

About the Conference

The International Conference aims to bring together scientists, researchers in the academia and industry professionals in the field of aeronautical / aerospace engineering around the world to share their experiences in their research work. A unique opportunity to advertise and expose their research finding and innovations.

Conference Theme

The International Conference on Advances in Aviation and Aerospace Technology is a three-day technical event. It provides a platform for academicians, research scholars, scientists and professionals in the industry to present, discuss and disseminate their contributions towards the indigenization of various technologies in the domains of Aerodynamics, Propulsion, Structures, Control & Guidance and Maintenance.

Important Dates

Submission of abstract	30.04.2022
Full length paper submission	30.05.2022
Acceptance of paper	30.06.2022
Registration starting date	06.08.2022
Last date for registration	10.09.2022
Submission of camera-ready paper	10.09.2022



CONVENORS

Dr. R. Asokan. Convenor Dr. P. Vasanthakumar, Co-Convenor

COORDINATORS

Dr. R. Santhanakrishnan. Professor Dr. S. Seralathan, Professor

ORGANIZING COMMITTEE

Dr. Dalbir Singh, Professor Dr. C.Ramesh, Associate Professor Dr. D. Raja Joseph, Associate Professor Dr. Piyush Gaur, Associate Professor Dr. M. S. Nisha, Associate Professor Dr. S. Subha, Associate Professor Dr. P. Saravanan, Associate Professor Dr. G. C. Vishnu Kumar, Assistant Professor Dr. N. Purushothaman. Assistant Professor Mr. C.Suresh, Assistant Professor Mr. G. Dinesh Kumar, Assistant Professor Mr. D. Gowrishankar. Assistant Professor Mr. S. Mahendran, Assistant Professor Dr. M. Chandrasekar. Assistant Professor Dr. A. Revanth Reddy, Assistant Professor Mr. L Sankaralingam, Assistant Professor

REGISTRATION FEE

Offline Presentation

Indian National	
Student	: INR 1000
Faculty / Research	: INR 1500
Industry	: INR 2000
Foreign National	
Authors	: USD 150
Delegates	: USD 75



Selected papers will be published in Scopus indexed journals Note : Publication charges are as per the norms of publisher

Venue

Hindustan Institute of Technology and Science, Rajiv Gandhi Salai, Kelambakkam, Chennai 603103 **Conference Website** www.hindustanuniv.ac.in/icaaat2022 **Registration Link** www.shorturl.at/pyjLU

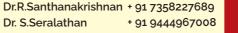




INTERNATIONAL **CONFERENCE** ON TECHNOLOGY









HINDUSTAN INSTITUTE OF TECHNOLOGY & SCIENCE (DEEMED TO BE UNIVERSITY)

CHENNAL www.hindustanuniv.ac.in www.hindustanuniv.ac.in/icaaat2022

ADVANCES IN AVIATIO AND AEROSPACE ICA³T-2022

THEME : INDIGENIZATION IN AEROSPACE TECHNOLOGY

Organized by

SCHOOL OF AERONAUTICAL SCIENCES

Selected papers will be published in Scopus indexed journals 🔀 🗖



S **ABOUT HIT**

HINDUSTAN INSTITUTE OF TECHNOLOGY & SCIENCE (HITS), a deemed to be University, is a leading prestigious and recognized institution in India, located at Chennai, Tamil Nadu. Established in 1985, it offers a wide spectrum of Under graduate, Post graduate, Diploma, Research & Doctoral Programmes in diverse fields of Engineering, Technology, Architecture, Management, Law, Fashion, Design and Arts, Aviation, Applied Sciences, Allied Sciences, and Arts and Sciences. The technical courses at UG and PG levels are approved by AICTE. Five undergraduate programmes offered by Aeronautical Engineering, Automobile Engineering, Computer Science and Engineering, Civil Engineering and Mechanical Engineering under Tier 1 category have been accredited by NBA. HITS is a part of the most illustrious Hindustan Group of Institutions which caters to the academic needs of over 15,000 students.



School of Aeronautical Sciences (SAS), established in 1996, is a pioneering department of Hindustan Institute of Technology & Science . SAS is devoted to providing guality technical education in the field of Aeronautics and Aerospace Engineering. B.Tech programme offered by SAS is accredited by the National Board of Accreditation (NBA) and National Assessment and Accreditation Council (NAAC). This programme has been designed to provide guality education for the undergraduate and postgraduate students through the blend of advanced laboratories and experienced faculty in the field of Aircraft Design, Aerodynamics, Aircraft Structures, Aircraft Propulsion, Aircraft Systems, Avionics, UAV, Aircraft Maintenance and the Advanced Materials. Syllabus is regularly updated to meet the industry demands in Aviation, Space Exploration and Defence Sector. The school encompasses various types of Aircrafts and Flight Simulators that can provide real-time experience in handling and familiarizing with the Aircrafts. We take pride in generating the maximum Aeronautical and Aerospace engineers in the country. Many of our alumni are working as Engineers, Scientists and Faculty in esteemed organizations at the National and International level.

Abstract Submission

Prospective and interested authors may submit an abstract of the proposed work relevant to the theme of the conference before the deadline. Abstract should have a minimum of 300 words and not more than 500 words. Submission of abstract & full length paper is through easy chair.

(www.easychair.org)

Call for Papers STRUCTURES:

Thin walled structure Composite materials Nano composites Structural analysis and design Impact and crack analysis Fatigue and damage tolerance Vibration and aeroelasticity Material characteristics and testing FEM analysis Sandwich construction Smart materials

MAINTENANCE AND AVIATION MANAGEMENT :

Airspace control and management Civil aviation regulations Air transport Air vehicle operations Path plan Airport design Reliability of Unmanned Aircraft System SPACE : Spacecraft altitude and control Orbital mechanics Launch Vehicle aero dynamics Spacecraft propulsion Tribology for aerospace

DEFENSE TECHNOLOGY:

Electronic warfare Stealth technology Military cybernatics Weapon systems Ejection systems for missile & launch vehicles



AERODYNAMICS

Experimental techniques in aerodynamics Computational fluid dynamics Hypersonic flow UAV & MAV aerodynamics Industrial aerodynamics Aero accoustics

PROPULSION :

Re-entry aerothermodynamics Alternate fuels Rocket propulsion Turbo machinery Intake and nozzle Materials for high temperature applications Cryogenic propulsion Heat transfer Combustion studies Electric propulsion systems Spray and atomization Sustainability in aerospace sector

AVIONICS :

Artificial intelligence Guidance, navigation and control Autonomous taxing Hybrid aircrafts Advanced techniques in UAV IOT in aerospace applications Sensor and applications

DRONES:

Unmanned air mobility Biological inspired unmanned aircraft system Swaram of Drones UAS flight planning and control Unmanned aircraft system applications

SATELLITE :

Satellite communication Satellite navigation Satellite remote sensing Miniature satellite Satellite IOT (Internet of things)





CHIEF PATRON

PATRONS Mr. Ashok Verghese, Director Dr. Aby Sam, Director

NASA Johnson space center, USA ARTEMIS, USA MAI, Russia Dr. L.N. Shankar, Professor Georgia Tech, USA Dr. Vijay Sahadevan, University of Washington, USA Prof. Chong Sik Bae, KAIST. South Korea Mr. Iyengar Parathasarathy Materials Engineer, Airbus, UK Atlascopco, USA University of Camerino, Italy

Apogee Aerospace, South Korea





Dr. (Mrs) Elizabeth Verghese, Chancellor

Dr. Anand Jacob Verghese, Pro Chancellor Dr. S. N. Sridhara, Vice Chancellor

ADVISORY COMMITTEE International Members

Dr. Kumar Krishen, Chief Technologist Mr. George Salazar, NASA Engineer

Dr. Yuri Aleksandrovich Ravikovich

Ms. Rhonda Walthall, Technical Fellow Collins Aerospace, Raytheon Technologies, USA Stress Technical Authority, GKN Aerospace, UK Dr. Daleo Francessco, Asso. Professor

Dr. Paul Briskham, Technical Expert

Dr. Carlo Santulli, Associate professor Dr. Jerin John, Propulsion Engineer

National Members Dr.Kiran Kumar, President, AeSI, Former Chairman, ISRO Shri. Somanath, Chairman, ISRO Dr.Tessy Thomas, DDG, Aero, DRDO Dr.Harpreet De Singh, Director, AIR INDIA. Er. Bishen Kumar Behra, DDG, DGCA Dr. Rajalakshmi Menon Program Director (ISTAR), DRDO Dr. A. K. Ghosh, Professor, IIT, Kanpur Dr. K.M. Paramasivam, Professor, MIT Anna University, Chennai Dr. J Omkar Subbaran, Professor, IISc Bangalore Dr. D Ramesh Rajakumar Sr. Principal Scientist, CSIR - NAL, Bangalore. Dr. P Usha Sri, College of Engineering, Osmania University, Hyderabad Dr. P M Pandey, Professor, IIT Delhi Dr. Chetan Mistry, Asso. Professor, IIT Kharagpur Dr. S. Anil Lal, College of Engineering, Trivandrum Dr. S. Anish, Asso. Professor, NIT Suratkal, Karnataka Dr. P. A. Ramakrishna, Professor, IITM, Chennai Dr. Rayapati Subharao, Asso. Professor, NITTTR, Kolkata Dr. C. P. Paul. Dean. Homi Baba National Institute, RRCAT, Indore Dr. Pon. Ramalingam, Registrar, HITS, Chennai Dr. G. Ilavazhagan. Director, International Affairs, HITS, Chennai Dr. K. Nandakumar. Director (Research), HITS, Chennai

- Dr. Angellina Geetha, Dean (E&T), HITS, Chennai
- Dr. K. Ramajeyathilagam, Senior Professor, HITS, Chennai