

Department of Applied Mechanics

Name

Dr. Sachin V. Bakre,
Associate Professor , H O D



Area of Specialization

Structural Control, Finite Element Analysis, Earthquake Engineering

Prominent journal paper publications



1. S V Bakre and R S Jangid, "Optimum multiple tuned mass dampers for base-excited damped main system." *International Journal of Structural Stability & Dynamics*, 4(4), pp. 527-542, (2004).
2. S V Bakre, R S Jangid and G R Reddy, "Optimum X-plate dampers for seismic response control of piping systems." *International Journal of Pressure Vessels and Piping*. 83, pp. 672-685, (2006).
3. S V Bakre and R S Jangid, "Optimum parameters of tuned mass dampers for damped main system." *Structural Control and Health Monitoring*. 14, pp. 448-470, (2007).
4. S V Bakre, R S Jangid and G R Reddy, "Response of piping system on friction support to bi-directional excitation." *Nuclear Engineering and Design*. 237(2), pp. 124-136, (2007).

Other prominent publications (Conf.)

1. O R Jaiswal and S V Bakre, A simple tuned mass damper for controlling seismic response of multistoried buildings, National Seminar on Structural Dynamics in Civil Engineering, Indian Institute of Science Bangalore, July – 2002.
2. S V Bakre, R S Jangid and G R Reddy, "Seismic response of piping system with isolation devices," Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, Canada, Aug. – 2004.

3. S V Bakre, R S Jangid and G R Reddy, “Passive control of piping systems: Analytical studies and experimental investigations.” First European Conference on Earthquake Engineering and Seismology, Geneva, Switzerland, September 3-8, 2006.
4. Nilesh U. Mate, SV Bakre and OR Jaiswal, “Comparative Study of Impact Simulation Models for Linear Elastic Structures in Seismic Pounding”, 15th World Conference on Earthquake Engineering, 24-28 September 2012, Lisbon, Portugal.

Ph D research students guided, research topics, brief statement of achievements,

Sr. No.	Name of student	Reg. Year and status (FT/PT)	Thesis Title	Other supervisor (s) (if any), name & department	Completed /Ongoing	Photo
1	Nilesh Mate	2010 (FT)	Analysis of Seismic Pounding in Adjacent Structures	Dr. O.R. Jaiswal, Dept. of Applied Mechanics, VNIT	Ongoing	
2	Atulkumar Manchalwar	2013 (FT)	Supplemental Devices of Seismic Response Control of Buildings	-	Ongoing	

Sponsored research projects, brief statement of achievements

1. Dynamic Studies on FBR Core, 9.95 Lakhs, Submitted to IGCAR, 2007. Could not Materialize.

2. Dynamics Response of End Buildings during Earthquake, 9.95 Lakhs, Submitted to BRNS, 2008. Could not Materialize.

Consultancy research projects, brief statement of achievements

- 1. Determination of Natural Frequency of 1.5", 40 NB Pneumatic Operated Globe Valve Using Impact Hammer Test**
- 2. Vibration Checking of Plant Building (POY-1) at INDO RAMA, MIDC, Nagpur**
- 3. Analysis and Design of Entrance Structures (at South Ambazari Road and Bajaj Nagar entrance of VNIT)**
- 4. Proof-checking of Pack House at Umranalla, MP**
- 5. Structural Design of Innovative Bamboo Structures by VEDHA**
- 6. Structural Audit of Plant Building for VODAFONE**
- 7. Structural Design of Girls Nursing School and Hostel at Ratnagiri for PWD**

Other capabilities (administrative and other achievements)

- 1. Head of the Department, 18/4/2012 to till date**
- 2. Incharge, Department Computer and LAN**
- 3. Incharge, Department Time-Table**
- 4. Incharge, Structural Analysis Laboratory**
- 5. Coordinator, Department MTech Admissions**
- 6. Coordinator, Department Website**
- 7. Department MTech Coordinator**