

NAFED 08 – 1st February, 2025

8:00 - 8:45 Hrs. Registration

**Inaugural Function: 8:45 - 10:05 Hrs.
Venue: Auditorium 1, Convention Center**

10:05 - 10:35	Introduction of Keynote Speaker by: Dr. Marimuthu R, Head, FSDD/SDAG/STR/VSSC	Venue: Auditorium 1
	<i>Keynote Talk:</i> “Aerospace Structures Design and Development - Challenges ahead” <i>Speaker:</i> Dr. P.C. Jain, Director Flight Structures, DRDL, Hyderabad	
 10:35 - 10:50 Hrs. Venue: Hallway outside Auditorium 1		
10:50 - 11:10	Presentation on FEAST 2025 capabilities by FEAST Team	Venue: Auditorium 1
11:10 - 11:30	<i>Invited Talk:</i> Modeling of Impact and Blast <i>Speaker:</i> Dr. Ramadas C, Group Director, R&DE(E), DRDO, Pune	
11:30 - 11:50	<i>Invited Talk:</i> “Data Driven Approach for Uncertainty Quantification of Impact Dynamics Problems” <i>Speaker:</i> Dr. Biswarup Bhattacharyya, Asst. Prof., IIT Hyderabad	
11:50 - 12:10	Presentation on Enhancing FEAST capabilities with Python by FEAST Team	
12:10 - 12:20	Business Presentation by M/s Lyra Infosystems, Bengaluru	
12:20 - 12:30	Business Presentation by M/s SVR Robotics, Pune	
12:30 – 12:35	Business Presentation by M/s Marconi Technologies, Hyderabad	
 12:35 - 13:15 Hrs. Venue: Pandal outside Convention Center		
13:15 - 13:35	<i>Invited Talk:</i> “Microstructure-informed Constitutive Model Development for Shock Response of Composite Materials” <i>Speaker:</i> Dr. Chandra Prakash, Asst. Prof., IIT Hyderabad	Venue: Auditorium 1
13:35 - 13:45	Constructive Suggestion Winner’s Presentation	

Parallel Session-1A (Statics)

13:45 - 15:30 Hrs. (Venue: Auditorium 1, Convention Center)

Session Chair: Dr. R. Suresh (VSSC)

Co-Chair: Shri MK Sundaresan (VSSC)

13:45 - 14:00	Development of 20kN capacity load cell through Design of Experiments using FEAST and its experimental validation	Philip K Mathew (VSSC)
14:00 - 14:15	Finite element simulation of a reaction force measurement structure using FEAST and its experimental validation	Vinayak P Varma (VSSC)
14:15 - 14:30	Structural Analysis of Launch Vehicle Inter-stage using FEAST Software	Sundar Raj R (VSSC)
14:30 - 14:45	Porosity evolution in metals: a comparison between continuum and micromechanical finite element models	Sagar Chandra (BARC)
14:45 - 15:00	Design and Analysis of Internal Pressure Reaction Chamber Assembly for Structural Qualification of Launch Vehicle Nozzle Closure Structures using FEAST	Rakhil Krishnan R (VSSC)
15:00 - 15:15	Structural analysis of Booster Thermal Shroud structure of a typical launch vehicle	Anilkumar VP (VSSC)
15:15 - 15:30	Structural Analysis of Experimental Vehicle Fore End Closure Using FEAST Software	Mali Somananth (VSSC)


Parallel Session-1B (Dynamics)


13:45 - 15:30 Hrs. (Venue: Auditorium 2, Convention Center)

Session Chair: Prof. Venkatesham B (IIT Hyderabad)

Co-Chair: Shri Kodati Srinivas (LPSC)

13:45 - 14:00	Slosh analysis of Crew Module Propulsion System propellant tank for Human space program using FEAST	Sarath Chandran Nair (LPSC)
14:00 - 14:15	Mechanical Design, FE Simulation and Validation of Structural Stiffness of CFRP Reflector	Prempal Kumar (SAC)
14:15 - 14:30	Structural Qualification of Ball Lock Separation System for SPADEX Satellite	Vinod G (VSSC)
14:30 - 14:45	Time-sweep Load Analysis of New Generation Launch Vehicle Core-alone configuration in FEAST using Python API	Akash SS (VSSC)
14:45 - 15:00	Structural analysis of Deck stack assembly of Payload for Sounding rockets	Nithish Varma (VSSC)

15:00 - 15:15	Structural assessment of SS3 actuator bracket for FNC	Vinu KS (VSSC)
15:15 - 15:30	Transient Response Analysis of Rocket Engine Pipelines using FEAST and Test Validation	Abino Bennet (VSSC)
 15:30 - 15:40 Hrs. Venue: Hallway outside Auditorium 1		
Parallel Session-2A (Thermal) 15:40 - 17:25 Hrs. (Venue: Auditorium 1, Convention Center) Session Chair: Shri Sundar B (VSSC) Co-Chair: Dr. Rajeev G Nair (VSSC)		
15:40 - 15:55	Thermal Analysis of Mixing Head Assembly in Semicryo Engine for Brazing Operation	Ullekh Pandey (VSSC)
15:55 - 16:10	Evaluation of THERMOSTAT boundary condition in FEAST-ANTARES	Vinay Krishna G (VSSC)
16:10 - 16:25	Natural frequency analysis and thermo-structural assessment of 1.5kN engine chamber using FEAST	Unnikrishnan KR (LPSC)
16:25 - 16:40	Simulation of Lock-in Thermography in FEAST for Flat Bottom Hole Defects	Digendranath Swain (VSSC)
16:40 - 16:55	Thermal Analysis of Avionic Packages in Launch Vehicle	KS Lakshmi (VSSC)
16:55 - 17:10	Design of an Orthogrid Cylindrical Structure for Bharatiya Antariksha Station	Sabin Kurian (VSSC)
17:10 - 17:25	Thermal Analysis of Gridfin for Crew-Escape System	Rishi Padmanabhan (VSSC)
Parallel Session-2B (FEAST Proposals) 15:40 - 17:25 Hrs. (Venue: Auditorium 2, Convention Center) Session Chair: Shri Vivek Chavan (BARC) Co-Chair: Shri Arunkumar R (VSSC)		
15:40 - 15:55	ANTARES: Finite Volume Method based Thermal Module interfaced with FEAST	Shri Philip George (VSSC)
15:55 - 16:10	General Purpose Nonlinear Modal Analysis Capability in FEAST	Nidish NB (IIT Madras)

16:10 - 16:25	Adaptive Phase Field Fracture Modeling of Functionally Graded Materials	Anna Mariya Shajan (BITS Hyderabad)
16:25 - 16:40	Analysis with Beam Elements in FEAST: Insights and recommendations	Vivek S (LPSC)
16:40 - 16:55	Incorporating Isogeometric Analysis in FEAST using Bézier Extraction	Philip Luke (IIT Roorkee)
16:55 - 17:10	A Robust and Efficient Adaptive NURBS Contact Enrichment Technique for Frictionless Contact Problems	Sumit Kumar Das (IIT Guwahati)
17:10 - 17:25	Hybrid Quantum-Classical Framework for Enhancing Finite Element Analysis in Structural and Stochastic Optimization	Athish NS (KITS Coimbatore)
<p>Panel Discussion: 17:25 - 17:50 Hrs. Venue: Auditorium 2, Convention Center Chairman: Dr. V. Ashok (Prof. Satish Dhawan Professor, VSSC) Co-Chair: Dr. Santhosh B (VSSC)</p>		
<p>Best Paper Awards Distribution: 17:50 - 18:00 Hrs. Venue: Auditorium 2, Convention Center</p>		
<p>Cultural Program: 18:30 - 20:00 Hrs. Venue: Auditorium 1, Convention Center</p>		
<p> 20:00 Hrs. onwards Venue: Pandal outside Convention Center</p>		