An International Workshop on

Recent Advancements in the Structural design of Stealth Airborne Platform (RASSAP)

Organized by

School of Mechanical Sciences, IIT Bhubaneswar
and
Aeronautical Development Establishment, DRDO, Bengaluru

Venue: IIT Bhubaneswar
Date: 16 December 2025

About the workshop

In today's era of modern military competition, minimizing an aircraft's detectability by enemy radar is of paramount importance. Stealth technology plays a critical role in this pursuit by diverting or absorbing incoming radar waves-an area where multifunctional composites show exceptional promise. Despite their potential, these advanced materials remain relatively less explored and not yet fully understood. Several critical aircraft components, including air intake ducts and leading edges, increasingly demand the integration of multifunctional radar-absorbing structures to enhance survivability and performance.

To realize their full potential, a comprehensive investigation of their structural properties is essential. This includes impact and damage resistance, fatigue behaviour, mechanical characterization across extreme temperature ranges, and environmental durability. Equally important is the development of computational modelling approaches, which represent a rapidly emerging research frontier with vast opportunities for innovation and application. Through expert-led sessions, participants will gain valuable insights into emerging concepts, innovative design strategies, and practical applications in stealth technologies for airborne platforms. For more information, please visit our website.

About IIT Bhubaneswar

IIT Bhubaneswar (IITBBS) is a prominent institute among the eight new IITs initiated in 2008. The institute's vision is to be a highly respected institute in the world for its distinctive knowledge. IITBBS offers programs like BTech, MTech, MS by research and PhD in various disciplines. As a mark of its commitment towards all round excellence, IITBBS has jumped 15 spots in the Engineering Category of NIRF rankings for the year 2025 and secured 39th position in this category.

Major Topics

Low Observable Manned and Unmanned Aircraft
Structural design of airborne platform
Coupled Computational Mechanics-Electromagnetics
Radar Absorbing Structures
Metamaterials Design and Fabrication
Impact studies of stealth aircrafts
Low Observable Configuration Design
Principles of stealth technology
Stealth materials for airborne platforms
Frequency Selective Surfaces (FSSs)
Additive and 3D Printing
Machine learning in aircraft design

Experts from international universities, IITs, DRDO, and ISRO will be interacting with the participants.

Who can attend

- Scientists, Executives, engineers and researchers from manufacturing, service and government organisations including Research & Development laboratories.
- Students at all levels (B.Tech./MSc./M.Tech./PhD), Postdocs and Faculty from academic institutions and technical institutions.

Registration

Registration is mandatory for attending the workshop.

1. Fill up the details in the Google form : Registration Link
2. Pay the registration fee using the following link : Payment Link
3. Receive a confirmation email within the next 3 working days.

Registration fee

Participants registered for ICCMS2025 : NIL

Only workshop participants (including GST)

Delegates : Rs. 4720
Faculty members and postdocs : Rs. 2360
Students : Rs. 1180

The registration fee includes access to all workshop sessions, breakfast, lunch, and snacks.
On-campus accommodation will be provided upon request, on a paid basis and subject to availability.

Important dates

Registration Deadline : 01 December 2025
Final Notification to the candidates : 05 December 2025
Workshop dates : 16 December 2025

Workshop coordinators

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