

KATTA VENKATARAMANA - CURRICULUM VITAE

(last updated: April 2018)



PERSONAL DETAILS

Name : Katta Venkataramana

Designation : Professor of Civil Engineering

Qualification : Doctor of Engineering

Specialization : Structural Engineering
(Structural Dynamics, Earthquake Engineering, Offshore Structures, Disaster Risk Mitigation)

Address : Department of Civil Engineering
National Institute of Technology Karnataka (NITK)
Surathkal, Srinivasnagar, Mangalore 575 025, INDIA
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EDUCATION

1986-89	Dr.Eng.	Civil Engineering	Kyoto University, Japan
1984-86	M.Eng.	Ocean Civil Engineering	Kagoshima University, Japan
1976-81	B.Eng.	Civil Engineering	University of Mysore, India

POSITIONS HELD

09/2002– present **Professor**, Department of Civil Engineering,
National Institute of Technology Karnataka, Surathkal, India

04/2010 – 03/2011 **Visiting Professor**, Center for Globalization,
Kumamoto University, Kumamoto City, Japan

01/1995 – 08/2002 **Associate Professor**, Department of Ocean Civil Engineering,
Kagoshima University, Kagoshima City, Japan

11/1991 - 12/1994 **Assistant Professor**, Department of Ocean Civil Engineering,
Kagoshima University, Kagoshima City, Japan

10/1990 - 10/1991 **Postdoctoral Research Fellow**, Department of Engineering Science,
University of Oxford, Oxford, UK

06/1989 - 06/1990 **Research Engineer**, Hazaki Research Laboratory,
Sumitomo Metal Industries, Hazaki, Japan

10/1981 - 06/1982 **Lecturer**, Department of Civil Engineering,
Manipal Institute of Technology, Manipal, India

ADMINISTRATIVE POSITIONS HELD AT NITK

10/2014 – 09/2017	Dean (Academic)
10/2014 – 09/2017	Chairperson – Board of Studies (UG, PG, Research)
04/2013 – 09/2014	Head of the Department - Dept of Civil Engineering
10/2012 – 04/2013	Chief Vigilance Officer
09/2009 – 03/2010	Head of the Department - Dept of Civil Engineering
10/2008 – 01/2010	Coordinator – Centre for Disaster Risk Reduction
01/2004 – 08/2009	Chairperson - NITK Health Care Committee
03/2004 – 08/2007	Associate Dean (PG & Research)
03/2004 – 08/2007	Convener - BOS (PG) & BOS (Research)
09/2005 – 04/2007	Chairperson - Estate & Works Committee

ACTIVITIES AS MEMBER OF PROFESSIONAL SOCIETIES / EXPERT COMMITTEES

06/2009 – Present	Member, Governing Body, DK Nirmithi Kendra, Surathkal, Karnataka
04/2013 – 09/2014	Member, Building Committee, Mangalore University, Karnataka
01/2006 – 12/2006	Chairperson, Technical Committee, Formed by the Deputy Commissioner, Dakshina Kannada District, for revising the Building Byelaws and Zoning Regulations for Mangalore City.
02/2002	Member, Advisory Committee, Asia-Oceania Symposium on information technology and strategy for earthquake disaster reduction, <i>Organized by National Research Institute of Fire and Disasters, Japan</i>
03/2001	Member, Expert Committee sent to Gujarat (India) for the Bhuj earthquake damage survey, <i>Ministry of Education, Japanese Government</i>
05/2000 – 09/2002	Member, Expert committee for formulating guidelines for the design and construction of floating bridges in Japan, <i>Japan Society of Civil Engineers</i>
06/1995 - 06/1997	Member, Technical Program Committee, <i>International Society of Offshore and Polar Engineers</i>
04/1995 - 03/1996	Member, Expert committee on structural cable behaviour, <i>Kyushu Association for Bridge and Structural Engineering, Japan</i>

INVITED AS EXPERT by external agencies/organizations

- 1) Examiner for master's/PhD Thesis evaluation – Kuvempu University, JNTU, VTU, Bangalore Univ., Manipal Univ., IIT Madras, IIT Bombay, IIIT Hyderabad, SVNIT Surat, Kerala University.
- 2) Reviewer for NPTEL Video Courses, IIT Madras (2013 onwards)
- 3) Evaluator for Student Projects submitted to Karnataka State Council for Science & Technology (2013)
- 4) Evaluator of project proposals submitted to Kerala State Council for Science, Technology and Environment (2011 onwards)
- 5) Evaluator of project proposals submitted to Department of Science & Technology, Govt of India (2013 onwards).
- 6) Member of Board of Studies - Bangalore University (2007-09), Karunya University (2011-12), MSRIT (2013-15)
- 7) External Expert for the Faculty Selection/Promotion Committee at Manipal University (2008 onwards)
- 8) Adjunct Professor, Amrita Vishwa Vidyapeetham, Coimbatore (January 2015 onwards)

CONFERENCES/WORKSHOPS / SHORT TERM COURSES (data for last 15 years)

Conferences/Workshops/Short term courses Organized:

- 1) Coordinator for the workshop on “*Earthquake resistant design and retrofitting of RC structures*” held at NITK, Surathkal, Institute during January 21-22, 2004
- 2) Coordinator for the workshop on “*Curriculum for postgraduate education in NITK*” held at NITK, Surathkal during Feb 18-19, Feb 24-25, March 12, March 17-18, 2005.
- 3) Co-coordinator for the National Workshop on “*R&D Activities in National Institutes of Technology : Review & Planning*”, January 20-21, 2006.
- 4) Coordinator for the *Training & Capacity Building Programme for Engineers & Architects on Earthquake Engineering* (6 Modules), sponsored by the DC's Office, Dakshina Kannada District during October 2005 to September 2006.
- 5) Coordinator for the workshop on “*Coastal Erosion Control Measures for West Coast Region of India*” held at NITK, Surathkal, on March 7, 2006
- 6) Coordinator for the workshop on “*Earthquake resistant design and retrofitting of RC structures*” held at NITK, Surathkal, during October 9-13, 2006
- 7) Coordinator for the workshop on “*Earthquake resistant design and retrofitting of RC structures*” held at NITK, Surathkal, during January 7-11, 2008
- 8) Coordinator for the public awareness Programme on nuclear energy, titled “*ATOM FOR PEACE*”, held at NITK during February 12-14, 2008.
- 9) Coordinator for the Indo-Japan Theme Meeting & Workshop (IJTM 2008) on “*Disaster Risk Reduction : earthquakes, landslides, Tsunami*”, held at CPRI, Bangalore during August 28-29, 2008.
- 10) Coordinator for the Public Awareness Programme, titled “*Introduction to Japan, Japanese culture, communication skills in Japanese & Higher studies in Japan*”, held at NITK, Nitte, Manipal and Mysore during September 15-22, 2008.
- 11) Coordinator for the Theme Workshop titled “*Concrete for Coastal Environment*” held at NITK, Surathkal, during October 7-8, 2008
- 12) Convener of the NITK-KU Joint Seminar titled “*Recent Advances in Engineering & Technology*”, held at Kagoshima University, Japan during November 28-29, 2008.
- 13) Coordinator for the workshop on “*Earthquake resistant design and retrofitting of RC structures*” held at NITK, Surathkal, during March 9-13, 2009
- 14) Coordinator for the *Theme Meeting on Retrofitting & rehabilitation of Structures and International Seminar on Structural Rehabilitation* held at NITK, Surathkal and Mangalore during March 30-31, 2009.

- 15) Coordinator for the workshop on “*Design of Earthquake Resistant Structures*” held at NITK, Surathkal, during September 14-18, 2009.
- 16) Coordinator for the *NITK-KU Joint Seminar 2010*, held at NITK, Surathkal, on March 11, 2010.
- 17) Co-Coordinator for the *International Engineering Symposium 2011 (IES2011)*, held at Kumamoto University, Japan, during March 3-5, 2011.
- 18) Convener for the *International Engineering Symposium 2012 (IES2012)*, held at Kumamoto University, Japan, during March 5-7, 2012.
- 19) Convener for the *International Engineering Symposium 2013 (IES2013)*, held at Kumamoto University, Japan, during March 4-6, 2013.
- 20) Conference Chair for the *First Annual Conference on Innovations and Developments in Civil Engineering (ACIDIC 2014)*, held at NITK Surathkal during May 19-20, 2014.
- 21) Conference Chair for the *International Workshop on Civil Infrastructure and Structural Materials*, held at NITK Surathkal during July 28-29, 2014.
- 22) Convener for the *International Engineering Symposium 2015 (IES2015)*, held at Kumamoto University, Japan, during March 4-6, 2015.
- 23) Convener for the *International Engineering Symposium 2016 (IES2016)*, held at Kumamoto University, Japan, during March 2-4, 2016.
- 24) Convener for the *International Engineering Symposium 2017 (IES2017)*, held at Kumamoto University, Japan, during March 1-3, 2017.
- 25) Convener for the *International Engineering Symposium 2018 (IES2018)*, held at Kumamoto University, Japan, during March 7-9, 2018.

Workshops/Short Term Courses/Meetings participated as resource person & delivered keynote/invited lectures:

- 1) Delivered lecture on “Lessons from Bhuj Earthquake – Damage of RC Structures”, at the workshop on “*Earthquake resistant design and retrofitting of RC structures*” held at NITK, Surathkal during January 21-22, 2004
- 2) Delivered lecture on “Bending and Torsion of Steel Structures” at the short-term course on “Design of Steel Structures”, held at NITK, Surathkal during March 29 – April 6 for teaching faculty from academic institutions and sponsored by Institute for Steel Development and Growth (INSDAG), Kolkata, 2004.
- 3) Delivered lectures on “Soil-structure Interactions” and “Seismic wave amplifications” at the short term course on “Structural Dynamics in Earthquake Engineering” held at IISc, Bangalore during March 8-13, 2004.
- 4) Delivered a lecture titled “Lessons from Consultation workshop on *Addressing Earthquake Awareness, Mitigation & Preparedness in Mangalore City*, held in Mangalore on June 21, 2004, organized by UNDP and District Administration of Dakshina Kannada, in association with NITK.
- 5) Delivered a lecture titled “Main Causes of Damages & Lessons learnt from Bhuj Earthquake” at the *Training Programme for Engineers & Architects*, held at Coimbatore during September 7-8, 2004.
- 6) Delivered a lecture titled “Earthquakes” at the Short term course on *Planning, Development and Management of Modern Urban Core Infrastructure Solutions for India* held at NITK, Surathkal during December 21-31, 2004.
- 7) Delivered a lecture, titled EARTHQUAKES, at the Workshop on *Disaster Risk Management* held at Pilikula Nisarga Dhama, Mangalore during March 5-6, 2005.
- 8) Delivered a lecture titled “Main Causes of Damages & Lessons Learnt from Past Earthquakes”, at the *Training & Capacity Building Programme for Engineers & Architects on Earthquake Engineering (Module 1)*, sponsored by the DC’s Office, Dakshina Kannada District on October 7, 2005.
- 9) “Delivered a lecture, titled “Dynamic Soil Structure Interaction Effects on Multi-Storeyed RCC Frames”, at the *International Conference in Structural Dynamics & Its Applications*, 7-9 December 2005, GITAM, Visakhapatnam, India, pp.454-467.
- 10) Delivered a lecture titled “Performance of Ground & Buildings in Past Earthquakes”, at the *National Programme for capacity Building of Architects for Earthquake Risk Management*, MIT Manipal, on February 6, 2006.
- 11) Delivered a lecture titled “Structural Dynamics in Earthquake Engineering”, at the *National Programme for capacity Building of Architects for Earthquake Risk Management*, MIT Manipal, on February 9, 2006.
- 12) Delivered a lecture titled “Seismic Risk Mitigation”, at the *Training & Capacity Building Programme for Engineers & Architects on Earthquake Engineering (Module 5)*, sponsored by the DC’s Office, Dakshina Kannada District on August 25, 2006.

- 13) Delivered a lecture titled "Engineers Role on Earthquake Safe Construction and Seismic Risk Mitigation", at the 39th *Engineers Day Seminar on Role of Engineers in Disaster Mitigation and management* held on Sept 9, 2006 at MIT Manipal.
- 14) Delivered a lecture titled "Techno Legal Aspects and review of Existing Building Byelaws", at the *Training & Capacity Building Programme for Engineers & Architects on Earthquake Engineering (Module 6)*, sponsored by the DC's Office, Dakshina Kannada District on August 25, 2006.
- 15) Delivered a lecture titled "Regulations and Curriculum at NITK" at the *workshop on Student Evaluation Methods in Autonomous Institutions*, held at Malnad College of Engineering, Hassan on February 9-10, 2007.
- 16) Delivered a lecture titled "Main Causes of Damages & Lessons Learnt from Past Earthquakes – Bhuj Experience", at the *National Workshop on Recent Trends in Seismic Design of Foundation and Structures*, held at Nitte on February 27-28, 2007.
- 17) Delivered a lecture titled "Earthquake Resistant Design Philosophy of Concrete Structures" at the *Workshop on Earthquake Resistant Design, Construction, Retrofitting and Rehabilitation of Structures* held at Davangere during 7-11 May 2007.
- 18) Delivered a lecture titled "Mangalore City Building Byelaws 2006 (draft)", at the *Meeting of the Institution of Engineers (India), Kodagu, Dakshina Kannada & Udupi Engineers Association and Association of Consulting Civil Engineers* held at Mangalore on July 21, 2007.
- 19) Delivered a lecture titled "National Building Code" at the Meeting of the *Rotary Club of Mangalore Metro*, held at Mangalore on 23 August 2007.
- 20) "Upgradation of Zoning Regulations & Building Byelaws to the Systematic Infrastructure Development in Mangalore City", *Seminar on Role of Valuers in Infrastructure Development* held at Hotel UTSAV, Mangalore on November 25, 2007
- 21) Delivered a lecture titled "Multi-hazard Building Byelaws – Case study of Mangalore City" at the *Training programme on Disaster Safe Building Codes & Designs*, held at Administrative Training Institute, Mysore, during August 4-8, 2008.
- 22) Delivered a lecture titled "Introduction to earthquake Engineering & Lessons from past earthquakes" at the *Tutorial on design, testing and retrofitting of structures for earthquake loading* held at CPRI, Bangalore on August 27, 2008.
- 23) Delivered a lecture titled "Multi-hazard Building Byelaws in Cities – Case Study of Mangalore City" at the *Training programme on Urban Management (with specific reference to urban disasters)*, held at Administrative Training Institute, Mysore, during December 22-26, 2008.
- 24) Participated as subject expert at the *Workshop on Formulation of Karnataka State Disaster Management Plan*, held at the Administrative Training Institute, Mysore during April 20-21, 2009
- 25) Delivered a lecture titled "Experimental study on the behaviour of infilled RC frames under seismic loading" at the NITK/ASTR-KU Joint Seminar held at Kagoshima University, Japan on May 28, 2009.
- 26) Delivered a lecture titled "Natural Disasters: Prevention & Mitigation" at the *World Environment Day*, organized by NITK Kannada Medium High School on June 6, 2009.
- 27) Delivered a lecture titled "Multi-hazard building byelaws in cities: case study of Mangalore City Corporation", at the Training Programme on *Disaster Management in Urban Areas*, held at the Administrative Training Institute, Mysore, during June 18-20, 2009.
- 28) Delivered a lecture titled "Multi-hazard Building Byelaws: A Case Study", at the Training Programme on *Disaster Safe Building Codes & Designs* for district level officers, held at the Administrative Training Institute, Mysore, during September 7-11, 2009.
- 29) Delivered a lecture titled "Main causes of damages & lessons learnt from past earthquakes", at the Training programme on Disaster Management, organized by Administrative Training Institute, Govt of Karnataka, and held at Zilla Panchayath hall, Udupi during October 27-29, 2009.
- 30) Delivered a lecture titled "Disaster Safe Construction Practices – Lessons from Past Earthquakes", at the International Conference on Emerging Trends in Engineering, Held at Jaisingpur, during February 20-21, 2010.
- 31) Delivered the Inaugural address at the Inaugural function of Students' Union and Sports' Union of Government Polytechnic, Bantwal, Karnataka, September 10, 2011.
- 32) Delivered a lecture titled "Earthquake Engineering", at the National Seminar on Disaster Management and Mitigation, Kalasalingam University, Krishnankoil, Tamil Nadu, September 16, 2011
- 33) Delivered a lecture titled "Fundamentals of Earthquake Engineering", to undergraduate students of Department of Civil Engineering, Alva's Institute of Engineering & Technology, Moodabidri, Karnataka, September 21, 2011.
- 34) Delivered a lecture titled "Earthquake Engineering", at the technical meeting of the Association of Consulting Engineers (India), Mangalore Chapter, September 29, 2011.

- 35) Delivered a lecture titled "Reinforcement Detailing for Earthquake Resistant Design" as part of the Continuing Education Programme on Reinforced Concrete Detailing, mix design and quality control, organized by Center for Continuing Education (NITK) during October 17-21, 2011.
- 36) Delivered a lecture titled "Introduction to Earthquake Engg" –at Sahyadri Engg College, organized by ACCE(I), Mangalore Centre, As part of Engineers Week during March10-17, 2012.
- 37) Delivered a lecture titled "Coastal Disasters and Possible Mitigate Measures", as part of the Training Programme on Disaster Management for District Disaster Management (DDMA) Members, at District Training Institute, Mangalore, during June 18-20, 2012.
- 38) Delivered a lecture titled "Introduction to Earthquake Engineering" – Delivered at Adhiyamaan College of Engineering, Hosur, on Sept 3, 2012.
- 39) Delivered a lecture titled "Introduction to Earthquake Engineering" at Toc H Institute of Technology, Ernakulam, at the International Conference on Emerging Trends in Manufacturing Technology, during Sept 5-6, 2012.
- 40) Delivered a lecture titled "Earthquake Resistant Design of Structures" –at K L University, Vijayawada, on Sept 8, 2012.
- 41) Delivered a lecture titled "Earthquake Disaster Risk Mitigation Measures" at Dr J J Magdum College of Engineering, Jayasingpur at the 2nd International Conference on Emerging Trends in Engineering during Feb 22-23, 2013.
- 42) Delivered a lecture titled "Coastal Disaster Mitigation Techniques", in the School of Civil Engineering, Karunya University, Coimbatore, on April 13, 2013.
- 43) Delivered a lecture titled 'Earthquakes', at *Poornaprajna College, Udupi*, on September 11, 2013.
- 44) Delivered the Inaugural address at the Inaugural function of the *SRISTICA-2013 & Engineers' day celebrations* at Srinivas School of Engineering, Mukka, Mangalore on September 20,2013.
- 45) Delivered a lecture titled "Strengthening of iron ore filter unit's heavy engineering shed at Kuduremukh iron Ore company Limited", at the Workshop on "*Structural Rehabilitation and Retrofitting using Construction Chemicals*" held at IIT Bombay during September 24-25, 2013.
- 46) Delivered a lecture titled "Introduction to Earthquakes", at the one-day National Seminar titled "*Effectual disaster management in India with special reference to Dakshina Kannada*", held at Besant Evening College, Mangalore on December 17, 2013.
- 47) Delivered a lecture titled "Seismic analysis of structures", at the 3-day National Workshop on "*Dynamic Analysis of Machines and Structures*", held at NITK Surathkal, during 29-31 January 2014.
- 48) Delivered a lecture titled "Introduction to Earthquake Engineering" at the St Joseph Engineering College, Mangalore, as part of *Engineers Week* organized by ACCE(I), Mangalore Centre, on March 25, 2014.
- 49) Delivered a keynote lecture titled "Earthquake response characteristics of masonry infill panels", at the 3rd World Conference on Applied Sciences, Engineering & Technology, held at Kathmandu, Nepal during September 27-29, 2014.
- 50) Chaired a technical session at the International Conference on Emerging Trends in Mechanical Engineering (ICETME'15), held at Ernakulam during September 3-5, 2015.
- 51) Delivered a keynote lecture titled "Seismic response of masonry infill panels", at the 3rd National Conference on Systems, Energy and Environment (NCSEE'15), held at Kannur during September 10-11, 2015.
- 52) Delivered an invited lecture titled "Seismic response control of steel structures using dampers", at the International Conference on Innovative Trends in Civil Engineering for Sustainability – ICICES 2016 held at Ernakulam, Kerala during January 8-9, 2016.
- 53) Delivered a keynote lecture titled "Seismic response of masonry infill panels", at the International Conference on Emerging and Sustainable Technologies for Infrastructure Systems,(ESTIS2016), held at Coimbatore during April 22-23, 2016.
- 54) Delivered a invited lecture titled "Overview of current seismic building codes", at the National Level Workshop on Revised Seismic Codes – Impact on Structural Design, Construction & Safety of Buildings, held at Kolhapur during December 18-19, 2017.
- 55) Delivered a invited lecture titled "Impact of IS 13920:2016 on Design & Detailing of RC Structure", at the National Level Workshop on Revised Seismic Codes – Impact on Structural Design, Construction & Safety of Buildings, held at Kolhapur during December 18-19, 2017.
- 56) Delivered an invited lecture titled "Earthquake resistant construction practices", at MBITS, Ernakulam, on April 16, 2018.
- 57) Delivered a keynote lecture titled "Recent advances in earthquake resistant construction practices", at the 2nd *National Conference on Structural Engineering and Construction management, SECON '2018*, held at FISAT, Angamaly, Kerala, during April 17-18, 2018.

MAJOR RESEARCH PROJECTS WITH EXTERNAL FUNDING/COLLABORATION

12/2007 – 11/2017	Collaborative research in the area of structural engineering (under the MOU between NITK and BARC <i>(sponsored by BARC)</i>)
04/2010 – 03/2013	Effect of corrosion on residual capacity prediction of RCC beams and beam column joints in coastal environment <i>(sponsored by BRNS)</i>
04/2009 – 03/2012	Uncertainty and sensitivity analysis of the pushover method for RC framed structures with brick infill walls <i>(sponsored by BRNS) (Co-Investigator)</i>
09/2007 – 03/2012	Evaluation of concrete and structural elements under fire loads <i>(sponsored by BRNS) (Co-Investigator)</i>
09/2007 – 03/2012	Dynamic soil structure interaction effects in multistoreyed structures on homogeneous soil and geosynthetic reinforced soil <i>(sponsored by BRNS) (Co-Investigator)</i>
09/2007 – 03/2011	Earthquake response characteristics of masonry infill panels <i>(sponsored by BRNS)</i>
03/2004 - 03/2007	Studies on the seismic vulnerability and earthquake resistant design of structure for south-west region of India <i>(MHRD-TAT project)</i>
03/2004 - 03/2006	Establishment of Earthquake Engineering Lab <i>(Sponsored by NPEEE)</i>
04/2001 - 08/2002	Dynamic safety evaluations of large offshore structures <i>(Sponsored by Japanese Ministry of Education, Science & Culture)</i>
04/2000 - 03/2002	Earthquake resistance of civil engineering structures of Kagoshima prefecture <i>(Sponsored by Yonemori Research Foundation)</i>
04/2000 - 03/2001	Dynamics of deep water uplifting devices <i>(Sponsored by Kagoshima Prefectural Government)</i>
04/1999 - 03/2001	Development of GPS mounted floating devices for measurement of flow parameters <i>(Sponsored by Shinwa Gijutsu Consulting Corporation)</i>
04/1998 - 03/2001	Dynamic characteristics of large offshore structures <i>(Sponsored by Japanese Ministry of Education, Science & Culture)</i>
04/1996 – 04/1998	Dynamic stability evaluation of offshore structures <i>(Sponsored by Japanese Ministry of Education, Science & Culture)</i>
04/1994 – 04/1995	Dynamics of underwater tunnels due to waves, currents & earthquakes <i>(Sponsored by Japanese Ministry of Education, Science & Culture)</i>
04/1994 – 04/1995	Fluid forces on ship rudder models <i>(Sponsored by Mitsubishi Heavy Industries Ltd.)</i>
04/1993 – 04/1994	Junction flow around a strut mounted on a flat plate <i>(Sponsored by Mitsubishi Heavy Industries Ltd.)</i>

THESIS GUIDANCE EXPERIENCE

Doctoral thesis

Ongoing:

1. Vajreshwari Umachagi : Seismic Response control
2. Archana J Satish : Torsional response of asymmetric buildings under earthquake load (co-guide)
3. Shreyasvi C : Quantification of seismic hazard

submitted for evaluation:

NIL

Completed:

1. Rajendra Prabhu (2018): Performance appraisal of eco-friendly mortars and concretes (co-guide)
2. Bhavana Patel S S (2016): Meshfree technique with adaptive refinement strategy for crack propagation analysis (co-guide)
3. Premanand Shenoy (2016): Optimum material disposition in 2D plate bending problems – nodes in motion strategy (co-guide)
4. Akshatha Shetty (2014): Effect of reinforcement corrosion on the bond strength of RC members
5. Poornachand Pandit (2014): Effect of corrosion on the flexural behavior of reinforced concrete beams
6. Srujana Nandam (2013): Seismic response of substation equipment with porcelain component
7. Shanthala B (2013): Response analysis of berthing structures for wave and earthquake induced forces including soil-structure interaction (co-guide)
8. Sujatha Unnikrishnan (2013) : Seismic response of laterite masonry structures (co-guide)
9. Chethan K (2010) : Studies on the influence of infill on dynamic characteristics of reinforced concrete frames
10. H C Chinnagiri Gowda (2010) : Usage potential of welded wire fabrics as lateral reinforcement in RC frames
and elements for seismic zones
11. B R Jayalekshmi (2009): Seismic response analysis of multistorey frames including soil-structure interaction
12. Babunaryan K S (2008): Discrete and continuous search algorithms for shape optimization of structures
13. Arakawa K (2002) : Uncertain parameter effects on seismic response evaluations of nonlinear structures
14. Hashimoto S (2002) : Dynamic safety evaluations of offshore structures
15. Komasa T (1998) : Dynamic response analyses of large offshore structures
16. Taniguchi T (1998) : Approximate evaluation of dynamic response of offshore structure

Master's thesis

Ongoing:

1. Pradeep Kumar Pandre: Optimum location of shear wall in multi-storey buildings
2. Nissin Ann Mathew: Earthquake response of structures with sliding base isolation
3. Sameeha Latheef: Vibration control of tall chimneys
4. Shubha Javagal: Studies on crack propagation in aircraft structures (*MTech-Research*)

Completed:

1. Seethu K (2017): Earthquake response of structures with base isolation
2. Anusree R (2017): Seismic analysis of multistorey RC structures with tuned mass damper
3. Haseena Mumthas M (2017): Performance based seismic analysis of RC framed buildings for various lateral load pattern
4. Bindhya K V (2017): Performance based seismic design of RC framed buildings
5. Archana Rajan (2017): Effect of gravity column in seismic response of buckling restrained braced frames

6. Smrithi Sohan (2017): Seismic response of tall RCC buildings with mass irregularity (co-guide)
7. Swathi S (2017): Performance-based seismic analysis of structure: evaluation of performance point (*MTech-Research*)
8. Ajay Ramesh Prabhu (2016): Assessment of fundamental period of RC structures
9. Deepa Venugopalan (2016): Dynamic response of RC frames with brick masonry infill panels
10. Kausalya G (2016): Lamb wave based damage detection in curved plates
11. Harisangam Madhura Ajit (2016): Seismic analysis of RCC structure using time history method and push over analysis
12. Mithila Bhagavathi M (2016): Studies on stress intensity factors and crack propagation in 2-dimensional plates using extended finite element method
13. Radhika Harshini V (2016): Health monitoring of stiffened plate structures.
14. Rokalla Eshwara Reddy (2016): Seismic response of asymmetric structures
15. Dheeraj Swamy B L P (2016): Performance based seismic engineering techniques for RC special moment resisting frames
16. Catherin Jaselia (2015) : Earthquake response of brick masonry infills (*MTech-Research*)
17. Kushitha U (2015): Seismic response control of structures using base isolation.
18. Vinaykumar R (2015): Seismic response control of structures with tuned mass damper
19. Muhammad Naseef P A (2015): Reduction of earthquake response of buildings by viscoelastic dampers
20. Sunil D V (2014): Studies on the effect of change in dead load on the design of multistorey buildings
21. Shashikumar M B (2014): Study on crack initiation and propagation using extended finite element method.
22. Divya Dev C M (2014): A parametric study on the vibro-acoustic performance of segmented fuselage with noise insulating passive material.
23. Neeraja Nair (2014): Structural design and analysis of unmanned aerial vehicle wing
24. Sri Ramakrishna Kavuluru (2014): Bond behavior between concrete and steel.
25. Jessiya Thasneem (2013): Seismic performance of steel structures with and without dampers
26. Manju Mariam John (2013): Seismic response control of structures by tuned mass dampers
27. Meenakshy P (2013) : Damage detection using ARX model in ASCE benchmark structure and applicability based on damping ratio
28. Aruna D (2013): Scope for utilization of waste tiles as partial replacement to coarse aggregate in normal, porous and blended concretes
29. Thomas Tamut (2013) : Usage potential of expanded polystyrene beads as partial replacement to coarse aggregates in concrete
30. Akshatha Shetty (2012) : Effect of corrosion on loss of bond strength in reinforced concrete members (*MTech-Research*)
31. Tamizharasi G (2012): Development and testing of magnetorheological fluid for making seismic dampers
32. Mahesha (2012): Experimental investigation on the flexural strength of corroded PPC reinforced concrete beams
33. Shivaprasad Naik K (2012): Experimental investigation on the flexural strength of corroded OPC reinforced concrete beams
34. Arun S Sedmkar (2012): Analytical investigation on flexural strength of RC beams using ANSYS.
35. Deeja A (2011): Seismic fracture analysis in concrete gravity dams
36. Bharath Kumar S (2009): Response characteristics of RC frames with masonry infill panels
37. Ashok Kumar S (2009): Performance of 150mm normal strength concrete(NSC) cubes at elevated temperatures
38. Goutam (2008) : Performance evaluation of 3D RC Frame under earthquake loading
39. Bhagyashri P (2008): Experimental study on chloride diffusion property of concrete
40. Vikas B N (2008): Evaluation of influence of masonry infill on 2D RC frames under seismic loading
41. Chandrakala C (2008): Evaluation of concrete under fire loads – preliminary investigation on cylinders
42. Mahesh Babu K (2008): Evaluation of concrete under fire loads – preliminary investigation on 100mm cubes
43. Mahesh G (2007) : Performance of RC frames using CFRP sheets under seismic loading – An experimental investigation
44. Sistla Prasanna (2007) : Performance of RC frames using masonry infill under seismic loading – An experimental investigation

45. Chandrashekhara Poojari (2007) : Performance of RC frames using welded wire fabrics under seismic loading – An experimental investigation
46. Prasad Vodugu B S (2007) : Performance of RC frames using RECRON 3S fibres under seismic loading – An experimental investigation
47. Prashanth M H (2006) : Performance enhancement of RC frames using welded wire fabrics – An experimental investigation
48. Sajith M (2006): Performance enhancement of RC frames using CFRP sheets – An experimental investigation
49. Neena V Hede (2005) : Static and dynamic analysis of berthing structure
50. Prashanth Salla (2005): Studies on application of artificial neural networks in semi-active control of controllable fluid dampers
51. Hema S (2004) : Optimum design of parabolic antenna
52. Chethan K (2004) : Design and testing of bamboo house for seismic loading
53. Soumya S (2004) : Linear and nonlinear response analysis of SDOF systems subjected to earthquake motions
54. Yasunaga K (2002) : Earthquake response of TLPs under offset condition
55. Uda T (2001) : Wave response characteristics of TLPs
56. Kuguhara M (2001) : GPS mounted floating structures as flow measurement devices
57. Tanabe Y (2000): Dynamics of floating bridges
58. Tougou J (2000): Dynamics of TLPs in steady currents

Undergraduate thesis (data for last 10 years)

Ongoing:

1. Apoorva, Mrunal Vikas Narkar and Sneha Choukikar: Vibration of extra-dosed bridges
2. Pawan Kumar Verma and Vikram Kumar Maharaniyan: Dynamic response of bridges

Completed:

1. Nidhi Rao, Sheethal Raj S G and Harshith Gowda (2017): Analysis of multi-storey building subjected to blast loading
2. Manasa Bhat and Neha Madhulika (2016): Effects of different kinds of bracing systems on buildings
3. Geetha C, Subhashree S and Raju Meena (2016): Response spectrum analysis of a RC framed building for different position of shear wall.
4. Aishwaraya M Bansode (2016): Seismic structural characterization of Nepal
5. Debarun Chatterjee, Chera Tata, Sabnam Gogoi, Tekcham Gishan Singh (2013): Effects of Corrosion on flexural strength and deflection of RCC beam (OPC).
6. Abhishek Rastogi, Deepak Bhandarkar, Lalit Mohan (2013): Effects of Corrosion on flexural strength and deflection of RCC beam (PPC).
7. Atul Gupta, Neeraj Gandhi, Satyendra Kumar Patel, Sayantani Dutta (2013): Damage detection using frequency analysis as a part of structural health monitoring.
8. Ankur Durga Prasad Kurmi, Maulik Saxena, Rahul Kumar, Rohit Kumar (2013): Analysis and Design of Extra-Dosed Bridge
5. Karun Mathew Joseph (2012) : Monotonic flexural behavior of plain concrete beams strengthened by textile reinforced concrete
6. Aditya S A, Tariq Zyad, Bharath R and Sajal (2012): Effect of corrosion on bond strength of reinforced concrete: A study using NASYS
7. Avinkrishnan A V, Vinay Damodaran, Sushma A and Poonam M (2012): Effect of dynamic loads on cable stayed bridges
8. Ajit Kamath and Kaustav Sengupta (2012): Development and testing of magnetorheological fluid for making seismic dampers
9. Ravishankar T, Saket Dabi, Surya Prakash N B and Vijendra Chourey (2007): Experimental and analytical dynamic analysis of structures
10. Piyush Pandey, Gautam D G, Singh N R and Sarge D R (2006): Rapid visual screening of existing buildings of NITK campus for potential seismic vulnerability
11. Sunil Kumar D, Ranjith Kumar B and Alok Verma (2006): Structural behavior of interlocking iron-ore-tailings based concrete block pavement

TEACHING EXPERIENCE

Courses

PG Level: 1. Structural Dynamics 2. Earthquake Engineering 3. Safety of Structures

4. Plates and Shells 5. Offshore Structural Engineering 6. Theory of Elasticity

UG Level: 1. Structural Analysis I & II 2. Structural Design (RCC) 3. Structural Design (Steel)

4. Engineering Mathematics 5. Structural Dynamics & Wind Engineering

General (both UG&PG): Introduction to Japanese Language & Culture (*non-credit course*)

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- 1) Fellow, The Institution of Engineers (India) (F-112304-8)
- 2) Fellow, Indian Association of Structural Engineers (F-214)
- 3) Life Member, Indian Society of Earthquake Technology (LM 834)
- 4) Life Member, The Indian Society for Technical Education (LM 38344)
- 5) Life Member, Indian Concrete Institute (M 7160)
- 6) Life Member, Kodagu, Dakshina Kannada and Udupi Engineers' Association (LM 642)
- 7) Life member, Association of Consulting Civil Engineers (India) (LM 2024)
- 8) Life Member, Association of Structural Rehabilitation (A0502)

AWARDS AND RECOGNITIONS

- Was conferred **Eminent Engineers' Award** for achieving excellence in professional field and service to the Civil Engineering Fraternity, from the **Association of Consulting Civil Engineers (India), Mangalore Centre**, on the occasion of Engineers' day 2013, held on September 15, 2013.

SELECTED RESEARCH PUBLICATIONS IN NATIONAL / INTERNATIONAL JOURNALS

1. Bhavana Patel S S, Babu Narayan K S and Venkataramana K, (2016): "Strategy for refinement of nodal densities and integration cells in EFG technique", *Structural Engineering and Mechanics*, Vol.59, No.5 (2016), pp.901-920. (DOI: <http://dx.doi.org/10.12989/sem.2016.59.5.901>)
2. Shetty A, Venkataramana K and Babu Narayan K S (2015): "Studies on load deflection behavior of corroded RC beams", *ICI Journal*, (July-Sept 2015), pp.9-17.
3. Shetty A, Venkataramana K and Babu Narayan K S (2015): "Experimental and numerical investigation on flexural bond strength behavior of corroded NBS RC beam", *International Journal of Advanced Structural Engineering*, Springer, DOI 10.1007/s40091-015-0093-6, (May 2015), pp.1-6.
4. Shetty A, Venkataramana K and Babu Narayan K S (2014): "Effect of corrosion on flexural bond strength", *Journal of Electrochemical Science and Engineering*, Vol. 4, No. 3 (2014), pp. 123-134.
5. Shetty A, Venkataramana K and Babu Narayan K S (2014): "Flexural bond strength behavior in OPC

- concrete of NBS beam for various corrosion levels”, *Structural Engineering and Mechanics, Techno-Press Ltd*, Vol.49, No.1, pp.81-93.
6. Jayalekshmi B R, Deepthi Poojari V G, Venkataramana K and Shivashankar R (2013): “Seismic response analysis of reinforced concrete frames including soil flexibility”, *Structural Engineering and Mechanics, Techno-Press Ltd*, Vol.48, No.1, pp1-16.
 7. Unnikrishnan S, Narasimhan M C and Venkataramana K (2013): “Effect of containment reinforcement on the seismic response of box type laterite masonry structures – an analytical evaluation”, *Earthquakes and Structures, Techno-Press Ltd*, Vol.5, No.1, July 2013, pp,67-81.
 8. Unnikrishnan S, Narasimhan M C and Venkataramana K (2012): “Free vibration studies of box type laterite masonry structures”, *Journal of Structural Engineering, SERC*, Vol.39, No.3, August-Sept 2012, pp.332-346.
 9. Chethan K, Ramesh Babu R, Venkataramana K and Sharma A (2010). “Influence of masonry Infill on fundamental frequency of 2D RC frames”, *Proc. of Journal of Structural Engineering, SERC-Chennai*, Vol.37, No.2, (June-July 2010) pp.135-141.
 10. Venkataramana K, and Peethala, S.S. (2007) ”Comprehensive revision of Building Byelaws – A case of Mangalore City”, *Asian Disaster management News – Special Issue on Emerging Risks and Approaches for Reducing Vulnerability of the Urban Built Environment*, May-August 2007, pp.22-24.
 11. Babunarayan, K S and Venkataramana K (2007) “Shape optimization of steel reinforced concrete beams”, *Computers and Concrete – An International Journal*, Vol.4, No.4, pp.317-330.
 12. Kawano K. and Venkataramana K. (1999): “Dynamic response and reliability analysis of large offshore structures”, *Computer Methods in Applied Mechanics and Engineering*, Elsevier Science, Vol.168, No.1-4, pp.255-272.
 13. Venkataramana K. and Kawano K. (1996): “Parametric uncertainties for dynamic response evaluation of offshore structures”, *Journal of Computational Mechanics*, Vol.18, No.6, pp.454-463.
 14. Venkataramana K. and Kawano K. (1995): “Nonlinear dynamics of offshore structures under sea wave and earthquake forces”, *Academy Proceedings in Engineering Sciences* (Indian Academy of Sciences), Sadhana, Vol.20, Parts 2-4, pp. 501-512.
 15. Venkataramana K. (1994): “Earthquake response of tension leg platforms in steady currents”, *Earthquake Engineering and Structural Dynamics*, Vol.23, pp.63-74.
 16. Kawano K., Yamada Y., Venkataramana K. and Iida T. (1991): “Dynamic interaction analysis of offshore platform due to random wave forces”, *Journal of Structural Engineering, JSCE*, Vol.37A, pp.1489-1496 (in Japanese).
 17. Venkataramana K. and Yoshihara S. (1989): “Hydrodynamic coefficients for flexible offshore columns by wave diffraction techniques”, *Applied Ocean Research*, Vol.11, No.1, pp.51-56.
 18. Yamada Y., Iemura H., Kawano K. and Venkataramana K. (1989): “Seismic response of offshore structures in random seas”, *Earthquake Engineering and Structural Dynamics*, Vol.18, pp.965-981.
 19. Kawano K., Yamada Y. and Venkataramana K. (1988): “Dynamic response analysis of soil-offshore structure systems”, *Computers and Structures*, Vol.30, No.3, pp.581-586.
 20. Yamada Y., Kawano K., Iemura H. and Venkataramana K. (1988): “Wave and earthquake response of offshore structures with soil-structure interaction”, *Proc. of JSCE, Structural Engineering/Earthquake Engineering*, Vol.5, No.2, pp.361s-370s.