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Indian Institute of Space Science and Technology (IIST) NEWSLETTER

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Visit of Dr. S. Jaishankar, Hon. External Affairs Minister



Director, IIST receiving the Hon. Minister Dr. S. Jaishankar

As part of the "Development Dialogue in Campuses of Higher Education Institutions", Dr S. Jaishankar, Honourable External Affairs Minister, visited IIST on 17th September 2023. His visit was part of the Government of India's initiative in educational institutes - 'Amrit Kaal Vimarsh' to discuss the transformational changes that has laid down the foundation of Viksit Bharat by 2047. He gave an inspirational talk on "G20 and Viksit Bharat", deliberated upon the transformational changes

that has to form the foundation of Viksit Bharat by 2047 and interacted with the IIST fraternity. Dr. S. Unnikrishnan Nair, Director, IIST, welcomed the Honourable Minister. The programme concludes with the visit of important labs in IIST. The visit was indeed a moment of pride for IIST and his visit promises to be an enriching experience for all at IIST.



Dr. S. Jaishankar visiting lab and interacting with research scholars.



Hon. Minister interacting with audience



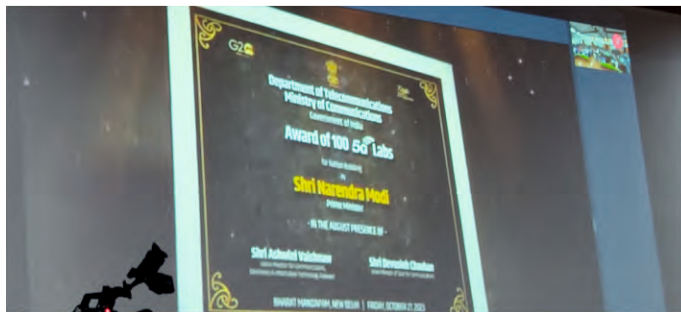
Hon. Minister delivering talk on "G20 and Viksit Bharat"

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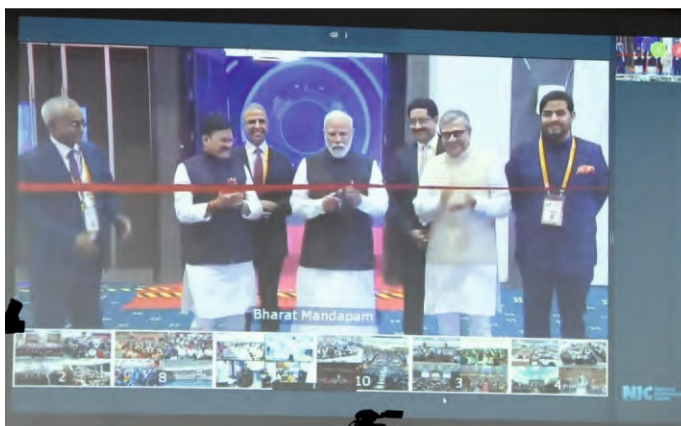
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Award of 5G Use Cases Labs

IIST has been conferred the distinguished 5G Use Cases Labs award as part of the Government of India's "100 5G Use Cases Labs Initiative." This visionary 5G Use Cases Labs program, introduced in the 2023-24 national budget, will be supervised by the Department of Telecommunications (DoT), Government of India. This initiative is designed to nurture expertise and encourage active engagement in 5G and future technologies among students, educators, researchers, and the emerging startup community.



On 27 October 2023, the Hon'ble Prime Minister Shri. Narendra Modi officially presented the award to IIST and selected other Universities during the inauguration of the Indian Mobile Congress 2023 (IMC-2023) at Pragati Maidan, New Delhi, organised by the DoT in collaboration with the Cellular Operators Association of India (COAI), IMC 2023. The state-of-the-art 5G Use Cases Labs at IIST Trivandrum will be a beacon of technological excellence, featuring advanced 5G cellular infrastructure and tools.

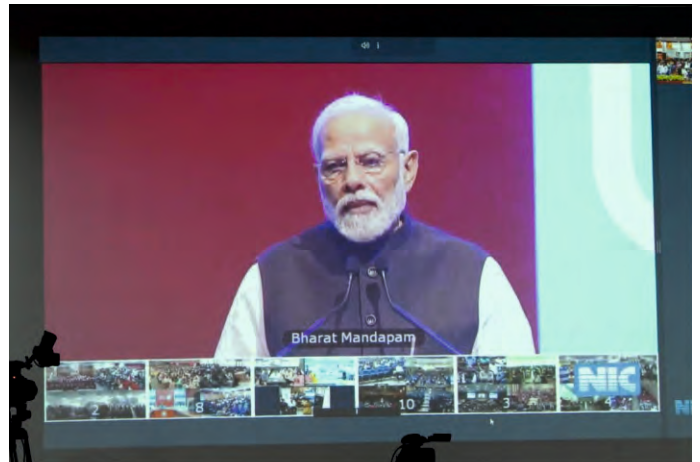


Inauguration of Indian Mobile Congress 2023

Key Objectives of the Initiative:

- Foster expertise in 5G technologies within the academic community.

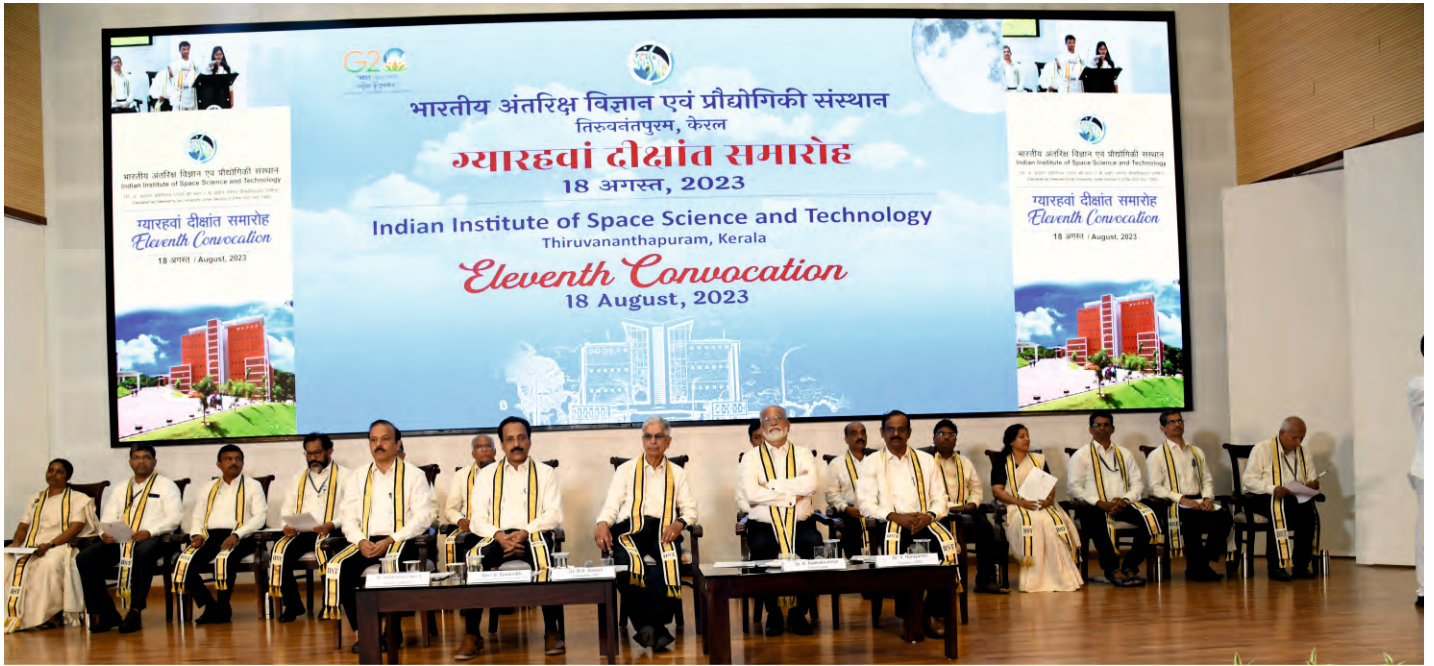
- Support undergraduate and postgraduate projects centered on 5G.
- Promote collaborations between academia and industry for 5G innovations.
- Provide startups and MSMEs nearby with a 5G testing environment.
- Equip the Indian academic and startup sectors for the upcoming 6G era



Honourable Prime Minister Shri. Narendra Modi conferring 5G Use Cases Labs in IMC - 2023



IIST community watching the event of conferring of 5G Use Case Lab to IIST



In its Crystal Jubilee celebration year, the Eleventh convocation of IIST was held on 18th August 2023 in the Pearl Jubilee Auditorium of LPSC. From an institution set up for generating skilled space manpower, IIST has all set to become the centre of space research in join hands with ISRO. Padma Vibhushan Dr. B N Suresh, Hon. Chancellor, IIST, has presided the function and Dr. K Radhakrishnan, Member Space Commission and former Chairman ISRO & Secretary DOS was the chief guest and delivered the convocation address. Shri. S Somanath, Chairman ISRO, President IIST Governing Body addressed the gathering and Dr. V Narayanan, Director LPSC, was the Guest of Honour. The report on IIST activities was presented by Dr. S Unnikrishnan Nair, Director, and Chairman BoM, IIST.



Dr. B. N. Suresh, Hon. Chancellor, addressing the graduands.



Dr. K. Radhakrishnan, the Chief Guest, delivering the 11th Convocation Address



Convocation Procession

Mr Hritham Nath of B.Tech, Aerospace Engineering is honoured with the prestigious Gold Medal for being the best academic performer across all undergraduate programs and Mr Arun S of Master of Science in Solid State Physics through the Dual Degree program, is awarded the Gold Medal for

attaining the highest rank among all postgraduate programs. The excellence certificate and cash award for the student who has secured Best academic score in Electronics and Communication Engineering (Avionics) goes to Mr Nirbhay Tyagi, and Mr Ayush Sharma of B.Tech, Aerospace Engineering is selected as the all-rounder of the UG Programs. The toppers of Aerospace Engineering and Electronics and Communication Engineering branches will undertake a sponsored Masters Program at California Institute of Technology (Caltech), USA, before joining ISRO. The 9-month program is financially supported under the DoS-Caltech Professor Satish Dhawan Endowment Fellowship.



Dr. V. Narayanan, Director, LPSC & Guest of Honor addressing the audience

ISRO role as a technology enabler has to be instilled in our community. ISRO is one of the pioneering organization dedicated to the development of advanced technologies and building of system that will benefit the society. The area of expertise available in ISRO is tremendous in multidisciplinary systems engineering of propulsion, control and guidance, aerodynamics, computational fluid dynamics, mission design, aero-thermal design, structural mechanics, mechanisms and pyros, mission simulation, avionics, checkout, testing and qualification philosophy, launch servicing, safety, quality etc. ISRO is keen to induct new technologies in keeping with the changing times for increasing throughput of present generation launch vehicles, bringing down cost of launch sustainability though reusable launch vehicle, SSLV for triggering rapid industrialization of the country, new propulsion systems with LOX methane engine, development of low cost sensors etc.

IIST has to take roles, especially the faculty with the support of students and researchers in taking up projects for technology development, innovation and consultancy for the emerging space actors. He urged that the rating of the institute has to be increased through carefully calibrated actions including and not limited to: increasing research students intake, enhance research outcome, publications, developing entrepreneurs, start-up companies, revenue generation programs, alumni support development etc.

Chief Guest Dr. K. Radhakrishnan, Member, Space Commission & Chairman, Standing Committee of IIT Council; and Former Chairman Space



Shri. S. Somanath, chairman, ISRO, addressing the audience

Shri. S Somanath, Chairman ISRO, Secretary DOS and President IIST Governing Body

As the Indian Space endeavor focused on use of space technology to find solutions to the problems of people, society and empower the country to have a self-reliant space programme, IIST is also the product of such a vision and urged the graduating students to be the brand ambassadors of India's intellectual prowess like thousands of others who are serving in ISRO. With the announcement of space sector reforms time has come for ISRO / DoS centres to concentrate on more R&D projects that will give an edge compared to the competitors. The role of IIST in creating a research dominant culture within ISRO becomes most important and should become the integral part of the ISRO research canvas. Each of the ISRO centre should become a research lab of IIST. Students should be able to conduct research in those centres with the help of the expertise and mentorship there. Innovation, new ideas can germinate fast and prototyping should be done faster. These ideas should find place in new missions and possibilities that can be showcased to potential users.

Dr. K Radhakrishnan has stated that in near-future, IIST will evolve as the beacon of futuristic knowledge, culture and ethics of the national space sector in its strive to gain prominence in 'New Space Age'. The Indian higher educational system is in transition, with a huge emphasis on research, innovation, and entrepreneurship. The New Education Policy 2020 aims to transform India into a vibrant knowledge society and mould global citizens with critical thinking, conceptual understanding, and human values. NEP is also a great enabler for multi-disciplinary education and research universities. The recently enacted National Research Foundation would foster a concomitant research ecosystem in the country.

India is in the threshold of human spaceflight, and its logical extensions to higher levels of space habitat. The academicians at IIST should ponder over this as a fertile field for intense education and research by using the uniqueness of the symbiotic connect with ISRO

Dr. Radhakrishnan reminded the graduates that “‘knowing’ and ‘doing’ are important for professional success; but ‘being’ what you are, your character and conscience will elevate you as emulable ones”. He has urged the graduates that the ‘success’ is very tricky and may not reflect in the efforts that one had put into it. The best thing is to concentrate on the tasks at hand. The results are not under our control. Every one of us will go through eclipses in our professional life, and personal life too. Learn to balance work and life. Good health and happy family make you fit to take deep plunges. He has advised the graduates to embrace adversities with steely nerves, take them as opportunities and may be very difficult while you go through it; but at the end, you will thank those who placed the hurdles in. You must choose wisely and create your own future. Exactly what you want to do and where you want to see yourself is up to you and your passion in life.

Dr. B. N. Suresh, Hon. Chancellor of IIST

Dr. Suresh, the founding director and Hon. chancellor of IIST has praised IIST in its phenomenal all-round success in every sphere of activities including education, research, innovation, satellite building, facilities establishment etc. He has urged the graduating



Dr. Unnikrishnan Nair S., Director, IIST, presenting report on IIST

students to ensure that the knowledge they gained has to permeate into all the strata of society to provide a better quality of life for the wider spectrum of society. India has been achieving rapid strides in almost all sectors with an impressive economic growth and reached the status of fifth largest economy in the world. This is the right time that the graduating young students can find diverse opportunities.

Indian space programmes are also very unique in utilizing the advanced space technologies effectively for national development in every domain we can think of, like natural resources survey, education, health, agriculture, rural development disaster management and many more. The new powerful India where the new graduates are entering provides for utilizing all their skills and contribute to the accelerated growth and become the agents of change in the Country. He has advised the graduates to learn the art of working as a team and imbibe the bitterness of failures as a fuel for achieving success.

Dr. Unnikrishnan Nair, Director IIST & VSSC

Director IIST has presented the convocation report with a commitment that the institute will thrive for academic and research excellence by introducing New Education Policy, strengthening collaboration with various ISRO Centres, international collaborations, industry engagements and develop cutting-edge technologies and skilled manpower according to the changing ecosystem of New space policy.

In order to continue imparting high-quality and holistic education to the much larger student populace, the Institute continues to modify and evolve processes which can effectively address the

changing situations. IIST facilitates a model of learning that emphasises a thorough engagement with the concepts and theoretical fundamentals, hands-on practical work, and provides to its students opportunities to engage in cutting-edge research in the chosen field of learning. With 99 faculty in IIST, student-to-faculty ratio remains at 1:10 in comparison to the AICTE norm of 1:20.

Various research activities of the institute including the progress of Small-spacecraft Systems and Payload Centre (SSPACE) which was established in 2018, successful launch of the third space mission of IIST - PILOT and ARIS-2 payloads on the POEM2 platform of PSLV C55 on April 22, 2023, a fully operational inhouse ground station, physics department of IIST has developed India's first bright quantum entangled twin light beam source and measured a 60% noise reduction from the standard quantum limit, student driven program of IIST Hybrid Rocket Experiments (IHRX), effective functioning of Advanced Space Research Group (ASRG) for the seamless integration of research ideas between IIST and ISRO, working of various external research projects etc.

Several Molls have been signed during last year

including with the Centre for Nanoscience and Engineering (CeNSE), IISc Bangalore through Ministry of Electronics and Information Technology's INUP idea 2 innovation program, MoU on inter-university exchange program with Niigata University Japan, Indo-French research collaboration sponsored by French Institutes in India and the embassy of France in India with Bordeaux Institute of Technology, Bordeaux, and an MoU was signed with College of Engineering (CET), Trivandrum to facilitate academic and research cooperation in areas of mutual interest.

In line with the expanding entrepreneurial ecosystem within the country, IIST has established Space Technology Innovation and Incubation Centre (STIIC) in its campus. 5 companies have been incubated and functioning actively under STIIC with many more in the pipeline.

Many new labs and facilities were established which included the expansion of shock tube and combustion experimental facilities, setting up of Manufacturing lab facilities, RF Anechoic Chamber (up to 40 GHz) Lab-scale Desktop testbed, Bio sensor and Gas Sensor Lab, NEMS & Microelectronics Characterization Laboratories and Intelligent Robotics and mobile robotics facilities to the Centre of Virtual Reality.



Graduants with the Chief Guest, invited dignitaries, and faculty

Live Streaming of Inauguration of 'Viksit Bharat@2047'

IIST faculty, students and staff, watched the the inauguration of 'Viksit Bharat@2047' on December 11, 2023 which was live streamed at MPH, SAC buildings. Faculty members and students listened to the virtual address by Honourable Prime Minister Shri Narendra Modi emphasizing the crucial role of semiconductor industries in fostering Viksit Bharat. As part of it, IIST hosted a seminar, "India's Techade-Chips for Viksit Bharat" on March 13, 2024, marking the inauguration of India's First Semiconductor Fabrication Facilities by the Honourable Prime Minister.





Dr. Unnikrishnan Nair, Director, IIST/VSSC delivered the inaugural address. He shared his thoughts on the importance of semiconductor ecosystem in the country and how IIST can also contribute to this national mission. Prof. Mayank Shrivastava, Department of Electronics Systems Engineering, IISc, Bangalore delivered a talk on "A Vision for India to Lead in Semiconductor R&D and Manufacturing (What, Why & How?)". His talk explored critical facets of India's journey towards semiconductor excellence, addressing the urgent need for innovation, strategic investment in R&D,

industry academia partnership in India, and the creation of a skilled workforce tailored for the semiconductor industry.

The seminar was attended by many students, faculty members and staff of IIST and the seminar was instrumental in exploring the opportunities and challenges in semiconductor manufacturing in India and the importance of innovations in this field.

Conscientia 2023

Conscientia 2023 was organised from 22nd to 25th September 2023. Shri. Padmakumar E.S, Director, ISRO, Inertial Systems Unit (IISLI), and Dr. Radha R.K., Senior Scientist, Jawaharlal Nehru Tropical Botanical Garden and Research Institute, Palode, graced the occasion as the chief guest and the guest

of honour, respectively.

From captivating tech talks to fierce competitions, Conscientia 2024 witnessed an incredible 3 days of



Chief Guest and Guest of Honour - Conscientia - 2023



innovation and inspiration. Technical talks and workshops were another much sought after features of Conscientia. Technical talks were delivered by Dr Shyam Mohan, the former Programme Director of Advanced Technology Programmes at VSSC, ISRO, on “RLV systems” and Dr Bijukumar K. S, Project Director, Cryogenic Stage, C25, ISRO, on “Propulsion System challenges in Chandrayaan 3”. Conscientia 2023

also teamed up with Pacelab for an incredible workshop journey through Cybersecurity, Google Flutter, and Full Stack Web Development.

Conscientia- 2023 featured 35 events organized under Robotics, Astronomy, Tech, Gaming, and Theme categories.



Students participating in events organised as part of Conscientia

Independence Day Celebration

The 77th Independence Day celebration in IIST was an event that brought together students, faculty, staff and family in a shared expression of national pride. Dr S. Unnikrishnan Nair, Director, IIST, graced the occasion as the Chief Guest and hoisted the tricolour flag in front of the administration building, followed by singing the National Anthem. This was followed by the 'Independence Day Speech' from the Director, who reflected on the importance of unity and progress in building an

institute and stronger nation. He briefly recollected the achievements that the academic community has achieved during the last year.



Dr. Unnikrishnan Nair S, Director, IIST, delivering Independence Day Speech



Students actively participated in the celebration through various cultural performances, including patriotic songs and dances. The CISF personnel demonstrated their skills in handling modern security equipments, emphasising how technology is used in safeguarding critical infrastructure and public safety.

The Director gave away the prizes to the winners of



competitions organised for the children of CISF personnel and also to the winners of the Hindi competitions. The atmosphere was filled with a strong sense of pride, and the decorations, often in the national colours, add to the festive spirit.



Cultural programmes by the students



Samvidhan Diwas Celebration

November 26 is celebrated as Samvidhan Diwas (Constitution Day) in order to commemorate the day of the adoption of the Constitution of India by the Constituent Assembly. As part of this, "Reading of Preamble", led by Prof. A. Chandrasekar (Dean Academic & Continuing Education), IIST, was organised in the foyer of the Library. All staff and



Reading of Preamble - Dean, Officers, and Staffs

officers from Administration, Accounts, Purchase, Academics, CMD, Hindi section, CSG, SSG, Library, and Placement, joined in the programme. Faculty and students have organised the programme in their respective departments.



Reading of Preamble - Students and Faculty

1. IIST and Niigata University, Japan

A formal Memorandum of Understanding (MoU) between the IIST and Niigata University, Japan, was signed on December 2019. Students and researchers actively collaborate in this academic partnership, promoting joint research projects and knowledge exchange between the two institutions. Department of Earth and Space Sciences, IIST, hosted a delegation of five students, an accompanying Associate Professor, and the Vice President of (Research) from Niigata University, Japan, from December 21-26, 2023. The program was titled “Human Resources Development Program on Field Science Research in the Indo-Pacific Region”. The Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan supported the project.

The exchange program included short lectures, demonstration sessions, laboratory visits, and fieldwork activities to allow for meaningful knowledge exchange and collaborative engagement. The exchange emerged as a notable testament to the influence of international collaboration in academic and scientific realms.



Inaugural ceremony of the S-Earth Programme at Niigata University, Japan

Throughout the visit, a diverse array of meticulously planned activities unfolded, ranging from intellectually stimulating lectures and captivating demonstrations to hands-on field work experiences, each designed to foster a rich exchange of knowledge and ideas. Beyond the academic sphere, the program also served as a conduit for cultural immersion and exchange, facilitating lasting bonds and deepening understanding between the participating institutions.

2. IIST and College of Engineering (CET), Trivandrum

A Memorandum of Understanding was signed between College of Engineering (CET), Trivandrum, and IIST, on 5th July 2023 at the Director's Office, VSSC. The signatories were Dr. S Unnikrishnan Nair, (Director, IIST) and Dr. Savier J S, (Principal, CET). The MoU will facilitate academic and research cooperation in the areas of mutual interest. Among those present were Dr. YVN Krishnamurthy, (Registrar, IIST), Prof. Raju K George (Dean R&D, IIST), Dr. Shine SR (Associate Professor, Department of Aerospace Engineering, IIST), Dr. Haris, (Dean International Affairs, CET), Dr. Suneesh, (HOD, Mechanical Engineering, CET), and Dr. Sreeja S, (Associate Professor, Electrical Engineering, CET).



Director, IIST, and Principal, CET after signing MoU

3. IIST and KIMS HEALTH

IIST and KIMS HEALTH signed an MOU for conducting research jointly to develop Breath Analyzer for various diseases. It propose to deploy best prototype/system to collect real time data by analysing the blood sample/breath from patient at KIMS HEALTH. Similarly, the data points will be compared with standard technique/methods for validating the research output. The data points will help to evaluate the performances, scientific and economic perspectives of the method.

Shraavanam – 2023

IIST celebrated the resplendent and jubilant festival of Onam with utmost ardour on Friday, August 25, 2023. The event, titled Shraavanam '23, was a huge success and brought together the IIST community in a familial embrace. The day's proceedings began at 7:30 am with the Athapoo competition, an artistic display of floral arrangements. This was followed by an exuberant Onam Procession, the conveyance of the Onam message by Shri Prasanth Nair, Special Secretary, Government of Kerala, a medley of cultural performances, a sumptuous Onam feast, and engaging Onam games.



Pulikali team with Maveli

The Athapoo competition was a sight to behold. The participants created intricate and beautiful floral arrangements, which were judged by a panel of experts. The Onam Procession was a colourful and festive affair. The participants, along with Maveli, Singari Melam and Puli Kali, marched through the IIST campus, carrying flowers and flags and playing traditional instruments.

The cultural performances were a delight to watch. The dancers, singers, and musicians put on a great

show, and the audience was clearly enjoying themselves.



Onam Vibes

The Onam feast was a delicious spread of traditional Kerala dishes. Everyone enjoyed the food.

The participants competed in a variety of games, including tug-of-war, Uriyadi, and pillow fight. The event was a resounding success, thanks to the collective efforts of the IIST community.



Inauguration of Shraavanam - 2023

Fit India Swachhta Freedom Run

The Fit India Freedom Run was started in 2020 to mark two days of national importance, namely, Independence Day and Gandhi Jayanti. This run aimed to inculcate the habit of walking and running in people in the quest for better health and fitness. IIST organised the "Fit India Swachhata Freedom Run" on October 28, 2023, as



part of its efforts to promote fitness, cleanliness, and national unity. The event saw enthusiastic participation from students, faculty, and staff, who

ran together to emphasize the importance of a healthy lifestyle and a clean environment.

Workshop / Lecture / Outreach Programme

1. IIST@ Schools

A new episode of IIST@Schools, the outreach programme of IIST for school students, was organised from October 18-20, 2023. The programme hosted by Amirta Kairali Vidya Bhavan brought together selected high school students (classes VIII and IX) from different schools under



Participants with Director and Resource Persons



Nedumangad Educational Sub-district. Dr. Unnikrishnan Nair S., Director, VSSC/IIST, inaugurated the programme. The inaugural programme was followed by classes and lectures by the faculty members and students of IIST.

2. Workshop on Academic Writing

The five-day online workshop on academic writing skills was jointly organized by the Department of Humanities and Social Sciences, NIT Trichy, and the Department of Humanities and Social Sciences, IIST, from July 24 to 28, 2023. The workshop covered a wide range of themes, including publishing in indexed journals, transitioning from thesis to monograph, book publication, research

impact and knowledge exchange, applying for research grants and fellowships, addressing diversity and inclusion in research documentation, ethical research practices, using reference management software, leveraging AI in research, conducting ethnographic studies and documenting them, writing and responding to peer reviews in academic journals, and drafting book proposals.

Designed to provide skill training, the workshop targeted young faculty, independent researchers, postdoctoral fellows, PhD candidates, postgraduate students, and junior research fellows or research assistants without a PhD. It featured thematic overviews delivered by experienced practitioners, interactive sessions with practical exercises, and engaging group discussions, offering participants hands-on experience and valuable insights into the nuances of academic writing.

3. Invited Talk on Aditya L1 Mission

IIST along with Aditya L1 Outreach Cell organised two talks on the Aditya L1 mission. On September 7, Dr. R. Satheesh Thampi, Division Head, Planetary Science Branch of the Space Physics Laboratory, VSSC spoke on the science goals of the mission, and the different payloads with emphasis on PAPA. On September 21, Shri. L. Sowmia Narayanan, Deputy Director, Control and Guidance Simulation Entity, VSSC, spoke on the key aspects of the PSLV, the design of Aditya L1 spacecraft, and the complex orbital calculations to L1



Dr. R. Satheesh Thampi



Shri. L. Sowmia Narayanan

4. Dance Demonstration and Workshop - Hasthas Across

Supported by the Department of Humanities and Social Sciences, the Cultural Committee, and the IQAC, Dr. Methil Devika conducted an engaging Dance Demonstration and Workshop titled "Hasthas Across Space" on November 8, 2023. The workshop focused on the intricate use of hand

gestures (hasthas) in classical dance, exploring their significance in conveying emotions and stories across different spaces and cultures and using modern technology like AI. The event was a blend of theory and practice, allowing participants to actively engage with the nuances of classical dance



Dr. Methil Devika

DHUN - Online Music Competition

IIST music club organised DHUN on July 2023, an online music competition that invited entries from participants across the nation. This virtual event allowed students to

showcase their musical talents through a variety of genres, maintaining the momentum of creativity even during the summer break.

Students Visit to IIST

Students and faculty from the Central School, VSSC, visited IIST on 6 December 2023. Prof. Kuruvilla Joseph, Registrar & Dean (SA, SW&OR), welcomed the visitors and interacted with the students. Students have visited the Flight Mechanics Labs, Ground Station Facility, Small Spacecraft Systems and Payload Centre, Electric Propulsion Diagnostics Lab, Thermal Lab and Propulsion Lab and Library. Dr. B. S. Manoj interacted with the students and briefed

them about the courses offered by the IIST.



Students with Prof. Kuruvilla Joseph, Registrar, IIST and other Faculty

Faculty Laurels

Patents Awarded

Prof. B. S. Manoj, Dept. of Avionics, Dr. Prescilla Koshy, Mr. Ananthakrishnan, and Mr. Sarath Babu received patent for their work titled "IoT Enabled Biomedical Wearable Clothing System for Healthcare Assistance".





Dr. Seena V, Dept. of Avionics, IIST, Ms. Anju Sebastian (Graduated student-M-Tech VLSI & Microsystems, Dept. Of Avionics, IIST) and Dr. Naveen Kadayinti (Assistant Professor, Dept. of Electrical Engg, IIT Dharwad) received Patent (Patent No. 456720) on "Closed Loop In-Plane Movable Suspended Gate FET (CLIP-SGFET) based Accelerometer and The Fabrication Method Thereof".

Patent granted to Dr Rakesh Kumar Singh (former IIST faculty) and Ms. Annie Varghese, M. Tech (Optical Engineering). Title of the patent is "Method and System for Lensless Digital Holography of a light transmitting object".

Awards / Recognition / Excellence / Fellowship

International

Dr. Kuruvilla Joseph, nominated as Fellow of Indian Analytical sciences (ASI)



Dr Narayanamurthy, C.S., elected as the Fellow of SPIE (International Society for Optics and Photonics), USA in 2023.

National

Dr Sarvesh Kumar Received a grant of INR 2,75,000 from the National Board for Higher Mathematics (NBHM) for participating in the International Congress on Industrial and Applied Mathematics held at Tokyo, Japan, from August 20-25, 2023.

Dr Sakthivel, K., Received full travel grant award from the National Board for Higher Mathematics (NBHM)/DAE to deliver a talk at the International Congress of Industrial and Applied Mathematics (ICIAM) held in Tokyo, Japan, from August 20-25, 2023.

Dr Anoop, C.S., received the IEEE Outstanding Reviewer Award in 2023.

Dr Sooraj Ravindran, received the Best Poster Award for the paper presented at Photonics 2023, held at IISc, Bangalore.

Dr Sooraj Ravindran, Received the Best Paper Award for the paper presented at OPTIQ, held at CUSAT, Kochi, in Decembe 2023.

Dr Prathap, C., Best Paper Award at the 10th International and 50th National Conference on Fluid Mechanics and Fluid Power (FMFP) at IIT jodhpur from 20-22 December 2023.

Students Corner

- Ms Jayati Vjaywargiya, PhD research scholar working under guidance of Dr A M Ramiya, Department of Earth and Space Sciences, has been awarded travel grant of 1500 USD from the International Society for Photogrammetry and Remote Sensing (ISPRS) to attend ISPRS Geospatial Week 2023 in Cairo, Egypt. The grant is highly competitive and was awarded to 18 applicants out of more than 100 global applications based on the merit of the paper. The paper that was selected for oral presentation was “Metamorphism of ALS point cloud for multitude applications” in the session 3D sensing for smart cities. The award was given by ISPRS President Prof Lena Halounova during the opening ceremony of the ISPRS event.
- Ms. Jayati Vijaywargiya, Department of Earth and Space Sciences, earned the first prize in the Doctoral Colloquium, for her work on Technologically Assisted Decision-Making for Sustainable Urban Development using Airborne LiDAR dataset. Additionally, she secured the 3rd position and monetary awards of 200 \$ and 150 \$ in the Story via Maps Challenge and the "Earth at Risk" EO Data Image Contest, for works showcasing the priority and gap analysis based urban afforestation drive for sustainable urban development using 3D model developed from Airborne LiDAR point cloud data.
- Gopika R., under the guidance of Dr Chinmoy Saha, received the URSI (International Union of Radio Science) Young Scientist Award in 2023 and conferred with the award in Sapporo, Japan in September 2023.
- Mr. Sam P. Raj and Mr. Aakash Ifumar, under the guidance of Sinha, P.R., have been awarded a full grant to participate in the Global Atmosphere Watch Training and Education Centre 41(GAWTEC-41) training course organised by the World Meteorological Organization (WMO) in Germany in October 2023.
- Ms. Haritha. A., Research scholar under the guidance of Rajesh, V.J., was awarded best poster during the 2023 Annual Convention of International Association of Gondwana Research and the 20th International Conference on Gondwana to Asia held in Niigata University, Japan, during 7th to 12th October 2023.
- Dr. Saisree, S. from the Department of Chemistry has been awarded the prestigious Chief Minister's Nava Kerala Post-Doctoral Fellowship (NKPDP) 2023 3.

She is one among the four who received the fellowship in the category of 'Chemical Science.' Dr. Saisree completed her Ph.D. under the guidance of Prof. K. Y. Sandhya and currently is a Research Associate at IIST. The host institute for NKPDF of Dr. Saisree is CSIR–National Institute for Interdisciplinary Science and Technology (NIIST), Trivandrum, under the mentorship of Dr. Achu Chandran. The fellowship ranges from Rs.50000 to Rs.100000 per month for two years. Her work is in the area of Electrochemical Sensors.

- Ms. Ishita Ganjoo and Dr B. S. Manoj received the Best Paper Award for the paper "Analysis of Intracellular Handoffs in Multihop Cellular Networks" in the IEEE Indiscon 2023
- Mr Krishnanunni and Ms Athira T. S secured the Best Poster Presentation Awards in the PHOTONICS 2023 conference held in IISC, Bangalore on July 05-08, 2023
- Best Paper Award in the Student Category and a cash prize of 5000 INR bagged by Mr. Prathap, C., P.V., Mr. Sai Hemant, N., Mr. Aditya, j., Ifuniyil, Mr. Sarkar, at The International Symposium on

Experimental and Computational Aerothermodynamics of Internal Flows at IIT Madras held from October 24-27, 2023.

- Sona Babu, under the guidance of Dr Girish, B.S., received third best paper award at ORSI-2023 & ICBAI-2023 conference, held at IISc Bangalore, from December 18-20, 2023.
- Dr Salih, A., and Mr. Venkatesh, N., Best Poster Award at 27th National and 5th International ISHMT-ASTFE Heat and Mass Transfer Conference, held at IIT Patna, from December 14-17, 2023.
- Mr. Govind Ifumar Sharma and Dr Nirmala Rachel received best oral presentation award, 17th International conference on Polymer Science and Technology, SPSI-MACRO-2023, organized by IIT Guwahati, December 10-13th, 2023.
- Ms. Chithra R. Nair & Dr. Sreejalekshmi, K.G., Best poster award Polymer Processing Society-Asia-Australasia Regional Conference (PPS 2023), organized by Polymer Processing Academy, 29 November - 2nd December 2023.
- Dr Dinesh N. Naik. And Ms. Athira, T.S., were awarded the Best Poster Award at Photonics 2023 held at IISc, Bangalore in July 2023.

Obituary

With deep sorrow we regret to inform the sad demise of Shri. Mohanan Nair, Former Chief Consultant, TOMD, IIST. On behalf of the IIST family we wish to convey our most sincere condolences to his family, friends and loved ones.



हिंदी कार्यशालाओं का आयोजन

i) संस्थान के संकाय सदस्यों के लिए अगस्त 23, 2023 को एक अर्ध दिवसीय हिंदी कार्यशाला का आयोजन किया। कार्यशाला का उद्घाटन डॉ. वाई. वी. एन. कृष्ण मूर्ति, कुलसचिव ने किया। सत्र



कार्यशाला का संचालन करते हुए श्री. आर. जयपाल

का संचालन श्री आर. जयपाल, भूतपूर्व उप निदेशक (रा. भा.), आईआईएसटी ने किया। उन्होंने संकाय सदस्यों को 'कंप्यूटर पर हिंदी का प्रयोग' विषय पर अभ्यास कराया।



ii) सहायकों, वरिष्ठ सहायकों, वैयक्तिक सहायकों तथा लिपिक वर्गीय कर्मचारियों के लिए 19, दिसंबर 2023 को एक दिवसीय हिंदी कार्यशाला का आयोजन किया गया जिसमें 17 कर्मचारियों ने सक्रिय रूप से भाग लिया। श्रीमती सिमी असफ़, सहायक निदेशक (रा.भा.), आईआईएसटी ने 'राजभाषा नीति कार्यान्वयन –



कार्यशाला का संचालन करते हुए सिमी असफ़ श्री. ए. सोमदत्तन

प्रोत्साहन योजना/निर्धारित लक्ष्य / प्रशासनिक वाक्यांश एवं अभिव्यक्तियाँ तथा 'कंप्यूटर के सहारे राजभाषा हिंदी में कार्य' विषय पर अभ्यास कराया तथा श्री. ए. सोमदत्तन, भूतपूर्व उप निदेशक (रा. भा.), आयकर विभाग ने 'बोलचाल की हिंदी' पर सत्र का संचालन किया।



स्वतंत्रता दिवस समारोह - 2023

स्वतंत्रता दिवस समारोह 2023 के उपलक्ष्य में संस्थान के छात्रों के लिए नशाखोरी के खिलाफ विशेष जागरूकता कार्यक्रम के दौरान अगस्त 9 व 10, 2023 को 'नारा लेखन' एवं 'पोस्टर रचना' प्रतियोगिताएँ आयोजित की गईं। अगस्त 15, 2023 को आयोजित पुरस्कार वितरण समारोह में 'नशाखोरी' विषय पर छात्रों द्वारा बनाए गए नारा एवं पोस्टरों का प्रदर्शन भी किया गया और निदेशक के कर कमलों से हिंदी प्रतियोगिताओं के विजेताओं को प्रमाण पत्र प्रदान किए गए।



कार्यशाला का संचालन करते हुए सिमी असफ़ श्री. ए. सोमदत्तन



पुरस्कार वितरण समारोह निदेशक डॉ. उष्णिक्कृष्णन नायर, निदेशक, आईआईएसटी से प्रमाण पत्र ग्रहण करते हुए विजेता

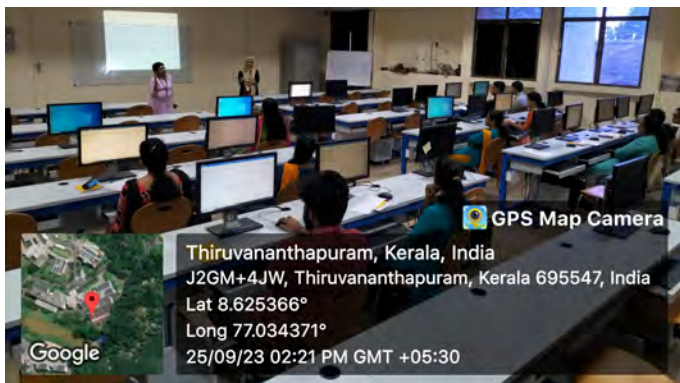
हिंदी पखवाड़ा - 2023

हर वर्ष सितंबर माह में हिंदी कार्यक्रमों के माध्यम से राजभाषा के प्रचार - प्रसार को बढ़ावा दिया जाता है। वर्ष 2023 में यह कार्यक्रम पुणे, महाराष्ट्र से आरंभ हुआ। संस्थान में सितंबर 19 से 04 अक्टूबर, 2023 तक हिंदी पखवाड़ा मनाया गया। प्रतिदिन हिंदी भाषा के संबंध में प्रमुख हस्तियों की सूक्तियों में से एक वेब मेल से प्रदर्शित की गई। हिंदी पखवाड़ा समारोह - 2023 के उपलक्ष्य में

संस्थान के कर्मचारियों के लिए सितंबर 19 व 20, 2023 तथा छात्रों के लिए सितंबर 26 व 29, अक्टूबर 04, 2023 को हिंदी प्रतियोगिताओं का आयोजन किया गया। अक्टूबर 4, 2024 को हिंदी प्रश्नोत्तरी के आयोजन के साथ विजेताओं को नकद पुरस्कार और प्रमाण पत्र प्रदान किए गए। कर्मचारियों के लिए सॉफ्टवेयर प्रशिक्षण कार्यक्रम का भी आयोजन किया गया।



प्रश्नोत्तरी प्रतियोगिता एवं लिखित प्रतियोगिताओं का आयोजन



प्रशिक्षण कार्यक्रम



पुरस्कार वितरण समारोह का आयोजन

नगर राजभाषा कार्यान्वयन समिति द्वारा आयोजित संयुक्त राजभाषा उत्सव में भागीदार

आईआईएसटी, वलियमला, नगर राजभाषा कार्यान्वयन समिति (कार्यालय - 2), तिरुवनंतपुरम के सदस्य कार्यालय है और इनके क्रियाकलाप में सक्रिय रूप से भाग लेता है। नगर राजभाषा कार्यान्वयन समिति, तिरुवनंतपुरम (कार्यालय -2) के तत्वावधान में 'संयुक्त राजभाषा उत्सव 2022-2023' के सिलसिले में सदस्य

कार्यालयों के अधिकारियों और कर्मचारियों के लिए आयोजित प्रतियोगिताओं में डॉ. रवि वी, आचार्य, मानविकी विभाग ने निबंध लेखन में तृतीय पुरस्कार और आशुभाषण में डॉ. दीपक मिश्रा, आचार्य, एविओनिकी विभाग ने प्रोत्साहन पुरस्कार जीते।

नराकास राजभाषा पुरस्कार योजना वर्ष 2022 -2023 के अधीन पुरस्कार

- वर्ष 2022-2023 के दौरान नगर राजभाषा कार्यान्वयन समिति, तिरुवनंतपुरम (कार्यालय - 2) के सदस्य कार्यालयों में राजभाषा हिंदी के उत्कृष्ट निष्पादन के लिए (श्रेणी – II) में तृतीय स्थान प्राप्त करने के उपलक्ष्य में आई आई एस टी को नराकास वैजयंती एवं श्रेष्ठता प्रमाण पत्र प्रदान किए गए।
- वर्ष 2022-2023 के दौरान नगर राजभाषा कार्यान्वयन

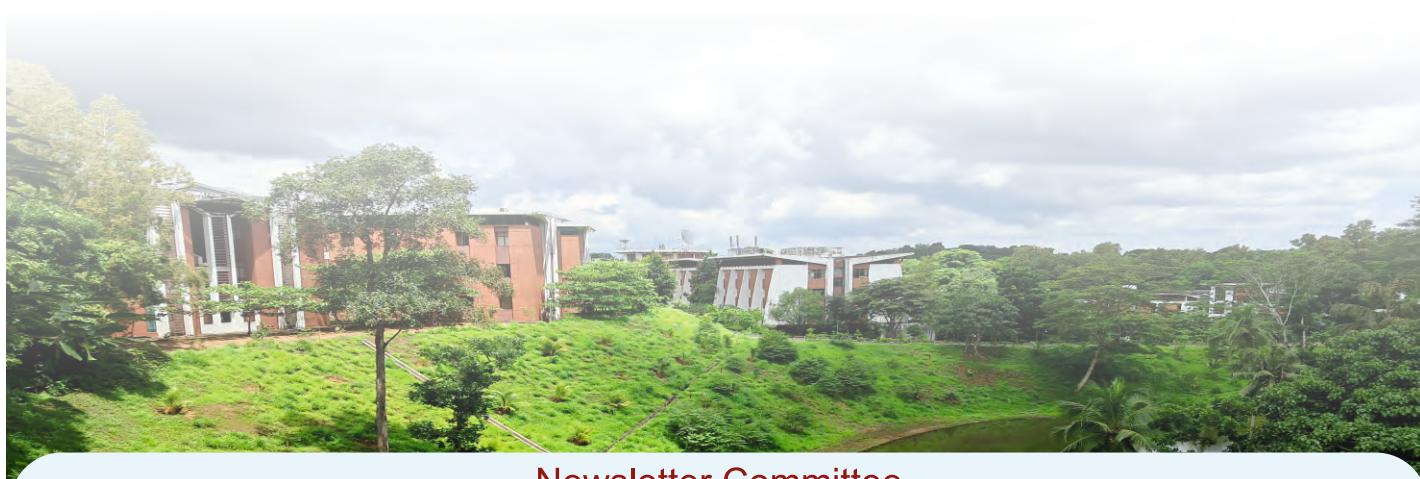
समिति, तिरुवनंतपुरम (कार्यालय - 2) के सदस्य कार्यालयों द्वारा प्रकाशित हिंदी गृह पत्रिकाओं में आई आई एस टी की हिंदी गृह पत्रिका “अंतरिक्ष धाराएं” को उत्कृष्ट पत्रिका के रूप में चुने जाने के फलस्वरूप तृतीय स्थान की नराकास वैजयंती एवं श्रेष्ठता प्रमाण पत्र प्रदान किए गए।



राजभाषा कार्यान्वयन समिति की बैठकें

- आईआईएसटी, वलियमला में राजभाषा नीति के कार्यान्वयन में हुई प्रगति की समीक्षा करने के लिए राजभाषा कार्यान्वयन समिति की दो तिमाही बैठक 27.09.2023, एवं 27.12.2023 को आयोजित कीं और संस्थान में हिंदी के

प्रभागी प्रयोग से संबंधित चार तिमाही प्रगति रिपोर्ट राजभाषा विभाग को भेज दी। इन बैठकों में राजभाषा हिंदी में अधिकाधिक कार्य करने पर जोर दी गई और इसके लिए आवश्यक कदम उठाने के निर्णय लिए गए।



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