Tamizharasi G.

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EDUCATION

Degree	*Institute/ University*	*Year*
Ph.D.	Indian Institute of Technology Madras	2018
M.Tech. *(Structural Engineering)*	National Institute of Technology Karnataka, Surathkal	2012
B.Tech. *(Civil Engineering)*	Pondicherry Engineering College, Pondicherry University	2010

AREAS OF INTEREST

(1) Earthquake Engineering
(2) Structural Dynamics
(3) Design of Reinforced Concrete Structures

RESEARCH WORK

Course	*Title*	*Description*
Ph.D.	Mitigation of Seismic Lateral-Torsional Response in Plan Unsymmetric Buildings	Torsion in buildings is attributed to poor structural configuration in plan; it arises from both *torsional eccentricity* and *torsional flexibility*. Usually, building code provisions focus on torsional effects on buildings only due to *torsional eccentricity*. This study examined torsional effects arising from *both* of these. Buildings with *torsional eccentricity (especially buildings with large eccentricity)* and *torsional flexibility (whose fundamental mode is a torsional mode)* demand large deformations in vertical elements resisting lateral loads along the periphery of the building, and cause brittle failure owing to lack of sufficient energy dissipation capacity in the structural elements. The present study provided limits on plan eccentricity to mitigate negative inelastic effects of torsion, rather than seeking to design for them.
M.Tech.	Development and Testing of Magnetorheological fluid for making for making Seismic Dampers	An experimental study was conducted with a newly constructed Capillary Tube Viscometer to test Magnetorheological (MR) fluid in presence and absence of magnetic field; the sedimentation property of the fluid was studied. Such fluids may be used for making semi-active control devices that can control seismic demand in buildings under earthquake shaking.
B.Tech.	Self-Compacting Concrete incorporating High Volume Fly ash	Self-compacting concrete can be made more affordable for the construction market by replacing high volumes of Ordinary Portland cement by fly ash.

PUBLICATIONS

Journal Publications

(1) Tamizharasi,G., Prasad,A.M., and Murty,C.V.R., (2017), "Limiting Twisting During Earthquakes in Buildings with Unsymmetrical Stiffness in plan – Elastic Study", *Indian Concrete Institute Journal,* 18(1), pp 20-26, April-June 2017

Awarded the ***Best Paper Published in ICI Journal***, at the 35th *Annual General Body Meeting* of the Indian Concrete Institute and *2018 Awards Function*, NIMHANS Convention Center, Lakkasandra, Bengaluru, 22 September 2018

(2) Tamizharasi,G, Manohar,A.K, Sengupta,K., Venkataramana,K. and Umesh,G., (2012), "Magnetorheological Dampers - An Overview," *International Journal of Earth Sciences and Engineering,* 05(4), pp 1068-1072, August 2012

(3) Manohar,A.K., Sengupta,K., Tamizharasi,G. and Gogoi,I., (2012), "Earthquake Vulnerability Assessment of Buildings in Guwahati," *International Journal of Earth Sciences and Engineering*, 05(4), pp 618-623, June 2012

Conference Proceedings

(1) Tamizharasi,G., Prasad,A.M., and Murty,C.V.R., (2017), "Criticality of Controlling Seismic Torsional Response in Plan Unsymmetric Buildings", *16th World Conference on Earthquake Engineering (16 WCEE)*, Paper No: 916, CDROM, 9-13 January 2017, Santiago, Chile

(2) Tamizharasi,G., Manohar,A.K., Sengupta,K., Venkataramana,K., and Umesh,G., (2012), "Development Of Magnetorheological Fluid For Making Seismic Dampers," National Conference on Contemporary Civil Engineering Research & Practices (CCERP-2012), 20-21 April 2012, Manipal Institute of Technology, Manipal

Won the ***Best Presenter Award*** in *Structural Engineering* theme at the *National Conference on Contemporary Civil Engineering Research & Practices (CCERP-2012),* Manipal Institute of Technology, Manipal

(3) Gogoi,I., Manohar,A.K., Sengupta,K., and Tamizharasi,G., (2011), "A Comparison of Earthquake Vulnerability Assessment of Buildings in Guwahati, Kolkata and Mumbai," *National Conference* on *Advances in Materials and Structures, AMAS 2011*, 03-04 February 2011, Pondicherry Engineering College, Puducherry

Research Bulletin

(1) Tamizharasi,G., Manohar,A.K., Sengupta,K., Venkataramana,K., and Umesh,G., (2012), "Testing of Fluids for Making Magnetorheological (MR) Dampers – An Experimental Study," *NITK Research Bulletin*, National Institute of Technology Karnataka, Surathkal, 21(1), pp 19-25, July 2012.

SOFT SKILLS

Commercial Technical Software: STAAD Pro, ETABS, SAP 2000, Perform 3D

(1) Linear static and dynamic analysis

(2) Nonlinear static and dynamic analysis

AWARDS & RECOGNITIONS

(1) ***Gold Medal*** for securing highest Cumulative Grade Point Average in M.Tech. (Structural Engineering) Program, National Institute of Technology Karnataka, Surathkal, 2012

(2) ***Chirag. K. Doshi Memorial Prize*** for being poor and meritorious among all branches of final year B.Tech. Program during 2009–10, Pondicherry Engineering College, 2010

(3) ***Government of Puducherry Prize*** for securing ***Second Rank*** in the University Examination held during 2006–10, Pondicherry University, 2011

(4) Stood ***Second*** in Kannagi Government Girls Higher Secondary School, Puducherry, in Class 10 Examinations, in 2004

EMPLOYMENT HISTORY

(1) *Assistant Professor,* Applied Mechanics Department, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, 04 November 2019 to till date
(2) *Senior Scientist,* Department of Civil Engineering, Indian Institute of Technology Madras, Chennai, 28 February 2019 to 31 October 2019
(3) *Project Officer*, Department of Civil Engineering, Indian Institute of Technology Madras, Chennai, 01 August 2017 to 27 February 2019

IN-PLANT TRAINING

Underwent industrial in-plant training:
(1) *ISRO*, Bengaluru, during 61 days (9 May to 8 July 2012)
(2) *Chennai Port* Trust, Chennai, during 10 days (20 – 29 December 2008)
(3) *JENO Maran Builders*, Puducherry, during 48 days (15 days during June 2008 and 26 May to 27 June 2009)
(4) *J.M.M. Builders*, Puducherry, during 15 days (26 May to 09 June 2008)

EXTRA-CURRICULAR ACTIVITIES

(1) Coordinator, *Structural Research Forum*, Structural Engineering Laboratory, IIT Madras 2014-2015
(2) Attended the *Earthquake Engineering Literature Survey Workshop* for the Postgraduate Students conducted by *National Information Centre of Earthquake Engineering*, Indian Institute of Technology Kanpur, Kanpur, 05-14 June 2014
(3) Participated in the Tutorial Program on *Seismic Design and Testing* conducted by the *Central Power Research Institute*, Bengaluru, 01 March 2013
(4) Participated in the *Winter IISc National Training for Entry to Research (Winter) 2009* organised by the Indian Institute of Science, Bengaluru, 28 December 2009 to 02 January 2010
(5) Participated in model making contest *GEOFEST 2009* in *Government College of Technology*, Coimbatore, 15 & 16 March 2009
(6) Presented a paper on "Long Term Energy Needs-A Perspective" at the *National Level Students Technical Symposium* organised by the Annamalai University, Chidambaram, 29 February and 1 March 2008