# ISRO unravels latest version of "FEAST" analysis software with more features towards Athmanirbharatha
# 8th National Finite Element Developers'/FEAST Users' Meet (NAFED08) hosted by IIT Hyderabad

**Highlights:**

- ***The 8th National Finite Element Developers'/FEAST Users' Meet (NAFED08) was inaugurated by Dr. S. Unnikrishnan Nair, Director, VSSC, ISRO.***
- ***IIT Hyderabad is the first second generation IIT to host Prestigious NAFED08***
- ***Over 250 attendees from academia, industry, and research institutions participated in the meet***
- ***The meet is organised to promote FEAST (Finite Element Analysis of Structures), an indigenously developed structural analysis software by ISRO.***
- ***Design competitions using FEAST software and quiz competition on allied topics were conducted.***
- ***FEAST 2025 software is released by the Director*** VSSC, ISRO***.***

**Hyderabad, February 01, 2025:** The 8th National Finite Element Developers'/FEAST Users' Meet (NAFED08) was held at the Indian Institute of Technology Hyderabad today. The meet was organized by the Vikram Sarabhai Space Centre (VSSC), a leading Centre of Indian Space Research Organisation (ISRO), in association with IIT Hyderabad. IIT Hyderabad is the first second generation IIT to host this prestigious event. This meet was organised to bring together industry leaders, academicians, and researchers to promote the indigenously developed finite element-based structural analysis software, FEAST (Finite Element Analysis of Structures).

**V. Narayanan, Chairman of ISRO in his video message emphasized the capabilities of FEAST software and the significance of indigenous software development**

- He highlighted the importance of engaging with academia and the student community to expand the reach and development of FEAST software.
- Dr. Narayanan also discussed new project approvals at ISRO, including the Human Mission, Bharatiya Antariksh Station, and Next Generation Launch Vehicle.
- He noted that software like FEAST will play a vital role in the structural design and analysis of these upcoming projects.
- He thanked Prof BS Murty and team for hosting the meet at IIT Hyderabad.

The meet was inaugurated by Dr. S. Unnikrishnan Nair, Director, Vikram Sarabhai Space Centre, ISRO, who highlighted the importance of achieving Atmanirbharata in numerical simulation software development, particularly through the FEAST software, in collaboration with academia, developers, and research organizations.

- Over the years, multiple versions have been launched, and over 4,000 licenses have been sold across India
- He also mentioned about the development of Pravaha, an indigenous Computational Fluid Dynamics (CFD) software being developed by VSSC, which is getting ready for commercial launch
- He appreciated these efforts which align with the vision of Aatmanirbhar Bharat and mentioned that initiatives like FEAST remain relevant, effective, and accessible to support India's ongoing technological development.

Prof. B.S. Murty, Director, IIT Hyderabad, delivered the presidential address, underscoring the importance of fostering innovation and collaboration in engineering. "*FEAST plays a crucial role in the manufacturing sector, contributing to the Make in India initiative and showcasing the nation's manufacturing capabilities with pride. Coming together to support Aatmanirbhar Bharat aligns with the vision set by our Prime Minister for Viksit Bharat. When we see Made in India products being recognized globally, it reflects our country's progress toward becoming a developed nation. I hope this software gains global recognition. We are always ready to collaborate, as we strongly believe collaboration is key to India's growth. IITH has been already doing a number of projects with ISRO.*"

Dr. A.K. Asraff, Associate Director (R&D) at VSSC, welcomed the gathering and provided an overview of the events held as part of NAFED08, along with the planned technical sessions for the user meet.

Smt. A.P. Beena, Deputy Director of the Structural Engineering Entity at VSSC highlighted the journey and evolution of FEAST software, tracing its development back to the time of Dr. APJ Abdul Kalam, who spearheaded the initiative. She also emphasized the importance of engaging with academia to encourage more users and developers to contribute to the development and utilization of FEAST software.

On behalf of IIT Hyderabad, Prof. Amritam Rajagopal, Dr. K Nithyanandan and Dr. Mayukh Pahari from Dept. of Physics have provided all the support and coordinated the NAFED08 meet successfully.

With over 250 participants from industry and academia, the event showcased the increasing adoption of FEAST software for structural and thermal analysis, emphasizing its role in strengthening India's self-reliance in engineering technology.

**Key activities during the event included:**

.

- **Exhibition:** An exclusive exhibition showcasing FEAST's journey and its applications in various domains was inaugurated by Prof. B.S. Murthy.
- **Keynote Address:** Delivered by **Dr. P.C. Jain**, Director of Flight Structures, DRDL, Hyderabad, on "Aerospace Structures Design and Development - Challenges Ahead."
- **Presentations & Talks:** Invited speakers shared their expertise on topics like impact modeling, uncertainty quantification, and FEAST 2025 enhancements.
- **Business Presentations:** Industry leaders from Lyra Infosystems, SVR Robotics, and Marconi Technologies showcased their contributions to structural analysis technology.
- **Parallel Sessions:** Four technical parallel sessions focused on Statics, Dynamics, Thermal Analysis, and FEAST Proposals, featuring presentations on advanced structural designs, thermal modeling, and finite element techniques.
- **Competitions:** Design and quiz competitions were held for students, fostering innovation and engagement. Winners were felicitated by Dr. S. Unnikrishnan Nair, Director, VSSC

The program covered engaging topics like **aerospace structural challenges, finite element modeling**, and **enhancements in FEAST software capabilities**. Sessions highlighted innovations in **thermal and dynamic analysis**, **adaptive modeling**, and **quantum-classical frameworks** for finite element analysis. The National Finite Element Developers' Meet continues to serve as a platform for knowledge exchange and collaboration, playing a pivotal role in strengthening India's engineering community.

The event concluded with the release of FEAST 2025, marking a significant milestone in the evolution of this indigenous software. A commemorative book of abstracts was also unveiled during the closing ceremony.

**About FEAST :**
"FEAST" software, developed by the Indian Space Research Organisation (ISRO) at its Vikram Sarabhai Space Centre (VSSC), stands for "Finite Element Analysis of Structures" and is a structural analysis software based on the finite element method, used for analyzing the behaviour of structures under various loads in fields like aerospace, automobile, civil, mechanical, and marine engineering; essentially allowing engineers to test designs virtually before physical construction. Indigenous development, Functionality, cost-effective are the key points about FEAST. ISRO intends to make FEAST available to academia, small and medium industries, and large-scale applications through different tiers of access. IIT Hyderabad is the first second generation IIT To host this prestigious NAFED08 event. NAFED07 was hosted by IIT Delhi in 2023.

For more information, Please Visit: https://nafed08.vssc.gov.in/

---

**About IIT Hyderabad:**
IITH, established in 2008, as one of the second Generation IITs, has reached a respectable position in both academics, research, technology development and startups in the short span of 16 years. In the recent Indian National Ranking (NIRF-2024), IITH is placed at 3rd in Innovation and 8th among Engineering institutes in India.

It has 325+ full-time faculty, 5,350+ students (PG + PhD students accounting for about 60%). The institute has a strong research focus with Rs. 1370+ Cr of R&D funding (Rs. 250 Cr funding in 2023-24), 11,500+ publications, 460+ Patents (210 patents in 2024), and about 260+ startups (that have generated 1100+ jobs and a revenue of Rs. 1500+ Cr). Follow us on Instagram, LinkedIn, Twitter, Facebook, and YouTube for the latest updates.

**To know more, please visit** *https://www.iith.ac.in/*

---

**You can view all press releases/ notes from IIT Hyderabad at: https://pr.iith.ac.in/press-release**
**Please direct all media queries to | Public Relations Officer, IIT Hyderabad |**
**Cell: 8331036099 | Email: pro@iith.ac.in**