

## PATRONS

- ❖ Dr. T.R. Parivendhar, Founder Chancellor
- ❖ Mr. Ravi Pachamoothoo, Pro-Chancellor (Admin)
- ❖ Dr. P. Sathyanarayanan, Pro-Chancellor (Academics)
- ❖ Dr. R. Shivakumar, Pro-Chancellor

## STEERING COMMITTEE

- ❖ Dr. C. Muthamizhchelvan, Vice-Chancellor
- ❖ Dr. S. Ponnusamy, Registrar
- ❖ Dr. B. Neppolian, Dean (Research)
- ❖ Dr. T.V. Gopal, Dean (CET)
- ❖ Dr. D. Kingsly Jeba Singh, Chairperson, SME

## ADVISORY COMMITTEE

- ❖ Dr. L.R.Ganapathy Subramanian, Professor & Head, Department of Aerospace Engineering.
- ❖ Dr. R. Vasudevan, Professor, Department of Aerospace Engineering.

## CONVENER

- ❖ Dr. S.Sivakumar, Associate Professor

## CO-CONVENERS

- ❖ Dr. S. Gurusideswar, Assistant Professor
- ❖ Dr. K. Saravanakumar, Assistant Professor
- ❖ Mr. N. Bharat, Assistant professor
- ❖ Mr. K. Iynthezhuthon, Assistant professor

## INSTRUCTION

- Interested participants can register through link provided.
- E-certificate** will be provided to all active participants.
- Meeting link shall be mailed to registered participants.
- Attendance shall be recorded through feedback form submission on the day of webinar

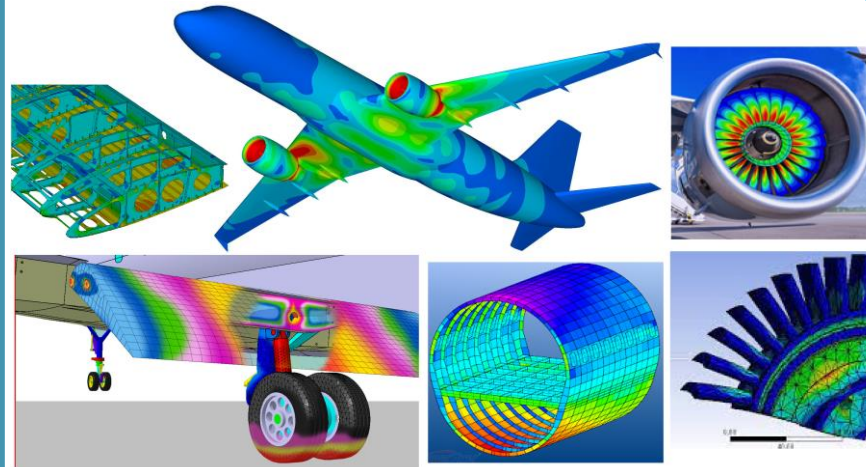


**SRM**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
Deemed to be University u/s 3 of UGC Act, 1956



# THREE DAYS WEBINAR ON “FINITE ELEMENT METHOD IN AEROSPACE STRUCTURES”

**01-11-2021 to 03-11-2021**



**Organized by**  
**Department of Aerospace Engineering**  
**School of Mechanical Engineering**  
**SRM Institute of Science and Technology**

**In Association with**  
**Aeronautical Society of India**  
**(Chennai Chapter)**



## ABOUT SRMIST

SRM Institute of Science and Technology (SRMIST) is one of the top ranked universities in India with over 50,000 plus students and 3,000 plus faculty members, offering a wide range of Undergraduate, Postgraduate and Doctoral Programs in Engineering, Medicine & Health Sciences, Management, Science & Humanities, Law, and Agricultural Sciences. Over the last three decades, it has set standards in experiential learning and knowledge creation across various fields. It has reached beyond borders to universities and corporates across India and around the World. There are four sprawling campuses three in and around Chennai, and one near New Delhi spread across 250 acres with all facilities. It had conducted 98th Indian Science Congress in January, 2011 which was attended by 7,000 delegates from India and abroad, including six Nobel Laureates and several eminent scientists. SRM IST is the first private university in India to launch a nano-satellite, named SRMSAT, into space, on board the PSLV-C18 from Sriharikota on October 12, 2011. The institution has grown up through international alliances and collaborative initiatives to achieve global excellence. Over 200 students are sponsored for 35- foreign Universities like MIT, Carnegie Mellon, UC Davis, Warwick and Western Australia annually. SRM IST is accredited by NAAC with the highest Grade of 'A++'. QS, the world renowned international ranking agency, has rated SRMIST as 'Four Star, Institute and QS-IGAUGE has awarded Diamond Rating to SRMIST. SRMIST is classified as Category I University by UGC/MHRD and enjoys 12B status too under UGC Act.

## DEPARTMENT OF AEROSPACE ENGINEERING

The Department of Aerospace Engineering was established in 2007. It offers four years degree B.Tech Program. It has well equipped laboratories. Our Aerospace hangar houses Cessna, Eurocopter, Kiran aircraft, Airbus A300 simulator, different types of engines and landing gear components. Aerodynamics lab comprises of subsonic & supersonic wind-tunnel, sophisticated high-speed jet facility, smoke tunnel, boundary layer tunnel, etc; Aircraft Structures lab; Aero fluid mechanics lab; CFD lab & Advanced computation lab; Material Testing lab; Avionics lab and Dr. APJ Abdul Kalam Memorial Propulsion Laboratory, exclusively for solid propellant making and firing to determine thrust, burn rate and to study combustion characteristics with high speed camera. The department had received AR&DB grant funded project in structures domain & consultancy project from NARL, Tirupathi.

### ABOUT PROGRAMME

To introduce the theory behind finite element calculations of stress, strain, and deformation in structures & materials and describe the role of a commercial finite element package in structural analysis and design. Overview on the significance of finite element analysis and the importance of updating knowledge on the latest technologies will be discussed..

### WHO WOULD BENEFIT

Faculties, Research Scholars and students from the institute offering courses in Aeronautical & Aerospace Engineering.

## OBJECTIVES

A Three days webinar is organized to promote the basic and applications of finite element method to solve the several types of problems in aerospace engineering. Applicability of the method and different types of formulation procedures will be explained. The objective of the webinar is to introduce the use of advanced finite element methods in the calculation of deformation, strain, and stress in aerospace structures.

- ❖ Include special lectures from experts in interdisciplinary areas.
- ❖ Lectures on the State of art techniques.

## COURSE CONTENTS

- ❖ Basic concepts of FEM
  - ❖ Applications of FEM in Structural problems (Case Studies)
  - ❖ Applications of FEM to Aerospace Structures
- Experts from different specializations will be delivering lectures in various sessions. Each session would be followed by interactive sessions on the subject matter.



## REGISTRATION LINK

[https://docs.google.com/forms/d/e/1FAIpQLSdSkfis\\_oWSMBSQK2w2UsR5eFjmaPJOGMU\\_-Ng0CP-JPyKo9w/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdSkfis_oWSMBSQK2w2UsR5eFjmaPJOGMU_-Ng0CP-JPyKo9w/viewform?usp=sf_link)

## TECHNICAL EXPERTS

**Dr. Ganapathi Manickam**

Professor,  
School of Mechanical Engineering,  
VIT University, Vellore

01  
Nov  
2021

**Dr. V. Balamurugan**  
Scientist G & Addl. Director,  
Aircraft Project Division,  
CVRDE, Chennai

02  
Nov  
2021

**Dr. Vinyas Mahesh**  
Assistant Professor,  
Department of Mechanical Engineering,  
NIT Silchar

03  
Nov  
2021

### Topics Covered

- ❖ Day 1:
  - ❖ Basic concepts of FEM
- ❖ Day 2:
  - ❖ Applications of FEM in Structural problems (Case Studies)
- ❖ Day 3:
  - ❖ Applications of FEM to Aerospace Structures

### Address for Communication

Dr. S.Sivakumar  
Associate Professor  
Department of Aerospace Engineering,  
SRM IST, Kattankulathur – 603 203  
sivakums2@srmist.edu.in

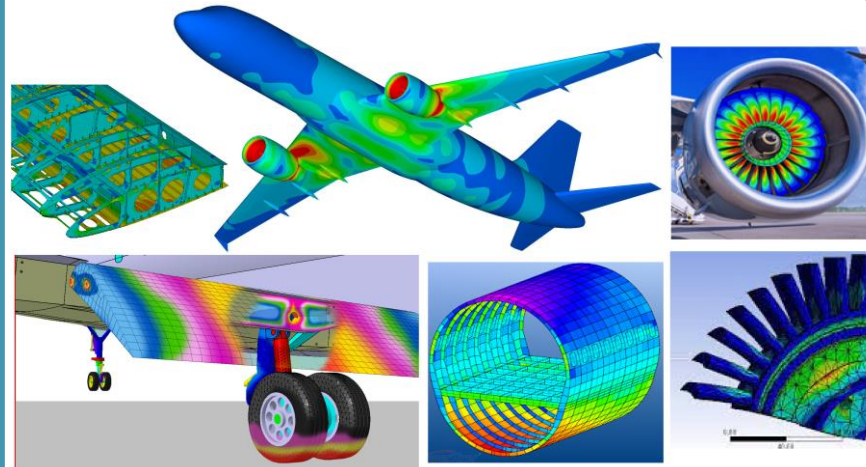


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