



CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

69th Congress of
INDIAN SOCIETY OF THEORETICAL AND APPLIED MECHANICS
(An International Conference)
ISTAM-2024

December 19-21, 2024
Organised by
CHRIST (Deemed to be University), Bengaluru, Karnataka, INDIA

About ISTAM

The ISTAM was established in 1955 in India with its headquarters at IIT, Kharagpur. Society was formed to provide a platform for scientists, technologists, and engineers to share and discuss the current research work they conducted individually or in groups to seek solutions to emerging problems for better living conditions. During the congress, five memorial lectures in honour of B.R. Seth, P.L. Bhatnagar, B. Karunesh, A.S. Gupta and G.I. Taylor are given by eminent researchers. Also, several invited lectures have been arranged to cover the current trends of various theoretical and applied mechanics topics. The Annual Congress of the Society has been held at various IITs, NITs, Universities, Engineering colleges and other reputed research establishments in different parts of the country. It has been attracting a large number of researchers not only from our country but also from abroad. The society has gone a long way in promoting inter-disciplinary research in Basic and Applied Sciences. Presently, the society has about 33 corporate members and 1278 life members. Extended abstracts submitted are peer-reviewed and are published in the form of e-proceedings. Full-length papers presented in the Conference will be published in our Souvenir volume/reputed journals.



About the University

CHRIST (Deemed to be University) was born out of the educational vision of St Kuriakose Elias Chavara, an educationalist and social reformer of the nineteenth century in South India. He founded the first Catholic indigenous congregation, Carmelites of Mary Immaculate (CMI), in 1831 which administers CHRIST (Deemed to be University). Established in 1969 as Christ College, it undertook path-breaking initiatives in Indian higher education with the introduction of innovative and modern curricula, insistence on academic discipline, imparting of Holistic Education and adoption of global higher education practices with the support of creative and dedicated staff. The University Grants Commission (UGC) of India conferred Autonomy to Christ College in 2004 and identified it as an Institution with Potential for Excellence in 2006. In 2008 under Section 3 of the UGC Act, 1956, the Ministry of Human Resource Development of the Government of India, declared the institution a Deemed to be University, in the name and style of Christ University. One of the first institutions in India to be accredited in 1998 by the NAAC, and subsequently in 2004 and 2016, CHRIST (Deemed to be University) has the top grade ‘A’ in the 4-point scale. Recently in 2022 the University has been accredited with A+ grade by the NAAC. The multi-disciplinary University which focuses on teaching, research and service, offers Bachelor to Doctoral programmes in humanities, social sciences, science, commerce, management, engineering, education, and law to over 25000 students. The University offers its programmes at three campus locations in Bangalore in Karnataka; and in Pune Lavasa in Maharashtra and Delhi NCR. The campus is a living example for the harmonious multiculturalism with students from all the states of India and around 60 different countries.

About the Department

The mission of the department is to organize, connect, create and communicate mathematical ideas effectively through 4D’s- Dedication, Determination, Discipline and Direction. The Department of Mathematics is one of the major departments in the university and has been in the forefront, providing quality education and training in the field for the past five decades. Adhering to the vision and mission of the university, the department has been striving to achieve its objectives while providing a holistic learning environment to its students. The Department has full-fledged, experienced and academically oriented faculty. The department offers undergraduate, postgraduate, and PhD programs. The Department is actively engaged in research areas of Fluid Mechanics, Graph Theory and Differential Geometry.

Centre for Mathematical Needs

The Center for Mathematical Needs is the hub for the promotion of research, innovation, and mathematical literacy. It fosters collaboration, providing resources for students, educators, and professionals to enhance their mathematical skills and contribute to problem-solving in diverse fields, promoting a deeper understanding and appreciation for Mathematics.

Conference Topics

Fluid Mechanics

- FM1 Aerodynamics and Propulsion
- FM2 Atmospheric Sciences and Oceanography
- FM3 Biofluid Dynamics
- FM4 Boundary Layer and Compressible Flows
- FM5 Computational Fluid Dynamics
- FM6 Electrohydrodynamics and Magnetohydrodynamics
- FM7 Experimental Methods in Fluid Dynamics
- FM8 Geophysics and Astrophysics
- FM9 Heat and Mass Transfer
- FM10 Heat Transfer and Fluid Flow in Porous Media
- FM11 Low Reynold’s Number Flow
- FM12 Mathematical Modelling
- FM13 Multiphase Flow
- FM14 Non-newtonian Fluid Flow
- FM15 Stability of Fluid Flow

Solid Mechanics

- SM1 Aerospace structures
- SM2 Computational Solid Mechanics
- SM3 Control Structures
- SM4 Elasticity
- SM5 Experimental Methods in Solid Mechanics
- SM6 Fracture Mechanics
- SM7 Mechanics of Composites
- SM8 Structural Dynamics
- SM9 Viscoelasticity and Creep
- SM10 Wave Propagation

Paper Submission

Participants intending to present a paper in Congress should upload a three-page extended abstract composed of an abstract, research aim, brief literature survey, problem formulation, solution methodology and significant conclusions as per the format available on the ISTAM website. Based on the reviewer’s recommendation, communication will be sent to the participants. Once the extended abstract is accepted for presentation, the participant is required to submit a brief abstract (limited to 200 words) or the full-length paper (maximum of twelve pages) as per the format on the ISTAM website, in case the participant wishes to publish it in the e-proceedings of the conference, which is subject to the peer review process.

Important Dates

Abstract Submission starts on	:20 Apr 2024
Last Date of Abstract submission	:11 Aug 2024
Notification of Acceptance	:31 Aug 2024
Full length paper submission	:30 Sept 2024
Last date of payment of registration fee	:31 Oct 2024

**Registrations Open from
20 April 2024**

Young Scientist Award

Three awards, one each, in Fluid Mechanics, Solid Mechanics, and Experimental Techniques or Computational Methods will be given to researchers aged 30 years or below for presenting outstanding research work at the Congress. The researcher should do the work independently with no co-author(s). The author who would like to be considered for the “Young Scientist” award is requested to mention it at the top of the Abstract by writing “PAPER FOR THE YOUNG SCIENTIST AWARD” and check the tick mark on “YOUNG SCIENTIST AWARD” while you are submitting it on the website. The author must present the award paper personally during the Award Session of the Congress. The Award Session will be held only if sufficient papers are received in each category.

Registration Details

Students and Scholars	₹ 2,000
Life Members	₹ 4,000
Delegates from Industry	₹ 6,000
Delegates from Education Institutions and R&D organisations	₹ 5,000
Academic Institution in Group (Upto three delegates)	₹ 12,000
Industries in Group (Upto three delegates)	₹ 15,000
Foreign Delegates	\$ 350 or €300
Delegates from SAARC & BRICS countries	\$ 250

Those participants whose extended abstracts are recommended for presentation can do the online registration at <http://istam.iitkgp.ac.in>. The delegate’s name must be written in the bank transaction. Registration is complete only when the registration fee details are filled in the online registration form and soft copy of the abstract is uploaded. A paper will be published in the proceedings only if it is accepted after peer reviewing. The abstract or paper will be considered for presentation on realizing the registration fee.

Registration fee can be paid at:
Account Name: ISTAM
Account Number: 10224336294
Bank Name: State Bank of India (SBI)
Branch: IIT Kharagpur
MICR Code: 721002103-002135-10
Swift Code: SBININBB339
NEFT (IFSC) Code: SBIN0000202

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**For accomodation and other details, please visit
[ISTAM@CHRIST](http://istam@christ)**

Contact Details

Dr S Pranesh
Oganising Secretary, ISTAM-2024
Department of Mathematics, CHRIST (Deemed to be University), Bengaluru.
Ph.: +91-934125457
E-mail: istam2024@conference.christuniversity.in

Prof. Dipak Kumar Maiti
Secretary, ISTAM
Department of Aerospace Engineering, IIT Kharagpur, West Bengal
Ph.: +91-3222-283028