

About ARMS-2023:

'Aerospace Related Mechanisms & Systems (ARMS)-2023', 13th National Conference on 'Innovations & Developments in High Altitude Technologies & Related Mechanisms' is being organized by Aerial Delivery Res & Dev Establishment (ADRDE), Defence Research & Development Organization (DRDO), INSARM Agra Chapter.

ARMS-2023 will provide a technical forum to bring together Scientists, Experts, Academia, Industry & Users to share their innovative work & ideas in the field of Aerospace and Related Technologies enabling development of futuristic and smart systems to cater for the requirements of High-Altitude Technologies & Related Mechanisms.

ARMS-2023 invites Scientists, Engineers, Professionals, Academia, Industry professionals & Users to discover explore and showcase their expertise & innovative work carried out in field of **High-Altitude Technologies & Related Mechanisms** etc.

ARMS-2023 is being organised at ADRDE, Agra on 14-15th Dec 2023

About ADRDE, Agra:

This establishment came under the fold of DRDO in May 1968 and ADRDE was established in January 1969 at Agra. During the resurgence of DRDO in 1980s, ADRDE was brought under cover of Directorate of Aeronautics. With this, the scope of activities of ADRDE widened to include programs like Aircraft Arrestor Barrier System, Balloon Technology besides design of Aerodynamic Decelerator and allied systems.

ADRDE has already developed various products in the field of Parachute Systems for applications including Personnel and Ejection Seat Parachutes, Recovery Parachutes, Armament and Ammunition Delivery Systems, Brake Parachutes and Heavy Drop Systems. Apart from Parachute Systems, the lab has indigenously designed, developed, two variants of Aircraft Arrestor Barrier Systems which are installed at various locations and also has designed & developed Inflatable RADOME. The lab has successfully participated in Space Capsule Recovery Experiment (SRE) mission of ISRO by designing the optimum parachute & flotation system and carried out design & development of Parachute System for prestigious Human Space Program (HSP) of the country. ADRDE is designing & developing Parachute system for the prestigious National Program 'GAGANYAAN' of ISRO. Keeping pace with the global trend in relevant technological arena, the laboratory has developed state of the art Lighter Than Air (LTA) systems i.e. Aerostats like AKASHDEEP, NAKSHATRA (operational altitude of 1 km) for surveillance purpose, using COMINT / ELINT/ EO Payloads, development of Unmanned Small Airship System.

Apart from its prime responsibility of R&D for design and development of Parachutes, Aerostats, Heavy Drop Systems etc., this establishment also provide technical product supports to Armed Forces for their existing services stores and equipments in the relevant field. Life extension studies for various existing products are also undertaken by ADRDE depending upon needs of the users. This covers indigenous products and ex-import as well. ADRDE possess a strong base of Textile Engineering & has developed Production partners and vendors especially in the area of textiles, metal components, mechanical structures, textile & mechanical fabrication, electronics etc. ADRDE maintains good synergy with various academia, industrial partners and users. This establishment is poised to meet the futuristic requirements of the Services & Space organizations by developing state-of-the-art systems.

About Agra:

Home to one the Seven Wonders of the World the Taj Mahal, Agra is one of the most popular tourist destinations in India. Along with Delhi and Jaipur, Agra forms the Golden Triangle of tourism in India. Situated in Uttar Pradesh, Agra is synonymous with the Taj Mahal however there's lot more to the city than this world-famous monument. Right from the epic Mahabharata to the Mughal Dynasty, Agra has been monumental and has played a significant role in shaping India's history, it was the capital of the Mughal Empire. Under the Mughal reign Agra was called Akbarabad and was ruled by greats like Akbar, Jehangir, Shah Jahan, etc. Their love for architecture, gardens and art and culture added a new dimension to Agra's personality. With so many prominent rulers having ruled the city, Agra is home to several important monuments including three UNESCO World Heritage Sites: Taj Mahal, Agra Fort and Fatehpur Sikri. A trip to Agra is incomplete without paying a visit to these that will take you back to an era of its glorious past.

Agra is well connected by road, rail and air with most parts of the country as it is a prime tourist destination. Agra is only 200 km away from Delhi and 300 km away from the state capital Lucknow. Agra is connected through these cities by expressway also. India's fastest trains, the Gatimaan Express and Vande Bharat that runs between Delhi and Agra in flat 100 minutes is also an option for travelling. Climate in December/January is cold.

Call for Paper:

ARMS-2023 invites Abstract (limited to two page)/ manuscript within the scope of the conference written in the English language. ARMS-2023 shall provide an opportunity to authors to share their expertise with scientists, academicians, industrialists and scholars enabling them to enrich experience, gain new ideas and will get to know about the latest work being carried out in these areas. The manuscript will be reviewed by a committee before acceptance. Authors are requested to submit the final full-length research paper in IEEE double column format on A4 size limited to 8 pages in MS Word. The accepted manuscripts will be published in electronic format and abstracts will be published in the form of Souvenir. Abstract/Full paper may be sent to arms2023@insarmagra.in

Important Dates:

Last date of submission of abstract : **30th Sep 2023**
Last date of notification of acceptance : **15th Oct 2023**
Last date of submission of full paper : **15th Nov 2023**
Last date of author/delegate registration : **5th Dec 2023**

Conference Topics:

The main topics covered in this Conference are: -

1. Decelerator systems and related technologies
2. High Altitude Technologies/Aerostat associated surveillance system /Airship/Stratospheric Airship and its related technologies
3. Mechanisms in launch vehicles/Missiles/Aircraft/Helicopters/Satellites /UAVs
4. Design, Analysis, Modelling, Simulation of Systems for Aerospace & Defence Mechanisms.
5. MEMs devices, Smart Mechanism
6. Warhead, Armaments, Fuzes and Safe Arm Mechanism
7. Aerospace Mechanisms for the future
8. Automation in Defence equipment and Aerospace industry

9. Reliability and Life cycle study of mechanisms.
10. Robotics, Space docking, Berthing and Rover mechanisms
11. Artificial Intelligence for Aerospace Systems
12. Multiagent and Swarm Robotics
13. Guidance, Navigation and Control for UAVs/LTA
14. Tribology for Aerospace & Defence Applications
15. Positioning, Pointing, Reuse Recovery mechanisms
16. Ejection systems for Missiles and Launch vehicles, Crew modules

Registration Fee:

Category	Amount
Students	: 500 INR
Govt. / R&D Organization/ Academia	: 6,000 INR
INSARM Members	: 5,000 INR

Payment:

Payment to be made through Cheque/Demand Draft/Online Transfer in favour of INSARM AGRA CHAPTER, payable at Agra.

A/c Name: INSARM AGRA CHAPTER **Branch:** Bank of Baroda, Agra Cantt

A/c No.: 77190100001103 **IFSC Code:** BARBOVJCAAG

UPI : insarmagrachapter@barodampay

Accommodation:

Accommodation will be arranged in Hotels/Guest House on payment basis as per the eligibility.

Accommodation and transport request may be sent to arms2023@insarmagra.in

Advertisement in Souvenir:

		Complementary Registration
Back cover Outside	: 60,000 INR	01
Front cover Inside	: 50,000 INR	01
Back cover Inside	: 50,000 INR	01
Inside Page (Full Page):	25,000 INR	-
Inside Page (Half Page):	15,000 INR	-

Exhibition:

An Exhibition of High-Altitude Technologies & Related Mechanisms and related products is being planned as part of the conference. Exhibits of Mechanisms, working models, laminated photos, products and posters will be accepted. Those interested are requested to send the list of items to be exhibited and space requirement. Industries are invited to participate with products as well as software related to mechanisms. **Exhibition Fee: 50,000 INR per cubicle/stall of size 3.0 m length, 3.0 m width and 2.4 m height, Complementary registration-1 No.**

Souvenir:

A souvenir consisting of abstract of papers will be brought out in the conference. It will also provide an opportunity to industries/ equipment manufacturers/ dealers/ traders/ consultants to advertise their product and services.

Sponsorship:

	Amount	Exhibition	Complementary Souvenir	Free Delegates
Platinum	:3,00,000 INR	2* Stall	Full Pg Adv.	04
Gold	:2,25,000 INR	1* Stall	Full Pg Adv.	02
Silver	:1,50,000 INR	----	Half Pg Adv.	01

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13th National Conference & Exhibition: ARMS-2023

ON

“Innovations & Developments
in High Altitude Technologies
& Related Mechanisms”

Venue: ADRDE, Agra

14th -15th December 2023



Organized by
Aerial Delivery Res. & Dev. Establishment
DRDO, MOD, GOI, Agra –1

In Association with
Indian National Society for Aerospace & Related Mechanisms