

**Dr. Abhijit Sarkar**  
Associate Professor

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### **Biography**

Dr. Abhijit Sarkar received his PhD from Indian Institute of Science Bangalore in 2009. He worked at Eaton Corporation (2009) & Tata Motors (2003) before joining IIT Madras.

His research is in the broad area of acoustics, vibration. His focus is on mathematical formulation and analytical solution of problems in dynamics and acoustics. He has made significant research contributions on the understanding of the dispersion characteristics of structural acoustics waveguides, vortex-induced vibration characteristics, vibration of rotating structures, etc. He is engaged in industrial consultancy activities for leading industries and also conducting continuing education program for participants from industry and academia.

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### **Awards & Honors**

1. Best student paper award at National Symposium of Acoustics in 2005
  2. Best student paper award at National Symposium of Acoustics in 2007
  3. Best Paper award at International Conference on Vibration Problems 2015
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### **Selected Publications**

1. M. A. Dhanwani, A. Sarkar and B. S. V. Patnaik, "Lumped parameter models of vortex induced vibration with application to the design of aquatic energy harvester", Journal of Fluids and Structures, 43, 302-304, (2013)
2. M. V. Kunte, A. Sarkar and V. R. Sonti, "Asymptotic expansions for the coupled wavenumbers in an infinite orthotropic flexible fluid-filled cylindrical shell", Journal of the Acoustical Society of America, Vol 131 (6), pp 4272-4282, (2012)
3. A. Sarkar and V. R. Sonti, "Asymptotic analysis for the coupled wavenumbers in an infinite fluid-filled flexible cylindrical shell: the beam mode", Journal of Sound and Vibration, Vol. 319, pp. 646-667, (2009)