Students Achievements

Illustrious Alumni & Entrepreneurs of the Aerospace Engineering Department

Mr Tanveer Ahmed, Batch 2017-2021- Co-Founder and Chief Technical Officer of Digantara-Aerospace Start-up

Tanveer Ahmed
Founder & CEO
Digantara research and technologies

DIGANTARA

Team Antariksh

TEAM antariksh

RVSAT-1: on Dec 30th 2024 from Shriharikota.

India's First Microbiological Payload, to study the growth characteristics of Gut Bacteria *Bacteroides thetaiotaomicron*. It was a 2U CubeSat of the dimensions 100mm x 100mm x 235.17mm and weighed 1.8kg. The mission was for 3 days, and it was launched onboard PSLV C-60/SPADEX Mission to a 350km circular orbit.

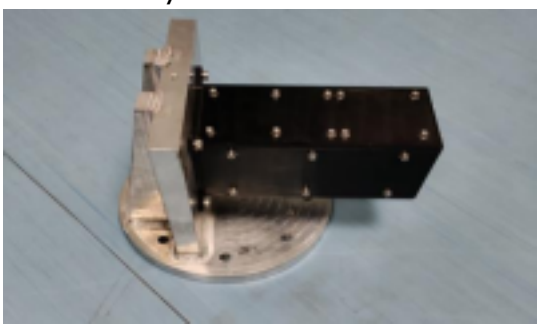
The design principle of measuring growth rate was to use an optical setup and measure the change in optical density as the bacteria grow.

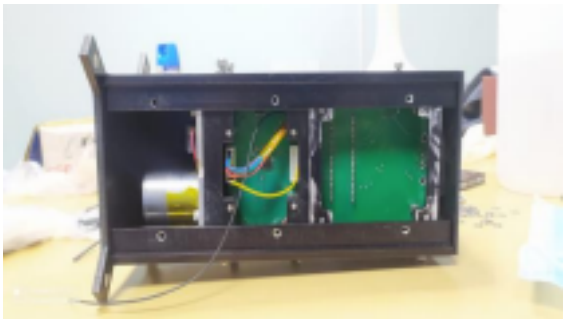
RVSAT-1 testing dates and outcomes:

1) TVAC-1: Thermovacuum testing was done at CREST, IIA near Hoskote, Karnataka, on 22nd July 2024 on the Qualification Model (QM) of RVSAT-1. The testing was successful and the payload behaved as intended under the simulated space temperature and vacuum.
2) Sinusoidal Sweep and Random Vibration Test-1: This was also done at CREST, IIA, on QM. The X and Y axes showed full compliance. In the Z axis, only one accelerometer between two Connectors showed amplification.
3) EMI/EMC-1: Electro-Magnetic Interference and Electro-Magnetic

Compatibility testing was done at Tata Advanced Systems Ltd. on 17th August,2024. Full compliance was observed in Conductance Susceptibility and Radiation Susceptibility, and partial compliance was observed in Radiation Emission.

4) Shock test: This was performed on 28th October 2024 at U. R. Rao Satellite Centre, Bengaluru, Karnataka. QM payload behaved as intended and withstood 1500g shock load on all 3 axes.
5) TVAC-2: This was done at CREST, IIA on the Flight Model (FM) on 6th November. Nominal behaviour observed.
6) Vibration Test-2: On 10th November 2024, this was done at CREST, IIA. Nominal behaviour of FM was observed.
7) EMI/EMC -2: This was done at Vikram Sarabhai Space Centre, Thiruvananthapuram, Kerala. Full compliance and FM payload were passed.
8) Equipment Bay checks: EB checks were done at VSSC. Mechanical Interface with PSLV, all systems' health and data were tested. All these tests were successfully cleared. Payload was cleared to be mounted on PSLV.





2U CubeSat with Bacteroides thetaiotaomicron Payload

Official Mission Name	**PSLV-C60 SPADEX/POEM-4**
Launch Date	**30th December 2024**
Mass	**1.8 kg**
Dimensions	**100mm x 100mm x 235.17mm (2U)**
Average Power	**6 W**
Peak Power	**15 W (30 mins max)**

Operation duration	**3 days**

EVENTS ORGANISED BY TEAM ANTARIKSH:

October Sky (4-6 January 2023, RVCE): October Sky was a two-day model rocketry workshop conducted at RVCE from 4th to 6th January 2023, which included theoretical sessions and hands-on training to build rocket motors from scratch.

Space Payload Challenge (15 June 2023, RVCE): The Space Payload Challenge, held on 15th June 2023 at RVCE as part of the 8th Mile techno-cultural fest, aimed to encourage students to design innovative and creative payloads for space applications.

World Space Week - Space Payload Design Hackathon (9-10 October 2024, RVCE): As part of World Space Week 2024, RVCE hosted a Space Payload Design Hackathon on 9th and 10th October, where participants worked on designing innovative space payload concepts.

World Space Week - Model Rocketry Workshop (9-10 October 2024, RVCE): During World Space Week 2024, a Model Rocketry Workshop was organised on 9th and 10th October at RVCE, providing participants with practical knowledge to build and test solid rocket motors.

World Space Week - **Art for Climate Change** (9-10 October 2024, RVCE): In an effort to raise awareness about climate change, an event titled 'Art for Climate Change' was organised during World Space Week 2024 at RVCE, combining space-themed art and environmental advocacy.

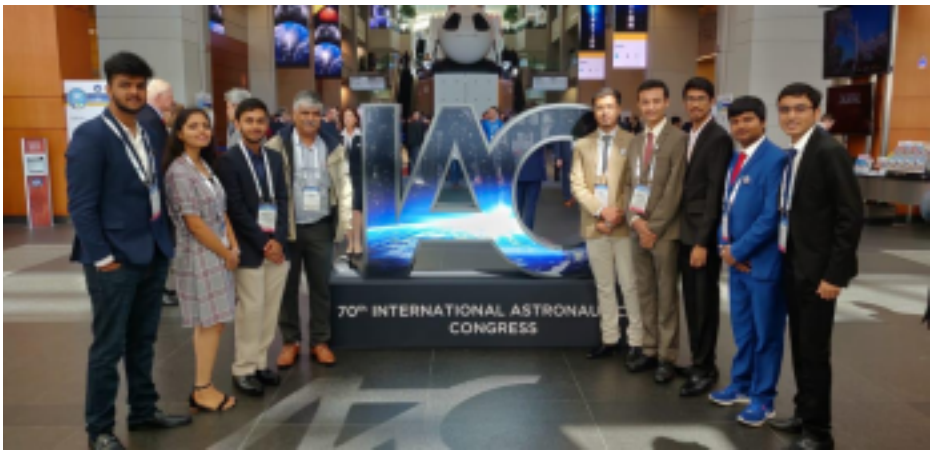
Static Fire Fiesta - Solid Motor Workshop (19 December 2024, RVCE): The Static Fire Fiesta, held on 19th December 2024 at RVCE as part of Aeromania 2024, featured a solid motor workshop with demonstrations and hands-on activities

focused on rocket motor design and testing.

TEAM ANTARIKSH- CLUB ACTIVITIES & ACHIEVEMENTS

1. Successful acceptance of the proposal for the PS-4 Orbital Platform, ISRO

Paper Presentation at the 25th International Congress of the Italian Association of Aeronautics & Astronautics - 2019, Rome, Italy.



Paper Presentation at the 70th International Astronautical Congress - 2019, Washington D.C, USA

Selection in Spaceport America Cup - 2020, New Mexico, USA

TEAM ANTARIKSH

TECHNICAL ACHIEVEMENTS:

Insight Mk-1(2nd April, 2023): Team Antariksh's first-ever sounding rocket with a cardboard airframe and an H-class solid motor reaching an apogee of 117m.

Insight Mk-1.5(1st July, 2023): constructed using an acrylic body tube and housing a vibrational payload, it reached an apogee of 208m.

Insight Mk-2(27th August, 2023): Launched in the Latin America Space Challenge, São Paulo, Brazil. It had a Dual parachute deployment system and a COTS L-class motor.

Mission Aarohan - Ardra(7th April, 2024): Successful parachute reefing demonstration. Using the SRAD Bell Nozzle motor, the rocket reached 660m Apogee and achieved live telemetry

Mission Aarohan - Ananta(8th December, 2024): Apogee of 1161.4m, with on board camera, live telemetry and successfully recovered.

Inchara N K IV year Aerospace Student (2021-2025) - Represents India in Sub-Orbital Spaceflight Training as an Astronaut Candidate in Florida, USA




Inchara NK, IV-year Aerospace Engineering student, has achieved a remarkable milestone by becoming the youngest Indian to train as an astronaut candidate for sub-orbital spaceflight in collaboration with the Canadian Space Agency, Final Frontier Design, Embry-Riddle Aeronautical University, and several other research labs for major companies like Virgin Galactic, Blue Origin, and Sierra Space. This prestigious training took place in April 2025, where Inchara completed:

- Spaceflight simulator training (both suited and unsuited) • IVA pressurised spacesuit evaluation
- Hypoxia training in a hypoxia chamber up to 21,000 feet

- Co-piloting the Piper aircraft on an imagery flight
- Practising 5.5+ G-forces, 0 gravity, and negative G-forces during aerobatic manoeuvres on the Extra 300 aircraft
- Studying space medicine, flight planning, noctilucent clouds, spaceflight life support systems, and spacesuit design

Inchara worked alongside esteemed instructors, including ***Jason Reimuller***, astronauts ***Shawna Pandya*** and ***Kellie Gerardi***, ***Captain Aman Johri***, and ***Erik Seedhouse.***

This achievement reflects Inchara's exceptional determination and vision, setting a powerful example for future generations to pursue excellence, break barriers, and contribute to advancing aerospace and space exploration, as well as India's race to space.

List of students who have excelled in academics during 2024 (State, National & International Events only passing out students)

Participated in the MechAura 2024 competition organised by Collins Aerospace and Pratt & Whitney and secured 1st place. As part of her achievement, she has been awarded an internship opportunity at Pratt & Whitney

Participated in the MechAura 2024 competition organised by Collins Aerospace and Pratt & Whitney and secured 3rd place. As part of her achievement, she has been awarded an internship opportunity at Pratt & Whitney

Anagha Udupa	1RV21AS007	Aerospac e	Participated in the MechAura 2024 competition organised by Collins Aerospace and Pratt & Whitney. As part of her achievement, she has been awarded an internship opportunity at Pratt & Whitney
Anisha Bhattacharya	1RV21AS009 Aerospace		Participated in the MechAura 2024 competition organised by Collins Aerospace and Pratt & Whitney and secured 1st place. As part of her achievement, she has been awarded an internship opportunity at Pratt & Whitney
			Presented a paper titled "Early Design Phase-Solar HAPS UAV" at Conference on Automation Science and Engineering (CASE-2024), Italy and got a travel grant from IEEE-RAS_WIE
Ankitha Shet	1RV21AS010	Aerospac e	Participated in the MechAura 2024 competition organised by Collins Aerospace and Pratt & Whitney and secured 3rd place. As part of her achievement, she has been awarded ian nternship opportunity at Pratt & Whitney

Vishal Hugar	1RV21AS064	Aerospac e	Developed RVSAT-1, India's first

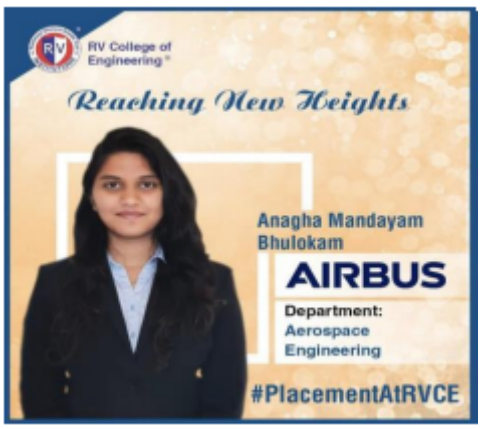
Om Kiritbhai Daxini	1RV21AS037	Aerospac e	microbiological payload, as part of Team Antariksh, for the POEM-4 experimental platform. Launched via the PSLV-C60 on 30th December 2024 at Satish Dhawan Space Center SHAR, Sriharikota.
Prajwal N	1RV21AS041	Aerospac e	
Ambuja Bamane	1RV21AS006	Aerospac e	
Abyan Raidh	1RV21AS003	Aerospac e	
Krush Machhi	1RV21AS028	Aerospac e	Placed 2nd in Asia, representing India at the Latin American Space Challenge 2023, the 2nd largest experimental rocket and satellite engineering competition in the world.
Pratik B Matt	1RV21AS044	Aerospac e	
Jeevitha J L	1RV21AS023	Aerospac e	
Veerabhadray ya C Roogi	1RV21AS063	Aerospac e	
Pratik B Matt	1RV21AS044	Aerospac e	Secured First Place in ICCMEH 2023 CFD Competition, International Conference
Sadiq Ali Mir, 1RV21AS049		Aerospac e	Selected for the Work Force Development Program as Lead Systems Engineer by NASA and the Milo Mission Academy
			Presented a Research Paper on Supersonic aircraft design and Analysis at the Annual AESI CFD Synopsis BIT, Mesra
			Developed Sustainable High-Speed HyperSwift Hyperloop System for AAKRUTI Global 2024 by Dassault Systèmes
Vishal Hugar 1RV21AS064 Aerospace			Launch of RVSAT-1, India's first microbiological payload
			Secured First Place in ICCMEH 2023 CFD Competition, International Conference

Cultural Activities – (CAT secretary to provide the Information – State, National & International Events only) passing out students – 2024

Vishal Hugar	1RV21AS064	Aerospace	Placed 1st in the Institute of Law, Nirma University Debate Competition (Novice Category)

PROJECT JATAYU- CLUB ACTIVITIES & ACHIEVEMENTS

1. AUSVI SUAS 2019 - Maryland, USA (Ranked 27th out of 75 teams worldwide) 2. Techoxian 2019 - New Delhi
3. Aerodominator 2019 - VIT, Vellore
4. Flight 2020, MIT, Chennai
5. Tech Connexion - 1st Place
6. Air Crash Investigation - 1st Place
7. CAD Modelling - 1st Place
8. Technical Paper Presentation - Finalist



Anagha MB & Gargi Sunil Pantoji Placed at Airbus from the college recruitment drive. Total no. of applied applicants – 600, Total Selected - 3

Aishvarya D Joshi, Winner of the MechAura Competition by Collins Aerospace, secured a prize money of 1L and a job offer from the company

Avinash Mani, Batch 2021, Aerospace Engg. Department, participated & won many awards in various National & International Swimming Championship events

National & International Swimming Championship events

The RVCE Aerospace team were runner-up at Quest Ingenium

Adarsh Agarwal from the Aerospace Department was announced the winner at World Space Week 2018

Students posing for a snap at the 29th IAC

Sports Achievements - Sports Secretary / PED to provide the information (University, State, National & International Events Only), passing out students - 2024

Dr. Ravindra S Kulkarni Prof. & Head Aerospace	Patent Grant	Patent titled "SOLAR-BIOGAS HYBRID REFRIGERATIO N SYSTEM", has been granted in the year 2024 with Patent No. 501049
	Dr. RS Kulkarni (PI) and Dr. P Nagaraj (Co-PI), along with their dedicated team of students, have played a pivotal role in the successful development and launch of RVSAT-1, India's first microbiological payload, as part of the POEM-4 experimental platform aboard the PSLV-C60 mission on 30th December 2024. Their leadership and collaborative efforts have significantly contributed to this groundbreaking achievement in space research.	

Mr. Srikantamurthy	Mechanic	Aerospace	Completed Diploma in Mechanical Engineering	Secured First Class with Distinction with CGPA-9.52

Achievements of NCC Activities – 2024

Ms. Veda Jambigi	1RV23AS062	3rd Sem/Aerospace Engineering	1) Participated in the Inter-Directorate Shooting Competition 2) 33rd All India G V Mavlankar Shooting Championship 3) 67th National Shooting Championship Competition

NSS Students Details – 2024 Outgoing Batch – extraordinary achievement

Jagadeesh Vijapur	1RV21AS022	jagadeeshhv.ae21@rvce.edu.in	8073991238	National Integration Camp
Eshwari B N	1RV21AS016	eshwaribn.ae21@rvce.edu.in	9742363154	Mega Plantation drives