

ABOUT US*

ESTABLISHED IN 1964

The Aerospace Engineering Department, with a history of over 40 years, was formerly known as the Aeronautical Engineering Department until 1991. The department maintains a balance between hardware development and theoretical/computational aspects in teaching, research, and development. Currently, the faculty consists of 33 members, sharing four with the Sustainable Energy Engineering Department. The department has undertaken numerous research projects funded by agencies such as Aeronautics R&D Board, ISRO, ADA, DST, HAL, DMRC, NAL, IFCPAR, TERI, PCRA, and DRDO. Faculty contributions span areas like wind tunnels, flow measurements, CFD, aerodynamics, satellite dynamics, thermal rocket propulsion, structural dynamics, composite structures, smart structures, aeroelasticity, wind turbines, and advanced materials modeling.

WELCOME ADDRESS *

The Aerospace Engineering department provides a learning environment founded on strong fundamentals, while fostering creativity, innovation, critical thinking and problem-solving skills. Our curriculum comprises a healthy blend of theory, experiments, and computation, covering both classroom-based learning and project-based training. We invite you to tap our world-class talent to build a strong workforce that can help propel your organizations to new heights.



DR. G. M. KAMATH (PROFESSOR & HOD)

WELCOME ADDRESS *

I extend a warm welcome to all the recruiters for the 2024-25 PhD placements. You may be aware that our department is one of the best in India in terms of teaching and cutting-edge research. As an integral part of this vibrant ambience, the PhD students are exposed to the best facilities where they get the opportunity to assimilate both theoretical and hands-on knowledge related to various topics in aerospace engineering and beyond. During their PhD, the students go through a rigorous training, which make them ready to undertake challenging projects and execute them successfully. I am confident that with their positive attitude and expertise, our PhD students will be valuable contributors if hired in your company.

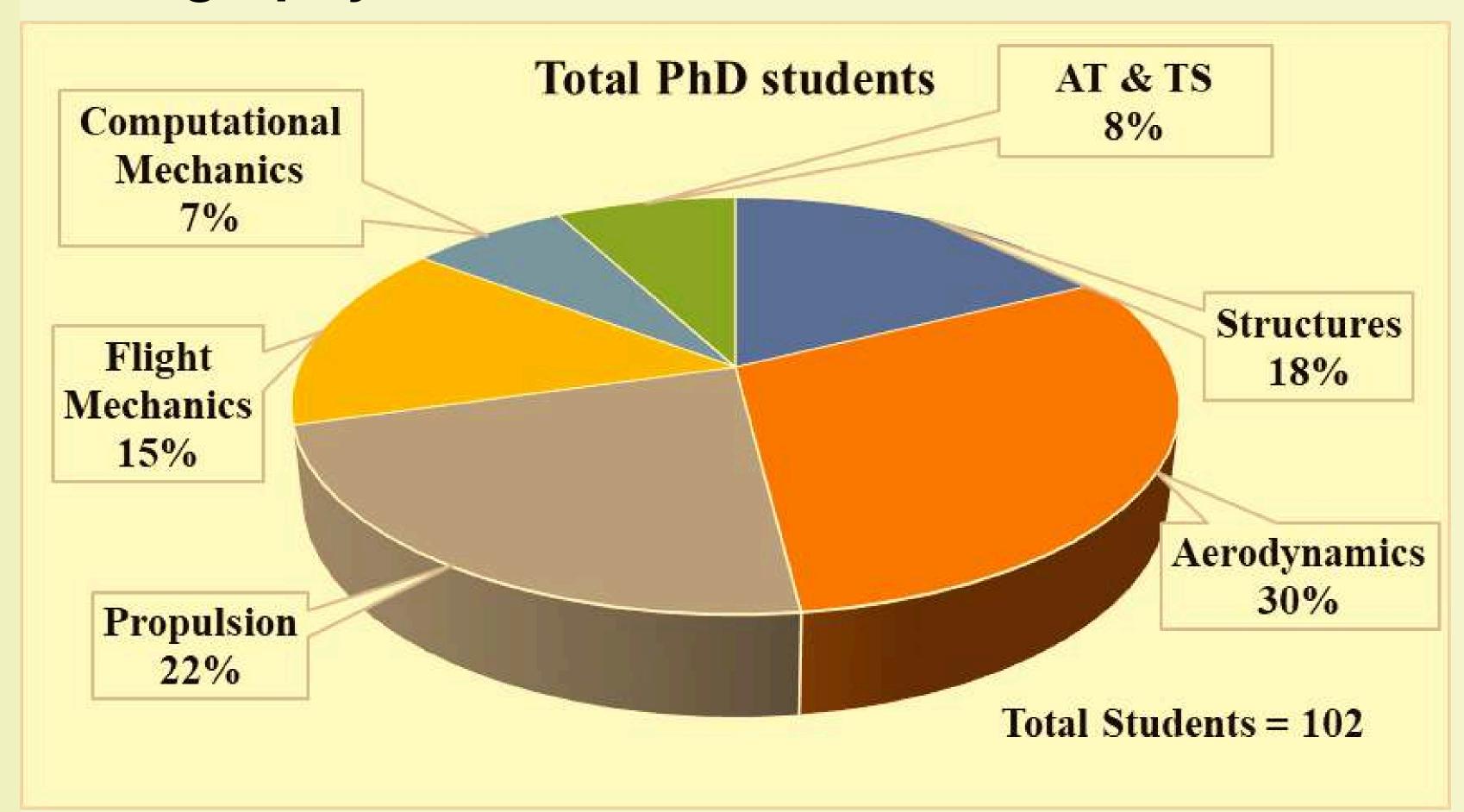


DR. PRITAM CHAKRABORTY
(ASSOCIATE PROFESSOR &
FACULTY PLACEMENT
COORDINTOR)

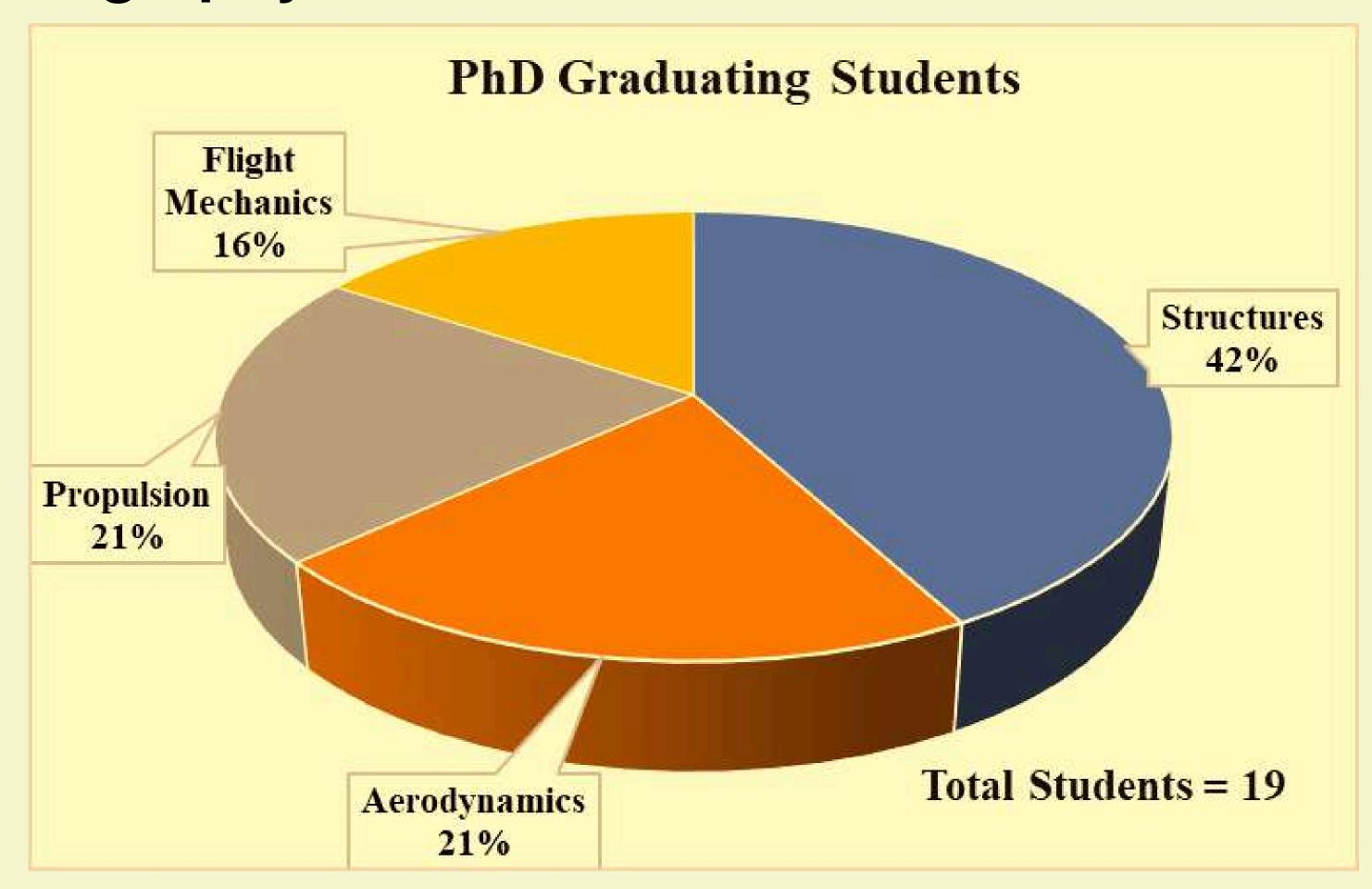
* -> click here to know more about the department

DEMOGRAPHY

Demography of students



Demography of students



PhD Students working on

1. Structures

- Fatigue, fracture, and impact analysis.
- Digital Image Correlation
- Viscoelastic deformation mechanisms
- Rigid filler reinforced thick coating.
- Higher Order Polygonal Elements
- Non-linear Constitutive Models
- Progressive damage of composites

3. Flight Mechanics

- Robust Control of Artillery Shells.
- Game Theoretic Modeling.
- Dual-Spin Artillery Projectile
- NavIC Software Receiver
- Advance Carrier Techniques

2. Aerodynamics

- Computational modeling of dusty gas flows.
- Shock-Particle Interactions
- Aerothermodynamic analysis of Reentry Hypersonic Flows.
- Flow over an axisymmetric backwards-facing step

4. Propulsion

- Leading Edge Serrations.
- Low speed axial flow fans.
- Dual Color Scanning Particle Image
 Velocimetry System
- Aero engine Health Monitoring

LABORATORIES*

- Artificially Engineered Materials and Structures Laboratory
- Computational Fluid Dynamics Laboratory
- Computational Propulsion Laboratory
- High Speed Aerodynamics Laboratory
- Low Speed Aerodynamics Laboratory
- Laboratory for Advanced Aerospace Materials and Structures (LAAMS)
- Laboratory for Simulations of Fluids using numericals
- Non-equilibrium Flow Simulation Laboratory (NFSL)

- Advanced Combustion and Acoustics Laboratory
- Advanced Propulsion Laboratory
- Aerospace Structures and Advance Materials Laboratory
- Combustion Laboratory
- Helicopter and VTOL Laboratory
- Hypersonic Experimental Aerodynamics Laboratory
- Flight Laboratory
- National Wind Tunnel Facility
- Space Dynamics and Flight Control Laboratory
- Structural Analysis Laboratory
 Structural Analysis Laboratory
 Click here to know more about the Labs



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