Static Firing of Hybrid Rocket
(Polypropylene and Oxygen Gas as propellants)

Magneto Plasma Dynamic Thruster

Mini Solid Propellant Thruster

An airplane model mounted in test section
with internal strain gauge balance

3 component and 6 component internal
strain gauge balances for aerodynamic
force and moment measurements

Mini mixer facility for preparing filled
viscoelastic gels for aerospace applications (50 g)
Arc Jet (100 kw for thermal erosion studies)

Laser Flash Apparatus for thermal diffusivity and specific heat measurements

Impact Tester Drop type Instrument (0.2 to 1800J)

Simultaneous Thermal Analyser for TGA and DSC studies

Ultrasonic Testing Equipment for NDT

Universal Testing Machine
Instron Make Model: 3367, 30 kN
Schlieren Image of a cruciform supersonic jet

Multi Rotor Test Bench for UAV development

Subsonic wind tunnel facility
Test section (6’ x 2’ x 2’) Wind speed 15 m/s

Table Top Wind Tunnel
Test section (18cm x 24cm x 60cm) Wind speed 50 m/s

Universal Testing Machine
(10 Ton) for Tension, Compression and Flexural tests

Combustion Diagnostics Test Bed
(Propane and Methane gases as fuels)
ASSOCIATION OF AERONAUTICAL ENGINEERS (AAE)

The Association of Aeronautical Engineers (AAE) of the Madras Institute of Technology was established in the year 1957. The AAE at MIT is one of the ever-buzzing association which organizes a large number of activities to promote the interests of budding aerospace community. It is funded and run by the students and faculty members of the Aerospace Engineering Department. Various co-curricular activities like guest lectures, industrial interactions, aero modelling activities etc. are conducted by the association including a technical symposium ‘FLIGHT’ annually. FLIGHT is a National Level Technical Symposium with a plethora of events in the field of Aerospace engineering. This is where the most brilliant minds from the best institutes turn up every year in order to compete and prove their talents. Our students also participate in PDA, NSS, NSO and YRC extra-curricular activities in MIT.

DEPARTMENT LIBRARY

The Department has its own library with about 1300 books. Every year books are purchased for the department library from the AR&DB scholarship grant. A faculty member and student representatives manage the department library. Books of various titles catering to Basic Sciences & Engineering, Core courses, Advanced Core & Electives and Management, Ethics, Environment and Quality Control are available.

STUDENT EXCHANGE PROGRAMME

Students are encouraged to take up student exchange programmes. Two of our B.E (Aero) students in the year 2014 and 2015 have successfully completed the Heritage Erasmundas student exchange program at Warsaw University of Technology, Poland for duration of two semesters. Under Erasmundas programme students from Belgium, Spain and Germany studied in the Department and underwent courses.

PLACEMENTS

Students have been placed in various core companies which includes Defence organisations. Also students have been recruited in IT companies such as IBM, TCS, Infosys, Wipro, CTS etc.

STUDENTS INTERNSHIP AND OUTSIDE PROJECTS

Students have been undergoing internship in various academic institutions and industries like IISc, IITs, HAL, DRDO, ISRO etc.

HIGHER STUDIES

More than 20% of our students opt for higher studies in foreign universities.
Stakeholders Meeting Conducted at Department Conference Hall

Inauguration of High Temperature Material Characterization Lab by Dr. A.P.J. Abdul Kalam

CSIR - National Award for Realization of light weight Artificial composite limb

National Conference Conducted Jointly by SAEINDIA & Dept. of Aerospace Engg.

National Workshop on Recent Trends in Aerospace Propulsion

Inauguration of Association of Aeronautical Engineers
CENTRE FOR AEROSPACE RESEARCH (CASR)

CASR was established in the year 2001 in this Department to serve the aerospace community through advanced research and development activities needed for the country. A number of seminars, workshops are also being arranged to bring together scientists, staff and students of various organizations and academic institutions to share their technical knowledge. A standing testimony to the striking progress achieved by the Centre can be showcased by the sanction of Micro Satellite Development project by the Indian Space Research Organization and Establishment of High Temperature Material Characterization Facility by DRDO. This centre is administered by one of the faculty member of the Department.

POTENTIAL EMPLOYERS

- Defence Research & Development Organisation (DRDO)
- Indian Space Research Organisation (ISRO) – VSSC, SHAR, ISAC, LPSC, etc.
- CSIR - National Aerospace Laboratories (NAL)
- Aeronautical Development Agency (ADA)
- Hindustan Aeronautics Limited (HAL)
- Gas Turbine Research Establishment (GTRE)
- Centre for Military Airworthiness Certification (CEMILAC)
- Centre for Advanced Systems (CAS)
- Honeywell International Inc.
- Rockwell Collins India Enterprises Private Limited
- Aeronautical Development Establishment (ADE)
- Thales India Pvt. Ltd.
- Larsen & Toubro InfoTech Ltd (L&T InfoTech)
- InfoTech Aerospace Services (IAS)
- Airbus Engineering Centre India Private Limited
- Tata Elxsi Limited
- CAE Simulation Technologies Pvt. Ltd.
- Snecma HAL Aerospace Pvt. Ltd.
- Data Patterns (India) Pvt. Ltd.
- ComAvia Systems Technologies Pvt. Ltd.
- Esterline Technologies India Pvt. Ltd.
- SILVER ATENA Electronic Systems Pvt. Ltd.
- UTC Aerospace Systems
## LIST OF FACULTY MEMBERS

<table>
<thead>
<tr>
<th>S.NO</th>
<th>STAFF NAME</th>
<th>DESIGNATION</th>
<th>SPECIALIZATION</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr.B.T.N. Sridhar</td>
<td>Professor &amp; Head</td>
<td>CFD, Jets, Aerospace Propulsion, High Temperature Material Characterization</td>
</tr>
<tr>
<td>2</td>
<td>Dr.K.M.Parammasivam</td>
<td>Professor</td>
<td>Aerodynamics, Wind Engineering, Propulsion</td>
</tr>
<tr>
<td>3</td>
<td>Dr.K.Senthilkumar</td>
<td>Associate Professor &amp; Director</td>
<td>Avionics, UAV Systems, Aircraft Guidance control, Missile Control Systems</td>
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<tr>
<td></td>
<td>&amp; Director Incharge,CASR</td>
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<tr>
<td>4</td>
<td>Dr.S.Thanigaiarasu</td>
<td>Associate Professor &amp; Zonal</td>
<td>Propulsion, High Speed Jets, Aerodynamics, Heat Transfer</td>
</tr>
<tr>
<td></td>
<td>Officer, Zone IV, MIT</td>
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<tr>
<td>5</td>
<td>Dr. V.Arumugam</td>
<td>Associate Professor</td>
<td>Composites, Flight Mechanics, NDT</td>
</tr>
<tr>
<td>6</td>
<td>Dr.J.Dheenadhayalan</td>
<td>Assistant Professor (Sr.Gr.)</td>
<td>Fluid Mechanics, Aerodynamics, CFD</td>
</tr>
<tr>
<td>7</td>
<td>Dr.C. Senthilkumar</td>
<td>Assistant Professor (Sr.Gr.)</td>
<td>CFD, Aerodynamics, High Speed Jets</td>
</tr>
<tr>
<td>8</td>
<td>Mrs. Leeavathy Mercy</td>
<td>Assistant Professor</td>
<td>Aircraft Structures, Composite Materials</td>
</tr>
<tr>
<td>9</td>
<td>Mr.V.Suresh</td>
<td>Assistant Professor</td>
<td>Aerodynamics</td>
</tr>
<tr>
<td>10</td>
<td>Ms.S.Ilakkiya</td>
<td>Assistant Professor</td>
<td>Jets, Propulsion, Aerodynamics</td>
</tr>
<tr>
<td>11</td>
<td>Mr.R.Arun Prasad</td>
<td>Teaching Fellow</td>
<td>Airplane Aerodynamics, Aircraft Propulsion</td>
</tr>
<tr>
<td>12</td>
<td>Mr.B.Kathiravan</td>
<td>Teaching Fellow</td>
<td>Aerodynamics, Combustion &amp; Propulsion</td>
</tr>
<tr>
<td>13</td>
<td>Mr.S.B.Jabez Richards</td>
<td>Teaching Fellow</td>
<td>Propulsion, Flight Dynamics</td>
</tr>
<tr>
<td>14</td>
<td>Ms.D.Christal Jency</td>
<td>Teaching Fellow</td>
<td>Structures, Vibrations</td>
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### Division of Avionics

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<tbody>
<tr>
<td>1</td>
<td>Dr.G.Anitha</td>
<td>Assistant Professor (Sr.Gr.)</td>
<td>Navigation Guidance &amp; Control, Image Processing</td>
</tr>
<tr>
<td>2</td>
<td>Mr.A.Saravanakumar</td>
<td>Assistant Professor</td>
<td>Acoustic Guidance, Spacecraft Systems</td>
</tr>
<tr>
<td>3</td>
<td>Mr.A.Kaviyarasu</td>
<td>Assistant Professor</td>
<td>Avionics</td>
</tr>
<tr>
<td>4</td>
<td>Mr.B.Anbarasu</td>
<td>Teaching Fellow</td>
<td>Avionics</td>
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<tr>
<td>5</td>
<td>Mr.E. Saravanan</td>
<td>Teaching Fellow</td>
<td>Avionics</td>
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</table>

### NON-TEACHING STAFF

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<tr>
<th>S.NO</th>
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<tbody>
<tr>
<td>1</td>
<td>Mrs.B.Maragatham</td>
<td>Stenographer Grade -I</td>
</tr>
<tr>
<td>2</td>
<td>Mr.V.Dhayalan</td>
<td>Mechanic Special Grade 'C'</td>
</tr>
<tr>
<td>3</td>
<td>Mr.S.N.Narayanan</td>
<td>Lab Assistant</td>
</tr>
<tr>
<td>4</td>
<td>Mr.N.Elumalai</td>
<td>Helper</td>
</tr>
</tbody>
</table>
Distinguished Alumni
1. Dr. A. P. J. Abdul Kalam, Former President of India.
2. Dr. Sharad Moghe, Goodrich Corporation, USA.
3. Dr. R. N. Agarwal, Former program Director AGNI & Former Director ASL.
4. Shri. C. U. Hari, Former Director, Aeronautics and Secretary AR&DB.
5. Dr. S. Tamilmani, Director General Aeronautics, DRDO.
6. Dr. Ganesh Rajagopalan, IOWA State University, USA.
7. Dr. K. Jayaraman, Former Director DRDL, Hyderabad.
8. Dr. S. Sivan, Director, VSSC.
9. Shri. S. Pandian, Dy. Director, VSSC.
10. Dr. M. Ganapathy, Vice President, Tech Mahindra.
11. Dr. K. Jayaraman, Former Registrar, Anna University.
12. Dr. A. Joseph Stanley, Former Dean, MIT.
13. Shri. M. S. R. Prasad, Director, DRDL.
14. Mr. G. T. Selvan, DG, VSSC.
15. Shri. Rajaram Nagappa, Former Associate Director, VSSC.
16. Dr. S. Pannerselvam, Outstanding Scientist, Former Technology Director and Former Associate Director, DRDL.

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