



IEST, Shibpur

Indian Institute of Engineering Science and Technology, Shibpur
(Formerly Bengal Engineering and Science University, Shibpur)

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Personal Information

Name: Shyamal Chatterjee

Designation: Professor and Head of Mechanical Engineering

Academic Qualifications:

1.	Ph.D.	IIT Kanpur	1996
2.	M.Tech.	IIT, Kanpur	1991
3.	B.M.E (Hons.)	Jadavpur University	1989

Contact Information

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Area of Research

SAME AS THERE IN THE EXISTING PROFILE

Courses Undertaken

UG Courses

1. Measurement & Control ME 404 (4th Semester)

2. Kinematics of Mechanisms ME 505 (5th Semester)
3. Elective-I : NC/CNC Machine Tools ME 705/8 (7th Semester)
4. Dynamics of Machines and Vibration (ME 603)

PG Courses

1. Theory of Mechanical Vibration
2. Nonlinear Dynamics
3. Dynamics and Control of Mechanical Systems

Recent Publications (Maximum 10)

1. Anindya Malas and S. Chatterjee , Analysis and Synthesis of Modal and Non-Modal Self-excited Oscillations in a Class of Mechanical Systems with Nonlinear Velocity Feedback, *Journal of Sound and Vibration* 334 (2015) 296-318.
2. R.K. Mitra, S. Chatterjee and A. K. Banik, Limit Cycle Oscillation and Multiple Entrainment Phenomena in a Duffing Oscillator under Time-delayed Displacement Feedback. *Journal of Vibration and Control* (in Press) (2015)
3. Anindya Malas and S. Chatterjee, Modelling and design of direct nonlinear velocity feedback for modal self-excitation in a class of multi degrees-of-freedom mechanical systems. *Journal of Vibration and Control* 1-17 (2015) DOI: 10.1177/1077546315582292
4. Anindya Malas and S. Chatterjee, Modal self-excitation by nonlinear acceleration feedback in a class of mechanical systems. *Journal of Sound and Vibration* 376 (2016) 1-17.
5. Anindya Malas and S. Chatterjee, Amplitude controlled adaptive feedback resonance in a single degree-of-freedom mass-spring mechanical systems. *Procedia Engineering* 144 (2016) 697-704.
6. Jayasi Nath and S. Chatterjee, Tangential acceleration feedback control of friction induced vibration. *Journal of Sound and Vibration* 377 (2016) 22-37.
7. Anindya Malas and Shyamal Chatterjee, Modal self-excitation in a class of mechanical systems by displacement feedback. *Journal of Vibration and Control*, (2016) 1-13. DOI: 10.1177/1077546316651786
8. Jayasi Nath and S. Chatterjee, Nonlinear control of stick-slip oscillation by normal force modulation. *Journal of Vibration and Control* (2016) Accepted for publication. doi: **10.1177/1077546316661046**
9. Anuja Roy, A. Ghosh and S. Chatterjee, Influence of tuning of passive TLD on the seismic vibration control of elevated water tanks under various tank-full conditions , *Structural Control and Health Monitoring* (2016) Accepted
10. Ranjan Kumar Mitra; Atul K Banik, and Shyamal Chatterjee, State feedback control of surge oscillations of two-point mooring system, *Journal of Sound and Vibration* 386 (2017) 1-20.

Book:

1. A. K. Mallik and S. Chatterjee, Principles of Passive and Active Vibration Control, Affiliated East-West Press, New Delhi, 2014

More Information (Optional)

(This information will be converted and uploaded as a separate pdf file linked on the profile page.)

PhD Scholars

Ranjan Kumar Mitra – Control, Anticontrol and Dynamic Stability of Vibrations under Time-delayed Feedback: submitted (2016)

Anindya Malas - Generation and Control of Self-excited Oscillation in a class of Mechanical systems by Nonlinear Feedback: submitted (2016)

Anuja Roy- ongoing

Joy Mondal- ongoing
