Sponsorship Brochure

TEAM IGNIS

The Rocket Propulsion Centre, COEP
Technological University, Pune

About Us...

IGNIS is the official rocketry team of COEP Technological University, Pune.

We are a passionate and multidisciplinary group of 35+ students from various departments.

Our mission is to pioneer innovation in student rocketry and represent India at global competitions like Spaceport America Cup 2026 in the SRAD 10K category.

We also aim at making space more accessible by using reusable rockets at competitive costs.

Rocket Specifications

Airframe Diameter:- 7.5 cm

Estimated Apogee:- 650m+

95cm
Total length
Of Airframe

Recovery Parachute
uses black powder charge to eject parachute, helping the rocket recover safely

Avionics and payload section
helps the rocket to achieve mission objectives and recover itself

Aerodynamic fins
for stability throughout the flight

Propulsion System(Class H motor)
Propulsion type:- Solid Fuel (KNDX)
Manufactured entirely by us

The Airframe is composed of Glass fiber, 3D printed ABS, poly-acrylic entirely in-house

About the motor:-

Unlike most teams that rely on commercially available motors, we have dedicated significant effort to research and develop our own H-class motor in-house. This motor produces an average thrust of 440 N and has undergone extensive testing. Through multiple iterations and upgrades, we have made it highly reliable — a fact proven by its successful deployment in our first rocket launch.
We have also successfully tested our motor over five times, consistently demonstrating its performance and reliability.

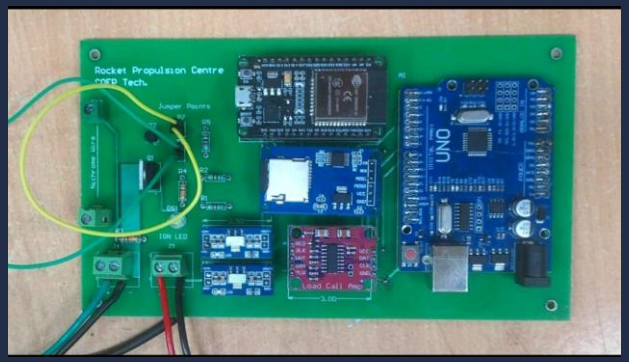
First Successful Iteration of our motor

Specifications of our motor

Propulsion Type: Solid fuel(KNDX)
Total impulse: 298Ns
Specific impulse 127s
Burn time 0.7s
Thrust: 440N

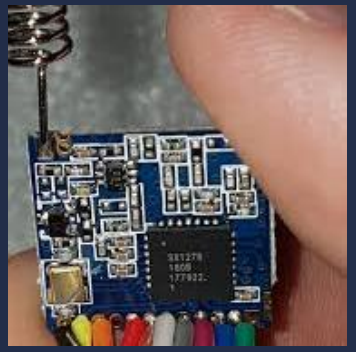
Avionics & Control Team

The On-board avionics consists of an gyroscope, altimeter, SD card for real time data logging, GPS, and power sources to monitor flight path, and deploy parachutes for recovery. The entire circuit is assembled and designed in-house and tested multiple times. The circuit is made flexible to accommodate future upgrades and fixes.



Altimeter Circuit, the brain of the rocket

Load cell for measuring thrust



LoRa Module for Remote Launch Capability

The rocket's remote launch functionality is enabled through LoRa-based communication modules. Thrust during on-ground static motor firings is accurately measured using load cells.

Recovery

The Recovery system consists of one parachute, which is present on the nose of the rocket. At the right moment, a black powder charge ejects a parachute to land softly

After the rocket has completed its mission, the on-board GPS system helps re-locate the rocket, in certain scenarios

Vision & Mission

Vision:
To become a globally recognized student rocketry team capable of launching reusable rockets, and to evolve into a pioneering space company that provides cost-effective satellite launch services with a strong focus on reusability.

Mission:
To represent India at the Spaceport America Cup (SAC) 2026 by developing advanced rocket systems and taking a significant step towards *Aatmanirbhar Bharat* through the in-house manufacturing of major components.

Space on Wheels @ COEP Tech

(ISRO × Vigyan Bharati Initiative)

The "Space on Wheels" mobile exhibition brought ISRO's legacy to Western Maharashtra, showcasing cutting-edge missions like Chandrayaan and Gaganyaan. At COEP Tech, students engaged with interactive exhibits, learning how space technology powers daily life—from agriculture to disaster management. With 415,520+ visitors across 7 districts, this initiative proved science's power to inspire generations.

Our display @ Space on Wheels

Interacting with Dr. Pankaj Priyadarshani

Scientists @ COEP

Team Milestones

पुढारी

www.pudhari.com

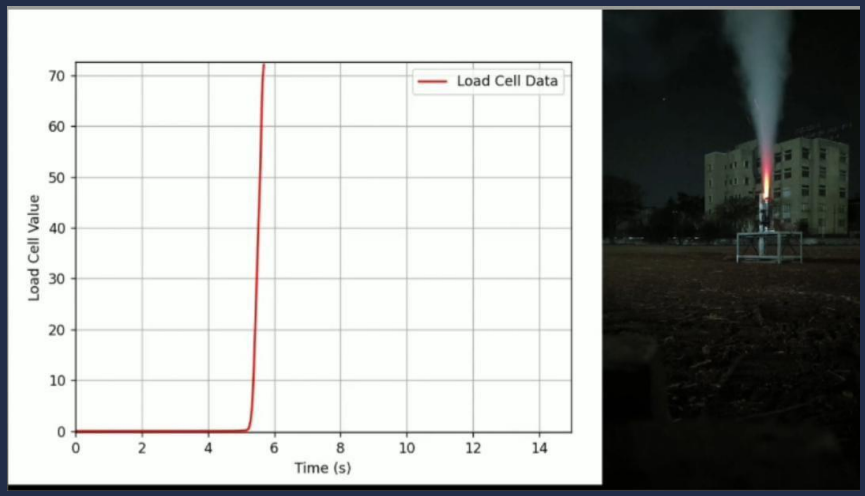
पुण्यातील विद्यार्थ्यांनी तयार केले रॉकेट लाँचर

सीओईपी महाविद्यालयात साकारले लाँचर : 'इस्रो'तील शास्त्रज्ञांनी केले कौतुक

Got featured in the *Puneri* newspaper

Successfully Launched our first rocket at an height of around 600m

Met and interacted with top ISRO Scientists

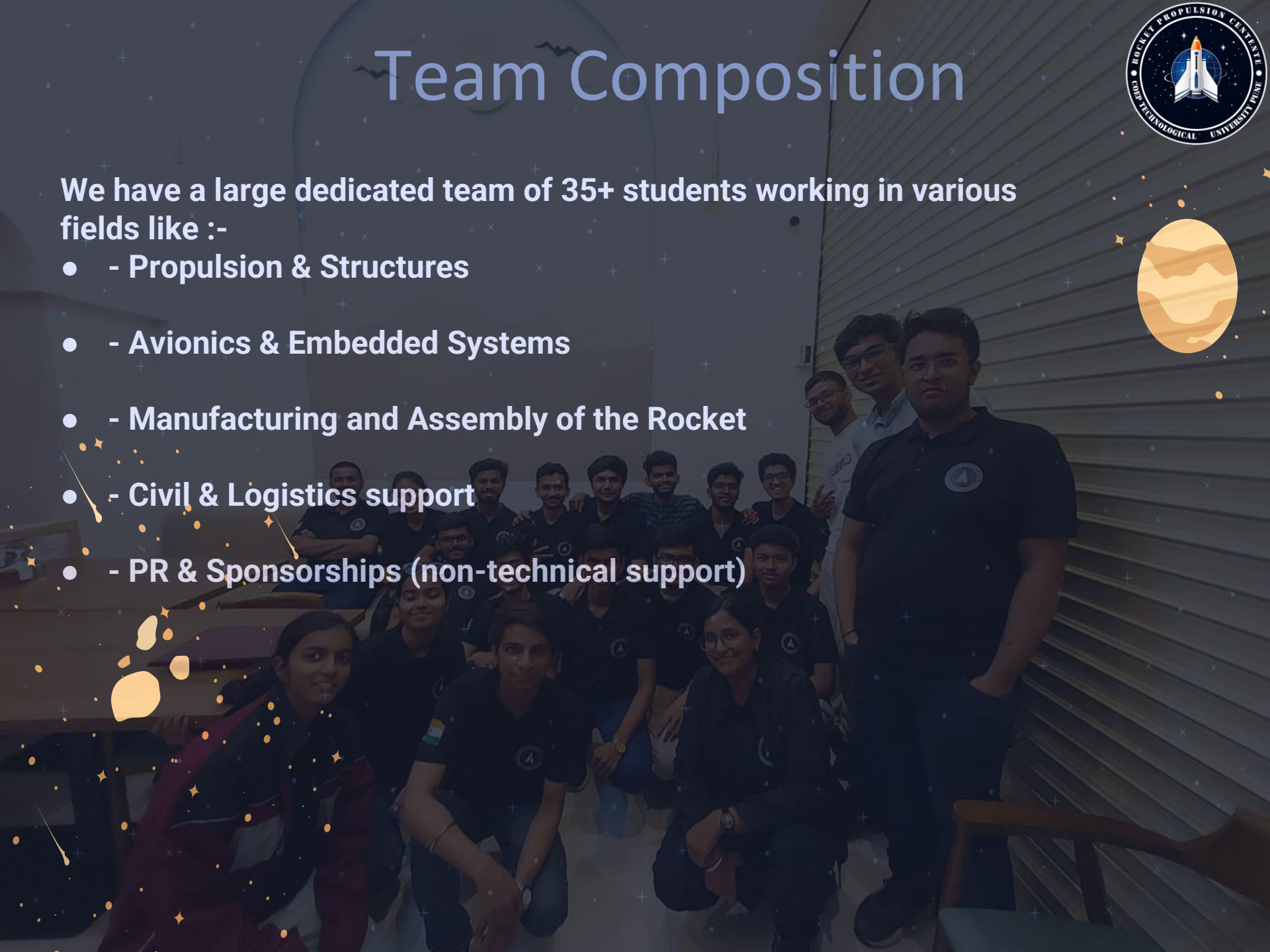


Successfully conducted multiple tests of our in-house developed motor.

Team Composition

We have a large dedicated team of 35+ students working in various fields like :-

- - Propulsion & Structures
- - Avionics & Embedded Systems
- - Manufacturing and Assembly of the Rocket
- - Civil & Logistics support
- - PR & Sponsorships (non-technical support)



SAC 2026 & Future Plans

Upgrading in-house propulsion systems to power a 10,000ft apogee rocket - nearly 5x higher than our 600m benchmark.

Taking complete ownership from design to testing - every component developed and assembled in our labs with zero external dependencies.

Developing proprietary flight control systems including thrust vectoring and reaction wheels for pinpoint stability mid-flight.

Challenges faced by us

Manufacturing

Manufacturing of rocket airframe, motor, fuel, tools, etc require significant amount of funds

Logistics

Requirement of a reliable method for transport of materials, travelling to launch sites, competitions.

Technical Aspects

Requirements of funds for electronic components, simulation software, research on advanced materials

Miscellaneous

Fees for entering competitions, printing of logos on t-shirts, require fundings

How you can help us

Materials (cash/in-kind)

Supplement of wide variety of materials, highly specialized tools, etc.

Services

Shipping, lodging, travel planning, and packaging are the services required

Support

Support of any kind- financial, scientific, mentoring, connecting us with relevant people is highly appreciated

Financial

Help with paying fees for competitions, printing uniforms, travel allowances can be helped with

Why Sponsor Us?

आत्मनिर्भर भारत

Join us in building an Aatmanirbhar Bharat! We innovate and manufacture in India—support self-reliance and 100% homegrown technology.

Fulfill CSR goals by supporting student innovation, and gain access to skilled, industry-ready talent.

Boost branding via rocket/merch logos social media promotions.

Showcase your brand on national and international platforms through our participation in global competitions like the Spaceport America Cup.

SPACEPORT AMERICA CUP

Budget Breakdown

Sectors	Materials	Budget	Sectors	Materials	Budget
Payload	Navigation and Positioning System	5.0 Lakh	Payload	Linear Actuators,IR Cameras,LiDAR	5.0 lakh
Airframe	Nose Cone, Body	5.0 Lakh	Travel	Tickets, VISA	10.0 Lakh
Avionics	Sensors, control systems, telemetry	2.5 Lakh	Shipping of Rocket	Packing and Shipping	3.0 Lakh
Propulsion	Engine, propellent, oxidizer	5.0 Lakh	Accomodation and local travel	-	5.0 Lakh
Recovery	GPS, Parachutes	1.5 Lakh	Competition Fees + Rocketry Fees	Registration	2.0 Lakh

Sponsorship Tiers

We offer multiple sponsorship tiers tailored to your level of interest and support. Every rupee, contribution, and gesture of help is deeply valued. In return, we offer meaningful recognition and visibility based on your sponsorship tier:

Diamond (7 Lakh+)
Title Sponsorship

Gold (4-7 Lakh+)

Silver (2-4 Lakh+)

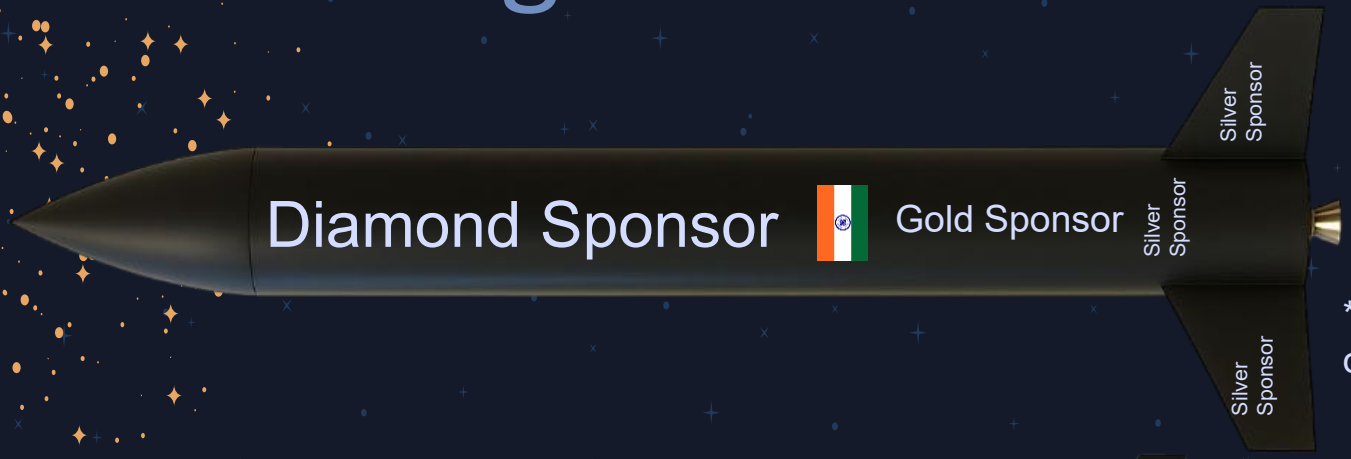
Bronze (1-2 Lakh+)

Supporter (50k – 1 Lakh)

Tier Benefits

Tiers	Logo Placement	Online Promotion	Presence in events	Access to Team's Resume	Introduction to Team Members	Customized Benefits
Diamond	**Large logo Presence on all places**	**Special Mention** and all below	**Special Preference** to all below	Access to Team's Resume	**Personalized Company Introduction**	**Special custom benefits**
Gold	Logo Presence on most places	Website blog Post + all below	Invitation to outreach events	Same above	All below	-
Silver	Logo presence in few places	Promotion of logo on home page	Presence in SA cup, banners, etc	-	All below	-
Bronze	Basic logo Presence on few places	Shoutout on social media/web	-	-	Introduction to all members	-
Supporter	-	Basic Shout out on social media/web	-	-	-	-

Logo Placements



*Each side is different

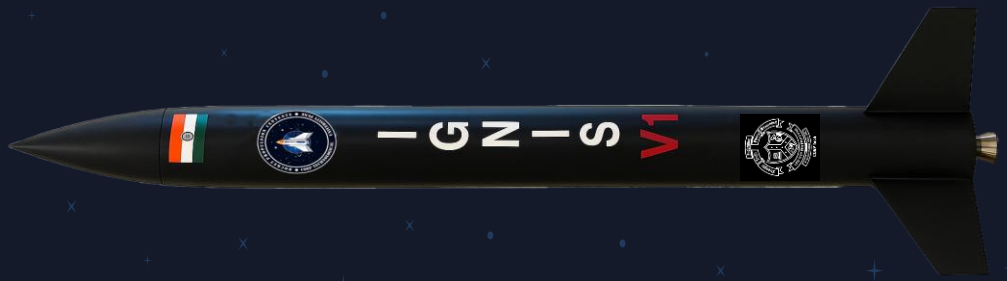
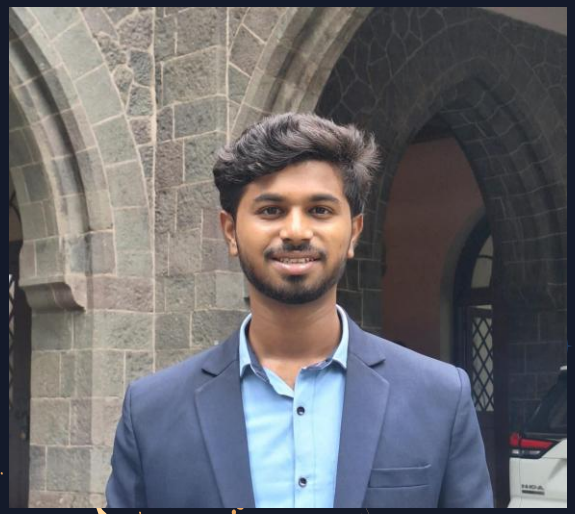


*Image for reference only

Team Leaders and Faculty Advisors



Swarup Shelke
Secretary

Shitij Agarwal
Founder

Faculty advisor
Prof. B.G.Birajdar

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