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Monthly Newsletter of the Indian Institution of Production Engineers

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# India's 1<sup>st</sup> CanSat India Students' Competition

# **Inaugurated by Chairman ISRO at Ahmedabad**

The IN-SPACe CANSAT India Student Competition concluded on 17 April 2024 in Ahmedabad. The two-day competition was organised for the first time in Ahmedabad by the Indian National Space Promotion and Authorization Centre (IN-SPACe) and the Astronautical Society of India (ASI) to foster future Space Innovators. Speaking at the event, Chairman of ISRO and President of the ASI Dr. S. Somanath said, the CANSAT competition is a testament to India's commitment to fostering a culture of innovation and scientific exploration.



# INDO-US INTERNATIONAL SYMPOSIUM ON "TECHNOLOGY TRANSFER – Commercialising intellectual property for a sustainable future" @ Cit



Cambridge Institute of Technology (CIT) Signed MOU with NRDC at International Symposium on Technology Transfer held on March 14, 2024 at CIT.



In a momentous stride towards fostering innovation and collaboration in the realm of technology transfer and intellectual property (IP) commercialization, Cambridge Institute of Technology, Bengaluru, has inked a Memorandum of Understanding (MoU) with the National Research Development Corporation (NRDC) of India.

The announcement was made during the inauguration of the Indo-US International Symposium on "Technology Transfer – Commercialising Intellectual Property for a Sustainable Future," held on March 14, 2024 at Cambridge Institute of Technology, Bangalore. The symposium saw participation from esteemed dignitaries, government officials, industry leaders, and academic representatives from both India and the United States.

**Dr. Bijay Kumar Sahu**, Senior Regional Manager at NRDC, shed light on the United States Technology Transfer Policy during his opening address, emphasizing the significance of the symposium. Following this, the Principal of Cambridge Institute of Technology, Dr. G. Indumathi, expressed gratitude towards the officials from the Government of India and the US Consulate for their support in organizing this international event.

The symposium featured notable speakers including **Dr. U. T. Vijay** from the Karnataka State Council for Science and Technology (KSCST), **Mr. John Cabeca**, U.S. IP Counsellor for South Asia, USPTO, and Christopher W Hodges, Counsel General, Chennai, who spoke on various facets of technology transfer, IP rights, and sustainable development.

**Commodore Amit Rastogi** (Retd.), CMD, NRDC, DSIR MoST, Govt. of India, delivered a keynote address underscoring the pivotal role of technology transfer and IP commercialization in achieving a sustainable future. He stressed the importance of collaboration between India and the US in developing innovative solutions to global challenges.

Shri D. K. Mohan, Chairman of Cambridge Institute of Technology, highlighted the significance of industry-academia collaborations in fostering awareness and understanding of IP rights for a sustainable society. **Ms. Kathi Vidal**, U. S. Under Secretary of Commerce for IP, delivered a leadership talk focusing on leveraging startup culture in India to align with Sustainable Development Goals (SDGs).

A panel discussion on Green Technology and IP Commercialisation delved into strategies for identifying, protecting, and commercializing sustainable technologies, featuring experts from patent offices, technology incubators, academia, and venture capital firms. The symposium concluded with a networking lunch, providing a platform for further exchange of ideas and expertise between Indian and US stakeholders.

The MOU between Cambridge Institute of Technology and NRDC signifies a commitment to fostering collaboration in technology transfer and IP commercialization, thereby contributing to the development of innovative solutions to global environmental challenges. This partnership is expected to pave the way for ground-breaking advancements in sustainable development.

The exchange of knowledge and expertise witnessed at the symposium marks a significant milestone in Indo-US collaboration, promising a brighter and more sustainable future for generations to come.

# Sai Vidya Institute of Technology, Bengaluru

SVIT – Institute Innovation Council, Organised an event entitled "Process of Innovation Development: Technology Readiness Level; Commercialization of Lab Technologies and Tech Transfer" Speaker for the Session is Prof. S K Sinha, Founder and Chairman, IISc Startup L2M rail, Bengaluru.



<b>UNISEC ALCONNECTION A1st Virtual UNISEC-Global Meeting</b>									
Small Satellite Initiatives in India-BIG Benefits to Academia									
-	"Opening remark"		"Think big, stay SMALL", A vision for S Internet of Things (Space IoT)	pace					
	Dr. L.V. Muralikrishna Reddy, President, UNISEC India, Indian Technology Congress Association and 75 Students' Satellites Consortium Mission		Prof. R. Venkatesha Prasad, Associate Professor, IEEE Distinguished Le TU Delft, The Netherlands and he was the I	cturer, Deputy					
"Sr	nall Satellite Initiatives in India and Opportunities for Academia"	E	Project Director for Lunar Zebro- a Moon Project	Rover					
	Padma Shri Prof. R. M. Vasagam, Eminent Scientist, ISRO. Project Director, India's First Geo-Stationary Communication Satellite "APPLE". Former Vice Chancellor, Anna University, Dr.MGR University, India	1	"NanoSat Learning Experiences and Risc V in Space Applications" Er. Nikhil Riyaz,						
	"Spacecraft RF Characterization"		Research Scientist, CIT/TU Delft, Netherlands,	Moderator					
3	Board of Governors, IEEE Aerospace & Electronics Systems Society, Region 10 (Asia and Pacific) India, Eminent Scientist, ISRO-Done RF	<	Former Student Representative	Mr. Kiran S Hegde Student Representative					
	Characterization of 47 Satellites, 325 Antennas, and Radomes		"Orbital Simulations for Nano Satellites Using MATLAB"						
	"Insight into Risc V and AI & ML for Space Applications"		Ms. Inbisat Yousuf Nath, Central University of Kashmir,	Contraction in the					
	<b>Dr. Antony Louis Piriyakumar,</b> Dean-R&D, Cambridge Institute of Technology (CIT), Bangalore, India		Student Representative						
			Host: UNISEC-India	Register now !					
	Dr. Cyril Prasanna Raj P, Director, Cambrian Consultancy Center and Industrial Research, CIT		February 17, 2024 https://www.unisec-global.org/virtual-meeting.html						



Pictured: Nikhil Riyaz during his presentation on RISC-V Applications in Space

Mr. Nikhil Riyaz is a research scientist at CIT/TU Delft, Netherlands. He is the former Student Representative of UNISEC-India. He has a wide experience in the area of technologies. He was a research intern at Indian Institute of Technology, Kanpur, Research and Development Intern at IBM, Vice Chairman at NHCE IEEE Student Branch Chair of Marine technology society's student branch. He is a founder of Dechedroid; a small scale 3D printing service facility and also was the Founding Director and CEO at TSC Technologies Pvt. Ltd. He is an active Member of 75 Students' Satellites Consortium Mission from its inception! Presentation on "Orbital Simulations for Nano Satellites Using MATLAB" has been done by **Ms. Inbisat Yousuf Nath**, Central University of Kashmir Ms. Inbisat Yousuf Nath is a PG Scholar of Physics at The Central University of Kashmir. She is also a Student Representative of UNISEC-India. She currently also interns at Indian Technology Congress Association (ITCA) and has experience of serving as the coordinator at Astronomy Department of Science Overse, scholar at Womanium, intern at Abdus Salam International Centre for Theoretical Physics (ICTP). She has worked on projects named Python Implementation for Xray Spectral Analysis of Active Galaxies and QuantumSquareWellPy.

Pictured: Ms. Inbisat Yousuf Nath during her presentation on conducting simulations in MATLAB



SVIT – Institute Innovation Council, organised an event entitled "Innovation, Validation and Concept Development" in 2 Celebration of National Youth Day-2024. Speaker for the event was Mr. M S Jayachandra Aradhya, CED of Silicon Micro Systems, Director of Quantum Innovations, Bengaluru,



The outcomes of this initiative extend beyond the tangible concepts development

- National Youth Day's "Innovation, Validation, and Concept Development" initiative created a lasting impact on the participating youth.
- It instilled a sense of confidence, enhanced practical skills, and fostered a mindset of innovation and entrepreneurship.

The event also strengthened the bonds within the youth community, creating a network of likeminded individuals committed to driving positive change.

# Futuristic Digital Karnataka RISC-V Workshop Inauguration of RISC-V Community of Practice (COPI)

![](_page_6_Picture_1.jpeg)

L to R: Mr. Paramesh: ADA Scientist G, Dr. Satya Gupta: President, VLSI Society of India, Dr. Bernhard Quendt: Senior Vice President and Group Chief Technical Officer, Thales, Shri. D. K. Mohan: Chairman, Cambridge Group of Institutions (CGI), Dr. Subhra Kanti Das: Head RISC – V Research, R&T Thales India at Thales, Dr. Shankar Venugopal: VP, Mahindra and Mahindra, Mr. Nithin Mohan: CEO, CGI, Dr. G. Indumathi: Principal, Cambridge Institute of Technology

In a futuristic **Digital Karnataka RISC-V Workshop**, **Dr. Bernhard Quendt**, Senior Vice President and Group Chief Technical Officer at Thales, **Dr. Shankar Venugopal**, Vice President at Mahindra and Mahindra, and **Dr. Satya Gupta**, President of the VLSI Society of India, engaged with students. Innovation and futuristic technology go hand in hand and the Cambridge Institute of Technology (CIT) walks the extra mile to incorporate the same in its institute. In keeping with this, CIT recently held at its campus the Digital Karnataka RISC-V workshop and COPI, bringing together industry experts and academia, where the significance of collaboration and innovation in technological advancement was duly highlighted.

The workshop aimed to take this forward to foster strong collaboration between industry and academia to promote innovative thinking and ventures that will lay a fertile ground for future advancements in RISC-V technology. Present on the occasion were Chief Guest **Dr. Bernard Quendt**, Senior Vice President and Group Chief Technical Officer at Thales, **Dr. Shankar Venugopal**, Vice President of Mahindra and Mahindra, **Dr. Satya Gupta**, President of the VLSI Society of India, **Mr. D. K. Mohan**, Chairman of the Cambridge Group of Institutions (CGI), Mr. Nithin Mohan, CEO of CGI, Dr. Indumathi, Principal, CIT and Dr. Cyril Prasanna Raj, Director, CCCIR, CIT. Deeply impressed by the technical knowledge in the country, the software technologies and the creative talents, Dr Bernard Quendt stated that he was very happy to collaborate with CIT to train and improve the skills of the students to make them industry ready. *"Given the tradition of innovation, India will become an important pillar of this disruptive movement in technology. Together with CIT, Thales will continue contributing to advancements in the digital ecosystem."* Addressing the gathered students, **Dr. Quendt** added, *"As students you will learn how to process the RISC-V technology, add functions to the IPs to grow the community to adapt RISC-V and bring this knowledge to your future workspaces."* 

### **Inherent Advantages**

According to **Dr Quendt**, the RISC-V technology comes with three advantages. *"It brings in enormous flexibility through the transparency of the instruction set to integrate IPs, customise chipsets and satisfy all the requirements arising from different domains."* Segments such as aerospace, defense, security need adaptive chipsets that cannot be purchased from big suppliers. RISC-V enables to adapt and improve your functionality as it is based on open source technology, he pointed.

# Futuristic Digital Karnataka RISC-V Workshop Inauguration of RISC-V Community of Practice (COPI)

![](_page_7_Picture_1.jpeg)

The second advantage according to **Dr Quendt** is the competitive aspect of RISC-V where it is ahead of the competition through its functionality and robust features. *"The third aspect is sovereignty that RISC-V gives your technology, leaving the destiny in your hands, permitting you to decide on your supply chains and this is vital for companies."* 

### **Role in Automotive Industry**

Coming from the automotive industry, Dr. Shankar Venugopal pointed that "Though RISC-V is part of the semiconductor industry and appears to have no connection to the automotive sector, the design based on this technology and its knowledge is extremely pertinent to solving real life problems. This knowledge will usher in transformative changes in automotive electronics." Referring to the role of RISC-V in the automotive industry, he further added, "It will bring in a significant shift in this industry as we will see software playing a major role in the design of future vehicles which will serve as the key product differentiator and also the innovation enabler."

Emphasising the need for collaboration between institutions and industry to nurture RISC-V expertise, **Dr.Satya Gupta** said, "Collaboration amongst stakeholders is crucial for the advancement of RISC-V and the academia-industry partnerships foster innovation and skill development."

### **Beyond Academic Rigour**

Education is not just about academic rigour but is also about practical skill acquisition and RISC-V is part of this objective, pointed **Mr D.K Mohan**. *"Engineering colleges need* to have a different perspective where the education goes beyond the classrooms to offer practical skill training and industry exposure. CIT firmly believes in providing the students a platform to acquire global recognition through industry aligned skill development."

- RISC-V is an open and modular Instruction Set Architecture (ISA) which is rapidly growing in popularity in terrestrial applications.
- RISC-V is an incredibly good microprocessor to bridge the accelerators and these machine learning frameworks and compilers.
- RISC-V cores and accelerators represent an open source enabling technology for implementing ML-models, allowing scalability, long lead etc.
- RISC-V provides an open alternative to expensive ARM licensing models. Its flexibility and modular design allows for tailored implementations for AI, IoT and many other applications, as well as the freedom to customize these extensions for specific use cases, such as AI/ML

![](_page_7_Picture_12.jpeg)

www.iipeonline.org

SVIT – Institute Innovation Council, Organised an Event entitled - National Start-Up Day, Speaker for the program - Mr. Pavan Kumar Ponnaganti, Founder and CEO, Playto Labs, IIT Kanpur

![](_page_8_Picture_1.jpeg)

![](_page_8_Picture_2.jpeg)

- Students are able work with new ideas and transform them into prototypes.
- Identify the challenges in initiating start-up.
- Learn entrepreneurial skills among students.

# Assessment of Core Knowledge Event at RTC, Coimbatore

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![](_page_9_Picture_2.jpeg)

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![](_page_9_Picture_4.jpeg)

Organized by Department of Mechanical Engineering in association with Indian Institute of Production Engineers (IIPE)

# Assessment of Core Knowledge

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Im ✓ /rathinamcollege

Convenor : Dr. S. Seenivasan, Head & Dean of School of Mechanical Science Event Coordinator: Mr. G. Vijayasekaran, AP / Mechanical Mr. H. Mansoor Raja, AP / Mechanical

www.rathinamtechnicalcampus.com

One day Internal Event of "Assessment of Core Knowledge", has been conducted on 27th March 2024, at Department of Mechanical Engineering, Rathinam Technical Campus, Coimbatore. There were 3 staff members and 32 students' participants from II Year Mechanical Engineering participated. The core assessment test based on the subject Engineering graphics, strength of materials, fluid mechanics & theory of machines. 40 questions are asked in MCQ type. Each question carries a single mark. Based on the marks scored we declared 1st and 2nd and the remaining students were given by the participants' certificate. Dr. S. Seenivasan, Head of the Department given the 1st and

Department given the 1st and 2nd place certificate to the students. Prof. G. Vijayasekaran, AP/MECH has stressed the importance of core subjects and in future.

![](_page_9_Picture_13.jpeg)

# Inauguration of the Semiconductor Systems Research & Innovation Lab and the Center of Excellence for Semiconductors at CIT

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**December 16, 2023: Cambridge Institute of Technology** has organized a significant event on December 16, 2023, featuring the inauguration of the Semiconductor Systems Research & Innovation Lab and the Center of Excellence for Semiconductors. Notable dignitaries present included **Mr. Priyank Kharge**, Honourable Minister of RDPR, IT & BT, Government of Karnataka; **Dr. Shivananda Koteshwar**, VP Engineering, EDAG, Synopsys India; **Ms. Thanuja Satheesh**, Director, Technical Publication, EDAG, Synopsys India; and other esteemed figures such as **Dr. Sankalp Singh**, University Program Specialist, GTM, Synopsys India; **Shri. D.K. Mohan**, Chairman, Cambridge Group of Institutions; **Mr. Nithin Mohan**, CEO, Cambridge Group of Institutions; and **Dr. G. Indumathi**, Principal, CIT. **Dr. Cyril Raj Prasanna**, Director, CCCIR, CIT has initiated and he is the backbone of this event, which underscored the institute's dedication to advancing semiconductor research and fostering collaboration between academia and industry leaders.

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A Student Chapter of Indian Institute of Production Engineers (IIPE) Department of Mechanical Engineering University College of Engineering Kakinada (A)

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# Workshop on NON-DESTRUCTIVE EVALUATION - Hands on Session by VIDAL NDT

Student Chapter of Indian Institute of Production Engineers (IIPE), Department of Mechanical Engineering, UCEK (A) has organised the Two Days' Workshop on "**Non-Destructive Evaluation – Hands on Session**" on 22<sup>nd</sup> & 23<sup>rd</sup> of December, 2023 for our PG (CAD/CAM, MD & TE) and III B.Tech Students. For this program nearly 80 students were participated and hands on training sessions were conducted by **Mr M. Sai Charan**, Technical Coordinator, **Mr P S G Vamsidhar Varma**, HR-Executive and **Ms A. Sandhya**, Managing Director, of M/s VIDAL NDT, Hyderabad on various non-destructive techniques to interpret the failures in the components. The Faculty members **Dr. Lingaraju Dumpala**, Assoc. Professors **B. Bala Krishna & Dr. N. Mohan Rao**, Associate Professors **Dr. T. Lakshmana Kishore**, **Dr. V. Jaya Prasad & Dr. K. Prasad**, Assistant Professors **Dr. K. Dileep Kumar, Dr. K. Krishna Bhaskar, Dr. V. Kalyanamanohar** and Assistant Professors (C) attended this program. **Mr. CH. Laxmimohankumar**, Coordinator – Research Students of IIPE has coordinated this event.

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![](_page_11_Picture_6.jpeg)

# IN-SPACe CANSAT India Student Competition 2022-23

# 16-17 April 2024, Ahmedabad, Gujarat

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![](_page_12_Picture_3.jpeg)

The IN-SPACe CANSAT Student India Competition 2022-23 concluded on 17 April 2024 in Ahmedabad. The two-day competition was organized for the first time in Ahmedabad by the Indian National Space Promotion and Authorization Centre (IN-SPACe) and the Astronautical Society of India (ASI) to foster future Space Innovators. Speaking at the event, Chairman of ISRO and President of the Astronautical Society of India (ASI) Dr. S. Somanath said the CANSAT competition is a testament to India's commitment to fostering a culture of innovation and scientific exploration. Over the last 15+ months, 80 teams from across India underwent screening through PDR/CDR/HWDR, and Launch Readiness. Finally, 28 teams were shortlisted for launching on 16 April 2024 in Ahmedabad.

Team Vihanga from Lovely Professional University emerged as the winners of the competition, followed closely by Nirma University, Ahmedabad, and Bharath University, Chennai, securing the 2nd and 3rd positions, respectively. The event aimed to provide students with comprehensive exposure to all aspects of satellite building, with eminent veteran scientists from ISRO serving as jury members, guiding and reviewing the teams. Chairman of IN-SPACe, Dr. Pawan Goenka, emphasized the event's goal to educate students about systems engineering, mission planning, quality assurance, and more, pertaining to satellites in general and CanSats in particular.

Chairman of IN-SPACe Dr. Pawan Goenka stated that the event aimed to give exposure to students in all aspects of satellite building. Eminent veteran scientists of ISRO served as jury members under the chairmanship of Dr. Surendra Pal, Dr. Prakasha Rao PJVKS, Mr. Sundramurthy, Mr. Srinivasa MS, IN-SPACe Deputy Director, PD, Mr. Brijesh Kumar Soni, IN-SPACe Director Dr. Vinod Kumar, and Dr. K. Gopalakrishnan Secretary-General of the Indian Technology Congress Association (ITCA), and Project Director of the 75 Students' Satellites Mission, and all were guided all the 80+ teams along with other experts and shortlisted 28 teams! During these processes, over 800 students were educated about systems engineering, mission planning, objectives, quality assurance, etc., regarding satellites in general and CanSats in particular.

The competition saw teams packing cylindrical satellites with electronic circuits, sensors, and cameras, adhering to international standards, with innovative approaches such as flywheel mechanisms and in-house PCB manufacturing. ISRO Chairman Dr. S. Somanath reiterated India's commitment to Chandrayaan missions and outlined plans for the Gaganyaan mission, while IN-SPACE Chairman Pawan Goenka discussed efforts to promote small rocketry among students and collaborations with colleges to improve space technology and reduce pollution and debris.

IN-SPACe CANSAT Prizes and Configurate Detrements

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India's first CanSat event draws 600 students

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# India's first CanSat event draws 600 students

Teams From Nirma University And IITRAM Participated, Nirma Secured Second Spot

icture a cylinder re-sembling a fire-cracker launcher during Diwali, packed with elec-tronic circuits, sensors, ca-merais and various other app-lications

meras and various other app-lications. This cylinder, primarily made of composite material, served as a Can Satellite or 'CanSat' for 26 teams from engineering Institutes across India competing for the top spot in India's inaugu-ral CanSat competition held in Ahmedabad from April 15 to 17

The event, jointly organized by the Indian National zed by the Indian National Space Promotion and Autho-rization Centre (IN.SPACe) and the Astronautical So-ciety of India, attracted 80 teams, out of which 26 were selected for the second round of launching the cylinder. Two te-ams from Gujarat —onefrom Nirma One from IIT-RAM — made it

one from IIT-RAM — made it to the finals, with Nirma University

emerging as the runnersup.

Accor-ding to organizers, the event adhered to international standards, where the cylin-der's weight should not exce-ed 750g and must maintain ed 750g and must maintain contact with ground control. The CanSat is released by a special drone from a height of 800m, where it must main-tain a steady drop and avoid tumbling upon landing. At about 500m, parachu-

![](_page_13_Picture_9.jpeg)

tes control the descent for a tes control the descent for a smooth landing. Team swere ranked based on their satelli-te's performance on various parameters. Senior Isro officials, in-cluding chairman S manath, attended the event on the conclu-

event on the conclu-ding day and awar ded the winners with trophies and certificates. Orga-nizers highligh-ted that CanSat is often the first step towards bu-ilding more complex mecha-nisms. "It is much

exposes students to work in multi-disciplinary teams, understand different aspects of design and launch, and get

of design and launch, and get hands-on experience with technology ranging from communication to imaging." said an Astronautical Socie-ty of India official. "With a very positive response from students, it will become a re-gular event."

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satellite. It

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SPACE DREAMS

MKSSS CCE MAHARASHTRA he all-girl team from Pune integrated a wheel mechanism for flywheel mechanism for de-tumbling with other systems for stabilization and control. The PCB was made in-house, and all the components were made in India, team members said. The team members said they all want to be part of India's space story with their work and innovations.

BEST TEAMWORK:

![](_page_13_Picture_13.jpeg)

Parth.Shastriditimesoroup.com

Partnamente ultragio quo soni Partnamente ultragio quo soni of Atmendiabad heade Indi-tion and Authorisation Centre (UNSPACO), said the agency is working to promote small rock-erry among students of techni-cal branches in India. He added that due to great response to Its inaugural edition, CanSat will be ableminal event now on. "This is the first time anyt-

The overall winners had students with work experience from Arbuy and space-tech startups. Their cansat cost just B 2000 as the entron Centre for Space Research at the university was working on the prototype for two years. The team improved the performance of the settline with multiple trials and development of their own user interface and PCB.

UNIVERSITY | GUJARAT UNIVERSITY GUARATI Team Dysuss is technical club with background statis is technical club with background statism of the statism advanced descent control system in the cansat. Sensors in the satellite relayed real-time data such as position, temperature, pressure, altitude and orientation in space.

SECOND POSITION: NIRMA

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WINNERS OF THE EVENT: Other winners included Team M.A.T.R.LX from the Bharath Institute of Higher Education and Research in Chennai, who got the third prize. Team NAMBI VJ from the Vidya Jyothi

institute of Technology in Hyderabad, won the prize for best design. TNN

# 'Missions to continue until an Indian lands on Moon'

sro chairman S Somanath

Isro chairman S Somanath India's space agency will continue Chandravaan nis-siona till an Indian is put on the Moon. He was speaking on the idelines of Cansath-dia Student Competition his city where he was the chi-te sust. Than and the space of the said Chandrayaan Shas done very by well. Data has been collec-ted and scientific publics that has just started. Now, we wan to continue the Chand-rayaan series till an Indian hads on the Moon. Before the Moon. Before the Moon. Before the Moon. Before the same till an Indian hads on the Moon. Before the Moon. Bef

"The airdrop test will hap-pen on April 24. Then two more uncrewed missions will happen next year and then the manned mission by the end of next year if everything goes well." the Isro chairman said. that an uncrewed mission, a test vehicle flight mission and an airdrop test from a hewell," the Isro chairman said. About Isro's Mission 2030.

![](_page_13_Picture_29.jpeg)

Gaganyaan on track, Mission 2030 will reduce space pollution S SOMANATH | Isro chairman

licopter will take place this

completion of its lifespan and reduce breakage of parts. "We will follow it and others "We will follow it and others in the space sector should also follow;" he said. On Isro's new-ly developed Carbon-Carbon (C-C) nozele for rocket engi-nes, he said it will improve pa-yload capacity for being light-weight and will be installed in the polar satellite launch ve-hicle (PSLV).

Somanath said that the initia-tive is aimed at reducing spa-ce pollution and debris with focus on reusable vehicles, bring satellite down after completion of its lifespan and

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IN-SPACe plans small rocket events for students hing like this has happened in In-dia. It is primarily to create enthusiasm among stu-dents. About 600 stu-He said that the agency want to bring for students for the sheer enthusiasm," said Goendia It is primarily to cree enthusiasm among stu-dents. About 600 stu-dents participated in this edition. It is not just about technology, but also about team-work and learning other aspects of a mission." Go-onka told

He said that the agency wants to get two things ing. "While it will be Cansat one year. It will be something else the next, we will announce it nor, but smaller rock-ets are an alternati-ve It is quite po-pular outside India, and we

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ઈન-સ્પેસ કેનસેટ ઈન્ડિયા સ્ટુડન્ટ

કોમ્પિટિશન'માં અતિથિ તરીકે હાજરી

આપવા અમદાવાદ આવેલા ઈસરોના

આયોજિત

અમદાવાદમાં

પ્રેક્ટિકલ એક્સપિરિયન્સ મેળવવા માટે સ્ટ્રડન્ટ્સને

પ્લેટફોર્મ પૂરું પાડવામાં આવ્યું. ટીમ્સે ડ્રોનની મદદથી

800 મીટર્સના ઓલ્ટિટ્યૂડ પર કેનસેટ લોન્ચ કર્યાં.

The IN-SPACe chairman said that the agency is in touch with is colleges that are starting deg-ree programmes in space. "Apart from that, we are also creating bridges for students to collaborate on space tech with help from both Isro and the pri-vate sector where they can use facilities to understand practi-cal aspects," he said.

અમદાવાદમાં ઈસરોના ચેરમેને ગગનયાન સહિતના મિશન વિશે માહિતી આપી

ચંદ્રની ધરતી પર કોઈ ભારતીય નહીં ઉતરે

ત્યાં સુધી મિશન ચાલુ રહેશે : એસ.સોમનાથ

ચંદ્ર પર કોઈ ભારતીય લેન્ડ થાય તે પહેલાં ઘણી તકનિકોમાં નિપુણતા મેળવવી પડશે

The IN-SPACe chairman said

# ડ્રોનની મદદથી વિદ્યાર્થીઓએ 800 એલ્ટિટ્યૂડ પર સ્મોલ કેનસેટ સેટેલાઇટ લોન્ચ કર્યા

સિટીમાં ચોજાચેલી ઇન-સ્પેસ કેનસેટ ઇન્ડિચા સ્ટ્ડન્ટ કોમ્પિટિશનમાં દેશમાંથી આવેલી ૨૮ ટીમોએ ભાગ લીધો

<mark>સિટી ભાઇક I</mark> ઈન્ડિયન સ્પેસ સાયન્સ ક્ષેત્રે વિશ્વકક્ષાએ ડંકો વગાડે તે માટેના યુવા વૈજ્ઞાનિકોને તૈયાર કરવા અને તેમને પ્લેટફોર્મ પુરં પાડવા માટે ઈન્ડિયન નેશનલ સ્પેસ પ્રમોશન એન્ડ ઓથોરાઇઝેશન સેન્ટર (IN-SPACe) અને એસ્ટ્રોનોટિકલ સોસાયટી ઓફ ઈન્ડિયા દારા ઈન-સ્પેસ કેનસેટ ઈન્ડિયા સ્ટુડન્ટ કોમ્પિટિશનનું આયોજન કરવામાં આવ્યું હતું. બે દિવસીય આ કોમ્પિટિશનમાં દેશભરમાંથી ભાગ લેવા માટે આવેલી ૨૮ ટીમોએ કેન-સાઇઝના સેટેલાઇટની ડિઝાઇનિંગ, ડેવલપિંગ અને લોન્ચિંગ માટે સ્પર્ધા કરી હતી. બુધવારે

ઈસરોના ચેરમેન એસ. સોમનાથની વિજેતા સ્પર્ધકોને ઈનામ આપી પ્રોત્સાહિ સ્પર્ધામાં લવલી પ્રોફેશનલ યુનિવર્સિટી રહી હતી

સ્પર્ધાએ સ્પેસ સાયન્સ અને ટેકનોલ મેળવવા માટે વિદ્યાર્થીઓને અનોખું પ્લે ડ્રોનની મદદથી ૮૦૦ મીટર્સના એલ્ટિટર કરવાનો પડકાર સફળતાપૂર્વક ઉઠાવ્યો હ ન કેવળ તેમની ટેક્નિકલ કુશળતાને ટેકનોલોજીના પ્રેક્ટિકલ પાસાની ઊંડી સ પણ કર્યા હતાં. સહભાગીઓએ પેલોડ િ અને રિકવરી મિકેનિઝમ જેવાં વિવિધ પ

સ્ટુડન્ટ્સને સ્પેસ સાચન્સ- ટેક્નોલોજીમાં પ્લેટફોર્મ મળી રહે તે માટે 'ઇન-સ્પેસ કેનસેટ ઇન્ડિયા' કોમ્પિટિશન યોજાઇ અમદાવાદઃ એસ્ટ્રોનોટિકલ સોસાયટી ઓફ

ઈન્ડિયા અને ઈન્ડિન નેશનલ સ્પેસ પ્રમોશન એન્ડ ઓથોરાઇઝેશન સેન્ટરદ્વારા 2 દિવસીય કોમ્પિટિશન યોજાઈ હતી. 'ઈન-સ્પેસ કેનસેટ ઈન્ડિયા' અંતર્ગત આ કોમ્પિટિશન યોજાઈ હતી, ઈવેન્ટમાં દેશભરમાંથી 28 ટીમોએ ભાગ લીધો હતો. જેમણે કેન-સાઇઝના સેટેલાઈટના ડિઝાઇન, ડેવલપિંગ અને લોન્ચિંગ

इसरो अध्यक्ष डॉ.एस.सोमनाथ ने कहा, गगनयान के तहत इस साल चार अहम मिशन पर काम, आदित्य एल-1 का साइंटिफिक पब्लिकेशन शुरू

![](_page_13_Picture_48.jpeg)

अच्छा प्रदर्शन किया है' पत्रिका न्यूज नेट्रवर्क patrika.com

अहमबाबाद. भारतीय अंतरिक्ष अनुसंधान संगठन (इसरो) के अच्छक्ष डॉ.एस.संभनाथ ने कहा कि चंद्रयान मिशन की श्रुंखला तब तक जारी रहेगी, जब तक कोई भारतीय

रेक्ष यात्री चंद्रमा पर कदम नहीं उन्होंने यह बात बुधवार जन्हों भारतीय राष्ट्रीय

अंतीक संवर्धन और प्रतिकरण केंद्र (प्रतन्मार) और प्रदुर्गतिकल संसायदी और क्रेडिया (प्ररस्कर) के संमुख्य ताल किंतिया (प्ररस्कर) के संमुख्य तालयाधन से अध्योजिन दन्यमारे के देशन डिजिय स्टेड समिपि के देशन कही। समर्थ में स्वरत्वा प्रोजेजना प्रति स्वर्धी स्वर्क्त प्रेणेजना केंद्र ताल किंधा (मिसा स्वान प्राप्त किया) वीक तालर राजेजना केंद्र ताला केंद्र में ताला खुनिवार्सी केंद्र उसमें पैसे जा रहे हेटा को एकत्र कर उस्तला वैवालिक प्रकारण का का का भी युरू ही राथ है। उन्होंने कहा कि हम (स्परी) चंद्रयान मिरन कुंखला को तब तक जार रा रदियान मिरन कुंखला को तब तक जार रा रदियान महाने है जाब तक कोई भारतीय चंद्रमा सर बर्दी तकनीकों में महारथ हासिल करनी तोगी, जेसे बहां मुर्टवेत जाना और सुरदित जा स्था का रहे है। भारत के प्राप्त आ मां के प्रा

9.5%

उन्होंने हाल ही में धोषित किए स्वच्छ अंतरिक अगियान के बारे में कहा कि जैसे हम पृथ्वी पर प्रबूपण ना हो उसकी विंता कर रहे हैं, उसी प्रकार से हमें अब अंतरिक में भी अनवाहे

उडान भिरान भाष्यता के खरो में उडान मिरान और अन्य है एयरडीय बॉ.एस. सोमनाथ ने कहा कि इस परीक्षण निरान। एयरडुॉप परीक्षण भी साल हमाने ने हुई साथ अग्रम मिरान पर जल्द होगा, हिए. अगले साल वा वे काम होरा छा, हि.समेरे एक मानव स्वार स्वार का मानव रहित मिरान होरे, रहिता मिरान, दूसरा है परीक्षण वाटन सब कुछ ठीक रहा तो हिर मानव

प्रक्षेपित सेटेलाइट का उद्देश्य उपयोग पूर्ण होने के बाद उसे सुरक्षित तरीके से वापस लाय जाए। 2030 तक हम प्रदूषण रहित अंतरिक्ष की कल्पना सेटेलाइट ना हो, वहां प्रदूषण ना फैले उसकी विंता करनी चाहिए। निजी कंपनियां भी सेटेलाइट लॉन्च कर रही हैं। ऐसे में हमें जरूरत है कि हम ऐसी तकनीक व योग्यता विकसित करें कि कर रहे हैं।

मिशन पर आगे बढ़ा जाएगा। रकिट इंजनों के लिए इसरो के नव विकसित कार्बन-कार्यन (सी-सी) नोजल पर उन्होंने कहा कि वह काफी हल्का है, जिससे पेलोड क्षमता में वृद्धि होगी। इसे ध्ववीय उपग्रह प्रक्षेपण यान पीएसएलवी में स्थापित जाएगा। यह उच्च तापमान बेहतर काम करेगा।

ારી ઓપ આપવામાં

સોમનાથે જણાવ્યું કે ાં એક માનવરહિત ટેસ્ટ વ્હીકલ ફ્લાઇટ ારડ્રોપ ટેસ્ટ કરશે. એપ્રિલના રોજ થશે.

નોઝલ વિકસાવવામાં સકળતા મેળવી : એસ. સોમનાથ ઉપરાંત પેલો ડડિઝાઇન ટેલિમેટી સિસ્ટમ અને રિકવરી મિક્રેનિઝમની પણ જાણકારી મેળવી હતી. ઈવેન્ટમાં ઇસરોના ચેરમેને આ વર્ષે ઈસરોએ મેળવેલી સિદ્ધિઓ વિશે વાત કરતા કહ્યું ઇસરોના ચેરમેન એસ. સોમનાથે ચિફ્ર ગેસ્ટ તરીકે કે 'રોકેટ એન્જિન ટેક્નોલોજીમાં પે-લોડ ક્ષમતામાં વધારો કરીને રોકેટ હાજરી આપી અને જણાવ્યું કે, 'કેનસેટ કોમ્પિટિશન એન્જિન માટે હળવા વજનના CC નોઝલ વિકસાવવામાં સફળતા મેળવી છે. ક એક્સપ્લોરેશનના ISROની નવી વિકસિત કાર્બન-કાર્બન (CC) નોઝલ હળવી હોવાથી પે-લોડ ાવનારી જનરેશનના ક્ષમતામાં સુધારો કરશે અને તેને ધ્રુવીચ સેટેલાઇટ લોન્ચ વ્હીકલ અથવા ર્સ અને આંત્રપ્રિન્યોર્સ PSLVમાં સ્થાપિત કરવામાં આવશે. પછી આવતા વર્ષે વધુ બે માનવરહિત મિશન હાથ ધરવામાં આવશે. જો બધુ બરાબર રહ્યું તો સમાનવ મિશન પશ

ભ્રમણકક્ષામાં લૉન્ચ કરીને ભારતીય સમુદ્રના પાણીમાં ઉતરાણ કરાવવામાં આવશે. તેમને સુરક્ષિત રીતે પૃથ્વી પર પાછા લાવીને માનવ અવકાશ ઉડાન ક્ષમતાના પ્રદર્શનની કલ્પના કરવામાં આવી છે.'

અજય મોદી શવેલ્સ હવે સમગ ગુજરાતમાં

1

પાર પાડવામાં આવશે. ગગનયાન

પોજેક્ટમાં ૩ સભ્યોને ત્રણ દિવસના

મિશન માટે ૪૦૦ કિલોમીટરની

![](_page_14_Picture_0.jpeg)

The Department of Production Technology is organizing the second International Conference on recent Innovations in Production Engineering (RIPE 2024) in line with the various National and International conferences and workshops conducted in the past in the area of manufacturing, design, mechatronics, automation and inspection. The noble aim of the conference is to bring together the professional and budding researchers on a common platform to discuss and exchange the ideas on recent developments and challenges in the field of Production Engineering.

This will provide opportunities to researchers to grade their work, to learn new methods of experimentation and analysis and to create new directions in their research and organization. It also aims to share the expert overview in selected research field through key note lectures by eminent speakers from India and abroad.

### KEYNOTE SPEAKERS

Prof. Manoj Gapta	Prof. J. Ramkumar	Prof. V. Krishnuraj	Prof. I.A. Palani	Prof. K. P. Karumakaran	Prof. V.Anundakrishnan	Prof. Sushant Kumar Panigrahi
National University of Singapore	IIT Kanpur	PSG College of Tech.	IIT Indore	IIT Bombay	NIT Tiruchirapalli	ITT Madras

Composites

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- Sustainable Manufacturing Industry 4.0
- Robotics and Automation
  Additive Manufacturing

![](_page_14_Picture_10.jpeg)

![](_page_14_Picture_11.jpeg)

![](_page_14_Picture_12.jpeg)

Advanced Manufacturing 
 Smart Materials

![](_page_14_Picture_13.jpeg)

Surface Engineering

![](_page_14_Picture_14.jpeg)

![](_page_14_Picture_15.jpeg)

Resource Management

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- · Extended abstract of accepted papers will be published in the conference proceedings with ISBN number.
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![](_page_14_Picture_31.jpeg)

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![](_page_16_Picture_0.jpeg)

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![](_page_16_Figure_21.jpeg)

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- Innovations/Patents/Video Watch etc

## Industrial Visits/Industry Collaborations

Arranging Industrial Visits/Field Training of Faculty/Students at Industries

- <sup>h</sup> B.Tech and M.Tech Mini-Major Project/Dissertation Work at Industries
- Collaborative Training Programmes/Credit Courses
- Companies to Take Students for Learn & Earn Programs
- Practical Training/Pre Internship of students in Industries (Unpaid/Paid)
- Professional Chairs Sponsored by Industries at EEI
- R&D Laboratories sponsored by industries at EEI
- MoU between Industries/R&D Labs/Professional/Trade Bodies
- Scholarships/Fellowships Instituted by Industries for Students of EEI
- Short-Term Assignment/Exchange of Faculty Members in Industries
- Expert/Professionals from Industry as Visiting Professors or Guest Lectures and Delivering Lectures on Industrial Best Practices & Trends

## Knowledge Conferences/Events: Organized/Attended

- Workshops, Conferences and Symposia *In House Events:* Faculty Participation in External Events:
- Having Tie-ups with Foreign Universities
- Promote International Internship /Summer Schools Startups: Established
- Startups by Students/Faculty Members

# CanSat India Students Competition held at Ahmedabad: 17 & 18 April 2024

![](_page_17_Picture_39.jpeg)

Dr. K. Gopalakrishnan, National Secretary, IIPE and Project Director, 75 Students' Satellites Consortium with Former Chairman, ISRO Dr. A. S Kiran Kumar and NAL Drone Team who have provide the Launch Opportunities for all the CanSat India Competition Teams at Ahmedabad!

![](_page_17_Picture_41.jpeg)