention of  
Indian Society for Probability and Statistics (ISPS)**

Jointly organized by



Department of Statistics  
Cochin University of Science and  
Technology (CUSAT)  
Cochin 682 022, Kerala, INDIA

and



Indian Society for Probability  
and Statistics

**January  
04-06  
2023**

Cochin University of Science and Technology,  
Cochin, India.



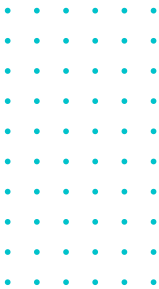


The conference aims to bring together National and International academics, researchers, and students dedicated to Statistics to a common platform for exchanging their ideas and discuss the latest developments in the broad field of applied statistics and probability theory. The important objective of the conference is to expose and attract young researchers to this steadily growing area. The organizers are also planning to have around 40 invited sessions with reputed statisticians. The intention of conducting the conference is to develop new collaborations and meet subject experts to explore their fruitful contributions and novel applications on “**Statistics, Probability, Data Science and Related Areas**”. The results are expected to encourage the delegated researchers to be creative and to put forth remarkable and productive research outputs.



## CONFERENCE TOPICS

- |                             |                             |
|-----------------------------|-----------------------------|
| Probability Theory          | Industrial Statistics       |
| Distribution Theory         | Business Statistics         |
| Statistical Inference       | Data Analytics              |
| Stochastic Process          | Computational Statistics    |
| Bayesian Inference          | Machine Learning            |
| Official Statistics         | Deep Learning               |
| Time Series Analysis        | Medical Statistics          |
| Operations Research         | Agricultural Statistics     |
| Multivariate Analysis       | Actuarial Statistics        |
| Applied Regression Models   | Mathematical Modelling      |
| Design of Experiments       | Econometrics                |
| Sampling Theory             | Cloud Computing             |
| Statistical Quality Control | Information Retrieval       |
| Reliability Theory          | Biostatistics               |
| Survival Analysis           | Mathematical Finance        |
| Nonparametric Statistics    | High Dimensional Statistics |
| Data Science                | Demography                  |
| Applied Probability         | Directional Data Analysis   |
| Bioinformatics              | Statistical Education       |



## CONFERENCE EVENTS

- KEYNOTE ADDRESS
- PLENARY SESSIONS
- INVITED SESSIONS
- CONTRIBUTORY SESSIONS
- P V SUKHATME MEMORIAL LECTURE
- Y C NARASIMHULU ENDOWMENT LECTURE
- A M MATHAI ENDOWMENT LECTURE
- M P SASTRY ENDOWMENT LECTURE
- DAVID HANAGAL ENDOWMENT LECTURE
- R RAVANAN ENDOWMENT LECTURE
- SPECIAL SESSION TO HONOUR N BALAKRISHNA, SENIOR PROFESSOR, DEPARTMENT OF STATISTICS, CUSAT ON HIS RETIREMENT

\*The updates on the various awards, fellowships and competitions under ISPS are available at <https://isps.org.in/>



## ABSTRACT FORMATS

Text Format	MS Word (Times New Roman, Font Size 12)/ Latex format
Title	Max. 200 characters, Use initial caps in the title; do not use all caps
Author (s)	Type all author's names with initial caps, Include affiliations for all authors using tags if necessary
Address	Contact/Presenting authors names, mailing address and e-mail address.
Keywords and Phrases	Maximum 5 keywords or phrases
Abstract Body	Limited to 200 words
Equipment Needs	Indicate your Audio-Visual equipment needs for presentation at the end of the abstract
Paper Subject Classification	Closest proximity from the list of "Conference Topics"

# IMPORTANT DATES

Submission of abstracts	On or before 30 November 2022
Acceptance communication of abstract	15 December 2022
Payment of registration fees	30 November 2022 (without late fee)
Date of conference	04-06 January 2023



## REGISTRATION

All participants must pre-register to secure a guaranteed place at the Conference. The registration fee includes the three lunches, conference banquets, tea/coffee and conference materials.

Participants	On or before 30-11-2022	After 30-11-2022
Faculty/ Scientist/ Research Scholar	₹ 5000*	₹ 6000*
Industrial personnel	₹ 6000	₹ 7000
Accompanying Person	₹ 3000	₹ 3500
Foreign delegates	US\$ 300	US\$ 350



\*The Life Members of ISPS will get discount of 20% in registration fee. Accompanying person will not be provided the conference kit. Please make a Bank Draft drawn in favour of 'THE CONVENOR, ISPS 2023', Department of Statistics, Cochin University of Science and Technology, Cochin 682 022, Kerala, INDIA payable at State Bank of India, Cochin University Campus Branch (IFSC Code: SBIN0070235), Thrikakkara, Cochin 682 022, Kerala, INDIA.

### Bank Details

Name	THE CONVENOR, ISPS 2023	IFSC Code	SBIN0070235
Account Number	40980392978	MICR Code	682 002 923
Bank	State Bank of India Cochin University Campus Branch	Swift Code	SBININBBT30

Registration Form Link : <https://forms.gle/wxAtuBeVf7AnKpqe9>



## ACCOMMODATION

The convention secretariat will make the arrangements for limited accommodation to the delegates/participants in the Guest Houses and Hotels on requests for which the tariffs have to be borne by them.



## ADVISORY COMMITTEE

K N MADHUSOODANAN, Vice-Chancellor, CUSAT (Patron)  
P G SANKARAN, Pro Vice-Chancellor, CUSAT  
N UNNIKRISHNAN NAIR, CUSAT  
V K RAMACHANDRAN NAIR, CUSAT  
K R MURALEEDHARAN NAIR, CUSAT  
A M MATHAI, McGill University, Canada  
BOVAS ABRAHAM, University of Waterloo, Canada  
FABRIZIO RUGGERI, Italian National Research Council, Italy  
HIRA L KOUL, Michigan State University, USA  
J NAVARRO, University of Murcia, Spain  
N BALAKRISHNAN, McMaster University, Canada  
S RAO JAMMALAMADAKA, University of California, USA  
VIJAY NAIR, University of Michigan, USA  
WILLIAM MEEKER, Iowa State University, USA  
ANUP DEWANJJI, ISI Kolkata, India  
ASHIS SENGUPTA, ISI Kolkata, India  
ASOK K NANDA, IISER Kolkata, India  
B L S PRAKASA RAO, ISI, CR RAO AIMSCS, India  
DEBASIS KUNDU, IIT Kanpur, India  
K MURALIDHARAN, The MS University of Baroda, India  
P VELLIASAMY, IIT Bombay, India  
S P MUKHERJEE, Calcutta University, India  
T V RAMANATHAN, Savitribai Phule University of Pune, India

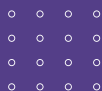
## ORGANIZING COMMITTEE

K C JAMES, CUSAT  
ASHA GOPALAKRISHNAN, CUSAT  
S M SUNOJ, CUSAT (CONVENOR)  
RAJESH G, CUSAT (CHAIR)  
IRSHAD M R, CUSAT (SECRETARY)  
PRINCY T, CUSAT  
HASHMY HASSAN, CUSAT  
ANILA P, CUSAT  
AMBILY JOSE, CUSAT  
M MANOHARAN, University of Calicut  
K JAYAKUMAR, University of Calicut  
E I ABDUL SATHAR, University of Kerala  
JOBY K JOSE, Kannur University

## ISPS EXECUTIVE COMMITTEE

N BALAKRISHNA, President  
K SRINIVAS RAO, Former President  
P RAJASEKHARA REDDY, Hon. President  
DEBASIS KUNDU, Chief Editor, JISPS  
RAKESH SRIVASTAVA, Vice-President  
B RE. VICTOR BABU, Vice-President  
S C MALIK, Secretary  
PARAMESHWAR V PANDIT, Joint Secretary

M VENKATESWARAN, Treasurer  
SHARADA V BHAT, EC Member  
KAVIYARASU, EC Member  
RAOSAHEB LATPATE, EC Member  
PRAFULLA KUMAR SWAIN, EC Member  
ISHA DEWAN, EC Member  
C SATHEESH KUMAR, EC Member  
RAMKRISHNA LAHU SHINDE, EC Member  
ISHAPATHIK DAS, Web Admin & Master



## ABOUT THE UNIVERSITY

Cochin University of Science and Technology (CUSAT) was established in 1971, located in Kochi (Cochin), is a major port city on the Malabar Coast of India, Ernakulum, Kerala. CUSAT has consecutively been figured in the Times Higher Education World Ranking since 2017. The Times ranks around 1500 best universities worldwide annually with around 60 universities from India out of 967. CUSAT has also found a place in the QS World University Ranking and the National Institutional Ranking Framework (NIRF) of the Indian Government. During the intervening four and half decades, CUSAT has made quantum leaps in its academic pursuits and has spread its wings far and wide, encompassing the novel and emerging realms of the horizon of knowledge. The University has entered into several collaborative ventures with reputed Universities and Institutions worldwide. Scores of National and International academic discourses, seminars, workshops, etc., are held in the University every year, providing opportunities to the student community to update themselves in their respective fields of study. CUSAT has bagged the prestigious Chancellors Award for best multidisciplinary Universities in the State three times in the years 2017, 2019 and 2020.



## ABOUT THE DEPARTMENT

Department of Statistics is one of the leading University departments in India and is committed to advancing knowledge and learning through teaching and research in Statistics. The University Grants Commission (UGC), Government of India has identified this department as an advanced centre in Statistics under its 'Special Assistance Programme (SAP)' at DRS level III. The Department of Statistics is supported by the Department of Science and Technology (DST), Government of India under the 'Fund for Improvement of S & T Infrastructure (FIST) scheme. The Department offers an M.Sc degree programme in Statistics, M.Tech. in Data Science and Analytics and research leading to the PhD degree. The Department is actively engaged in research in the fields of both theoretical and applied areas of Statistics.



### CONTACT

#### S M SUNOJ (CONVENOR)

Department of Statistics  
Cochin University of Science and Technology  
Cochin 682 022  
Kerala, INDIA

smsunoj@cusat.ac.in  
91-9446627103



#### IRSHAD M R (SECRETARY)

Department of Statistics  
Cochin University of Science and Technology  
Cochin 682 022  
Kerala, INDIA



irshadmr@cusat.ac.in  
91-9497240876



isps2023cochin@gmail.com