

**Sponsored Research Project: Servo Hydraulic Loading Frame System with Pseudo Dynamic Test Arrangement (2021 - 2026)**

Sponsored by: Department of Science and Technology New Delhi under Fund for improvement of Science and Technology Infrastructure in Universities and Higher Education Institutes (DST-FIST)

This facility positions the Department of Applied Mechanics at Walchand College of Engineering as a trailblazer in research in the field of Structural Engineering and infrastructure development. It stands as a unique asset in South Maharashtra, following the footsteps of IITs/NITs, making it invaluable for both academic and industrial research in the region. This cutting-edge facility has come to fruition through the unwavering vision and support of our Administrative Council under the esteemed guidance of Honourable Chairman, Shri. Ajit Gulabchand, and the generous funding from the Department of Science and Technology, DST has implemented an Electronic Project Management System (EPMS), providing a transparent and detailed overview of the entire project process.

The award letter clearly emphasizes that this sponsored research project is intended to primarily benefit the college students and research scholars in and around the institution. It highlights the objective of strengthening research infrastructure and promoting an active research environment that directly supports academic and research activities. The support is expected to enhance their exposure to advanced scientific facility, encourage innovation, and foster meaningful research outcomes aligned with the goals of the DST-FIST programme.

Sr. No	Lab Name	Supported by	Objectives	Utilization	Effectiveness
01	Heavy Structures Lab	Department of Science and Technology (FIST)	1. To quantify loss of strength in structural member due to hazard like earthquake, fire or wind 2. To investigate the behaviour of structure subjected to vertical and lateral forces together 3. To estimate strength of material/structure under influence of dynamic load.	1. Undergraduate Civil Engineering - Post Graduate Structural Engineering students / Research Scholars at the department for their study/research work 2. The equipment can be used to generate IRG as per requirement from Central/State Govt. departments.	1. In this equipment there is a provision of actuators to apply loads in both displacement and force-controlled mode which is essential requirement for academicians and industry experts. 2. The equipment can be used effectively to conduct test on full scale prototype.
<ul style="list-style-type: none"> <li>• Outcome of the research facility: Total <b>16 PG</b> students and <b>3 Ph. D.</b> research scholars have used this facility in their research work.</li> <li>• 24 research articles are published (few in pipeline) the work using this facility in reputed conferences and journals.</li> </ul>					

  
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 Head  
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