


Short Resume

	<p>Prof Prasanna M. Mujumdar Professor (Retired), Department of Aerospace Engineering IIT Bombay Email: mujumdar@aero.iitb.ac.in</p>
Educational Qualifications	<ol style="list-style-type: none"> 1. PhD Department of Aerospace Engineering, IIT Bombay 1988. 2. MTech, Department of Aeronautical Engineering, IIT Bombay, 1983. 3. BTech, Department of Aeronautical Engineering, IIT Bombay 1981.
Professional Positions	<ol style="list-style-type: none"> 1. Deputy Director (Finance & External Affairs), IIT Bombay, Oct 2015 – Nov 2021 2. Dean (R&D), IIT Bombay, Sept 2012 – Sept 2015. 3. Head, Aerospace Engineering Dept, June 2008 – May 2011. 4. Head, Centre for Aerospace Systems Design & Engineering (CASDE), IIT Bombay, 2004 – 2011. 5. Professor, Department of Aerospace Engineering, IIT Bombay - 1998 to date. 6. Associate Professor, Department of Aerospace Engineering, IIT Bombay, 1994 - 1998. 7. Assistant Professor, Department of Aerospace Engineering, IIT Bombay, September 1988 - 1994. 8. Lecturer, Department of Aerospace Engineering, IIT Bombay, 1986 - 1988.
Areas of Expertise & Research Interests	<p>Aerospace Structures, Structural Dynamics & Stability Aeroelasticity and Aeroservoelasticity, Fibre-reinforced Composite Structures, Multi-disciplinary Design Optimization, Smart Structures and Structural Health Monitoring</p> <p>R&D & Consultative work done covers Analytical, Computational & Experimental work in these areas</p>
Awards/ Recognitions	<ol style="list-style-type: none"> 1. Prof S C Sahasrabuddhe Life Time Achievement Award, IIT Bombay 2. Shri H H Lala & Smt J H Lala Teaching Excellence Award, Dept of Aerospace Engg, IIT Bombay, in the years 2020, 2017 & 2011 3. Prof S P Sukhatme Excellence in Teaching Award, IIT Bombay, 2016 4. Excellence in Teaching Award, IIT Bombay, 2010. 5. Excellence in Aerospace Teaching Award, Aeronautical Society of India, 2009. 6. AR&DB Research Excellence Award, presented at the Aeronautics Research & Development Board Silver Jubilee Celebration, NAL Bangalore, May, 1996. 7. Institute Silver Medal, IIT Bombay, 1981 (standing first in the BTech Aerospace Engineering Program)

Teaching Activities	<p>Since 2002-2003: 82 Core/Elective Theory Courses at UG & PG level (50% shared contribution in 10 of these) – Excellent teaching evaluations in most of the courses taught. Additionally several lab courses conducted/participated as Co-ordinator/participating faculty. 1986 to 2002-2003 - data not available.</p> <p>Courses taught in the areas of Solid Mechanics, Aerospace Structural Mechanics, Vibrations & Structural Dynamics, Aeroelasticity, Advanced Aeroelasticity & Aeroservo-elasticity, Finite Element Method, Engineering Design, Optimization & Multidisciplinary Design Optimization,</p>
Projects (as PI/CoPI)	<p>Major projects – 32 (26 Sponsored projects and 6 Consultancy projects). Total outlay about 12.76 cr.</p> <p>Mainly from DRDO establishments - ADA (Aeronautical Development Agency), ARDB (Aeronautics Research & Development Board), DRDL - Mostly Research & Technology Development at Aircraft level.</p> <p>& DST/Other Ministry funding agencies – R&D in non-aerospace areas involving structures and materials technologies.</p> <p>Major impactful Aerospace R&D work (as part of IITB team/team lead) has been towards</p> <ul style="list-style-type: none"> (i) LCA Project technology development support, in the areas of indigenous software development for Aeroelastic and Aeroservoelastic analysis at full scale real aircraft level, New formulations and approach towards aeroservoelastic analysis of LCA (10 years), (ii) LCA Composite structures analysis and experimental investigations for buckling and postbuckling failure of LCA stiffened panels and ply-drop effects (8 years), (iii) Test plan for experimental evaluation of the full set of elastic and strength of thick composite materials (6 years), Piezoelectric Actuation based Smart Structures for Aeroelastic control (4 years), etc. and in the areas of (iv) Exploration of Multi-disciplinary Design Optimization for applications in Aerospace Vehicle Design (10 years).
Post-Graduate Student Guidance (as guide/co-guide of PhD Thesis & MTech Dissertations)	<p>PhD students - 12 ; MTech students – 66</p> <p>Many of the students have been sponsored students working on problems of their organizational interest and at practical level under my supervision.</p>
Publications	<p>Journals – 26 papers</p> <p>Conferences – 36 papers</p> <p>Mostly International Journals & International Conferences.</p> <p>Several Project Technical Reports, other conference/symposia presentations (unpublished work due to restricted contents)</p>
Continuing Education and other outreach activities (since 1998)	<p>A large number of CEP courses & workshops/symposia/conferences organised & conducted as a part of the CASDE team since 1998 till 2022 for the Aerospace Sector in India (ISRO/DRDO/HAL/NAL etc) in the areas of Systems Engineering, Multi-disciplinary Design Optimization and</p>

	<p>Aeroelasticity).</p> <p>Key impact – Awareness creation of Systems Engineering principles and practices for senior, mid-level and entry level scientists/engineers, Awareness, technology demonstration and case study creation in Multidisciplinary Design Optimization. This is across the ISRO/DRDO Aerospace Design & Development Labs ecosystem for their scientists and engineers. This was part of the CASDE (Centre for Aerospace Systems Design & Engineering) initiative and teamwork over 15 years.</p>
Administrative Work	<p>Involved in Administrative and Institution building work at Department and Institute levels in continuation for the most part of the period from 2008 to 2022, as Head of Aerospace Engg Dept, Head CASDE, then Dean (R&D) and lastly as DD (FEA), apart from other roles/committee work before 2008 (such as for example Vice-Chairman GATE for 2004 & 2005, etc).</p> <p>Apart from regular administrative work and leadership role, substantial contributions and lead roles in special, non-regular activities/initiatives (as part of Institute teams) include the IITB ERP architecting and implementation work including tackling contractual difficulties, the HEFA(Higher Education Funding Agency) funding related proposal formulations and its administration, the IoE (Institution of Eminence) funding initiative and its administration, the formation and growth of the Institutes Section 8 non-profits, funding related strategic thinking and document/presentation creation for Institute + alumni committees/groups, amongst other things.</p>
Honorary work for External Committees/Entities in Technical/Techno-administrative functions & other interactions with external	<p>Have been part of a very large number of such opportunities for supporting external organizations/programs/funding bodies etc in roles such as technical expert/selection committee member/techno-administrative Institute functionary/ etc. Principal amongst them being Member of AR&DB Structures Panel for about 15 years (2004-2017); member of the Integrated Technical Review Committees for PSLV, GSLV, SSLV, RLV-TD programs of ISRO, ADA/DRDL/NAL technical sub-committees/selection committees, Various committees of IIST, including IIST 10 year review committee, DST PACE Committee, amongst several other organizations/institutions.</p>