DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY (DU), PUNE

Mechanical Engineering Department

&

Metallurgical & Materials Engineering Department

In association with

Adhesion Society of India

IS ORGANIZING

Symposium on Futuristic Adhesive Materials For Defence Applications

17 –18th Dec. 2026

About Symposium

Futuristic defence technology involving adhesion engineering is transforming the way military systems are designed, repaired, and deployed. Advanced adhesives and adhesion technologies are increasingly replacing conventional joining methods such as welding and mechanical fasteners in aircraft, naval vessels, armoured vehicles, and space-defence systems due to their advantages of reduced weight, enhanced strength, and improved durability. The symposium aims to provide a common platform for researchers, scientists, academicians, defence personnel, and industry experts to deliberate on recent advancements, challenges, and future opportunities in adhesion engineering for defence applications.

Themes to be covered

- **High Temperature Aerospace Adhesives**
- **Adhesion Engineering in Military Robotics**
- **Adhesion Engineering in Underwater and Marine Defence Applications**
- **Electromagnetic Adhesion**
- **Structural Adhesives**
- **Functionally Graded Adhesives**
- **Adhesives in Composite Structures**
- **Smart Adhesives**
- **Battlefield Repair and Rapid Assembly Technologies**
- **Stealth Bonding Technologies**
- **Nano-adhesives**
- **Smart and Self-healing adhesives**
- **Adhesion Technologies for Space and Defence Systems**
- **Survivability Enhancement through Adhesion Engineering**
- **Advanced Bonding Techniques for Aerospace Applications**
- **Repair and Retrofitting using Adhesive Technologies**
- **Emerging Trends in Defence Adhesion Engineering**

About DIAT

Defence Institute of Advanced Technology (Deemed to be University), Pune is a premier technology university, established u/s 3 of the UGC act 1956. MHRD, Government of India has placed DIAT (DU) in Category 'A' Deemed to be University. DIAT is 'National Assessment and Accreditation Council' (NAAC) and National Board of Accreditation (NBA) accredited. DIAT is the only technical university of Ministry of Defence, Govt. of India which enjoys the autonomy of a full-fledged University, having wealth of academic acumen and financial and technical support from Defence Research and Development.

DIAT is engaged in imparting technical education, in niche areas at PG (M.Tech) & Ph.D in its various forms & capacities. The main focus of the Institute is to evolve into an innovative and unique teaching & research university to develop indigenous contemporary defence-related technologies. The University is spread over 496 acres in scenic beautiful location, overlooking Khadakwasla lake, in Sahyadri hills. The university has been awarded various education excellence awards. The university has well-equipped laboratories with latest equipments and simulation/analysis

Adhesion Society of India (ASI)

The science and technology of Adhesion is one of the most important subjects in the world of structural and functional systems with varied applications. The numerous methods of adhesive bonding and the wide spectrum of adhesives, adhesion promoters industrially used speak volumes of the importance of this subject. Despite the large-scale use of various adhesives and technologies of bonding materials, the scientific exploration of adhesion has not been holistically undertaken in our country.

A group of scientists took the initiative and a Society was formed and registered in year 2025 as "Adhesion Society of India" (ASI) under the Societies Registration Act 1860, Govt. of India (Registration No. Pune/0002341/2025). The Society aims to promote education, research, training, and innovation in adhesion science and technology through academic programs, workshops, publications, scholarships, and professional recognition. It will foster national and international collaborations among researchers, industries, and institutions while supporting students and professionals through conferences, technical guidance, and fellowship programs. The Society will also develop digital resources and organize educational and technical activities to advance knowledge transfer and practical applications in the field of adhesion science.

About Mechanical Engineering Department

The Department of Mechanical Engineering has been one of the important departments in the Institute since 1976. Presently, the department is offering unique, specialized programmes in the country, namely Armament and Combat Vehicle (ACV), System Engineering, Marine and Mechanical System Design (MSD) at the Post Graduate level besides Ph.D. and Master of Science (By Research) programmes. These programmes are open to all students under sponsored (DRDO, DPSUs, Industry, and Tri-services, etc.) and general categories. MTech programmes offered by the department are accredited by NBA.

About Metallurgical & Materials Engineering Department

The Department of Metallurgical & Materials Engineering, which started in 1985 under the name of 'Faculty of Metallurgy,' was recently rechristened to its present name in 2010. The Department is striving to create a vibrant atmosphere for education and research in materials science and engineering. Towards achieving this, the Department is imparting education and training to DRDO Scientists, Service Officers, and scholarship students through its various academic programs, viz., M. Tech, MS, and Ph.D. and by participating extensively in R&D activities for different DRDO labs such as ASL, DMRL, NMRL, DMSRDE, ADE, DEBEL, NPOL, and Industries. MTech programmes offered by the department are accredited by NBA.

Registration Details

- **Please submit registration form along with transaction details.**
- **Please visit website for more details (https://adhesionsocietyofindia.net / www.diat.ac.in)**
- **For Registration Fees (Scan & Pay)**

Students : Rs. 2360/-
Faculty/Scientists : Rs. 4720/-
Industry : Rs. 5900/-

Inclusive 18% GST

- However, GST is not applicable for DIAT Participants.
- Discount of Rs.1000/- is applicable for ASI Members.
- The Filled-in registration form along with transaction details is to be sent to asihqrdiat@gmail.com. or sunil.nimje@diat.ac.in

Patrons

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Vice Chancellor, DIAT(DU),Pune
and
Dr. K. L. Mittal
Honorary President & Founder, ASI

S. K. Panigrahi
Convenor/Chairman, ASI
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Abstract Submission

Authors are invited to submit abstracts of 250 words highlighting their research contributions aligned with the themes listed in the "About Symposium" section or related areas. Please visit website (https://adhesionsocietyofindia.net/www.diat.ac.in) for abstract template. All submitted abstracts will undergo peer review. Authors of selected abstracts will be invited to present their work through oral or poster presentations during the symposium.

Important Dates

- **Abstract Submission : 15th Nov 2026.**
- **Abstract Acceptance : 20th Nov 2026.**
- **Last date of Registration with payment : 25th Nov 2026.**

Contact details

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