B I O – D A T A

1. Name : **Dr. Yuwaraj M. Ghugal**

2. Designation : **Professor and Head,**
Applied Mechanics Department,
Govt. College of Engineering, Karad – 415 124

3. Date of Birth : **1st July, 1961.**

4. Father's Name : **Shri Marotrao Gadiji Ghugal**

5. Languages written & spoken : **Marathi, Hindi & English**

6. Permanent Address : **At Dadhera, Post. Tisti (Bujrug),**
Tq. Kalmeshwar, Dist. Nagpur (M.S.)

7. Present Address : **.Plot. No. 43, 44, Shivkrupa Colony,**
Near Lords Mangal Karyalaya,
Aurangabad – 431 005, Maharashtra State, India.

8. Educational Qualifications : **B. E. (Civil Engineering),**
M.Tech. (Structural Engineering.),
Ph. D. (Structural Engg. from I.I.T. Bombay)

9. Details of Exam Passed :

Exam Passed	Name of the Institute	University/ Board	Division	Date & year of passing
S.S.C.	Gomukh Vidyalaya Nanda Gomukh.	Nagpur	I (D)	14.08.1978
H.S.S.C.	Saraswati Vidyalaya Nagpur.	Nagpur	I (D)	09.06.1981
B.E.(Civil)	Regional College of Engg. Nagpur	Nagpur	First	02.03.1986
M.Tech. (Struct.)	Regional College of Engg. Nagpur	Nagpur	First	07.01.1990
Ph.D. (Struct.)	Indian Institute of Technology, Bombay	Powai, Mumbai	-----	**23.11.2000**

Passed the **MS-CIT Examination** of Maharashtra State Higher and Technical Examination Board, Mumbai, in **First Division with Distinction** on 27.08. 2002.

10. Professional Experience. : M/s Jayshree Construction Co. Nagpur
From 16. 04.1986 To 15. 05. 1987 : ……01 Year

11. Teaching Experience :

Post Held	Institute	From	To	Total Period Years	Months
1. Lecturer	Y. C. College of Engineering, Nagpur	10.8.87	30.6.88	0	11
2. Lecturer	S.D.M. Polytechnic, Nagpur.	16.8.88	15.6.89	0	10
3. Lecturer	R.K.N. Engg. College Nagpur	29.8.89	22.1.90	0	05
4. Lecturer	Govt. Engg. College. Aurangabad	25.1.90	28.6.96	06	05
5. Assistant Professor	Govt. Engg. College, Karad.	29.6.96	30.6.01	05	--
6. Assistant Professor	Govt. Engg. College, Aurangabad	01.7.01	11.07.02	01	--
7. Professor	Govt. Engg. College, Aurangabad	12.07.02	30.04.11	08	08
8. Professor	Govt. Engg. College, Karad	01.05.11	Till date	04	00

Total Teaching Experience 25 Yrs
Total Experience in Engineering Profession: 26 Yrs.

MEMBERSHIPS OF TECHNICAL / PROFESSIONAL INSTITUTIONS

(INSTITUTION / SOCIETY, GRADE OF MEMBERSHIP, YEAR OF ELECTION)

INSTITUTION / SOCIETY	MEMBERSHIP	NUMBER	YEAR
1. INSTITUTION OF ENGINEERS (INDIA), CALCUTTA	(Fellow)	F-110570 / 8	2005
2. INDIAN SOCIETY FOR TECH.EDUCATION, NEW DELHI	(LM)	LMISTE (8323)	1991
3. INDIAN CONCRETE INSTITUTE, MADRAS ……	(LM)	MICI (3663)	1992
4. INDIAN SOCIETY OF CONSTRUCTION MATERIALS & STRUCTURES, ROORKEE… ……	(LM)	LMISCMS (254)	1992
5. INDIAN SOCIETY FOR EARTHQUAKE TECHNOLOGY, ROORKEE ……	(LM)	MISET (785)	1994
6. INDIAN SOCIETY FOR WIND ENGINEERING, ROORKEE	(LM)	MISWE (164)	1994
7. INTERNATIONAL CENTRE FOR FIBRE REINFORCED CONCRETE COMPOSITES, CHENNAI, INDIA (LM-ICFRC)	(LM)	ILM (0190)	2001

List of Papers Published in National and International Conferences

By

Dr. Y. M. Ghugal

1. **Effect of soil structure-interaction on concrete chimney.** Annual paper meeting, 18th November, 1990, IEI Nagpur Centre, Nagpur, India, pp. 18-26.

2. **Effects of sulphur, nitrogen and carbon compounds on cement and concrete**. All India seminar on Effect of Air Pollution on Concrete Structures. 28 – 29 th February,1992. Organized by IEI Nagpur Centre, Nagpur, India, pp. 133-138

3. **Corrosion and carbonation**: **Deterioration of concrete structures.** Workshop on Distress in Concrete Structures and their rehabilitation. 4-5th February, 1993. Organized by ISCMS, New – Delhi, India, pp. 1-5.

4. **Investigations in to the load bearing performance of ferro-cement doubly curved roof tiles**. International Symposium on Innovative World of Concrete. Aug. 30 – Sept 3, 1993. Organized by Indian Concrete Institute, Bangalore, India.Vol.1, pp.(2), 3-13.

5. **Earthquake resistant houses**. Lokmat Times –A leading News paper in Maharashtra State, 1st November, 1993, page No. 09, Aurangabad, India. (Public awareness program on Earthquake Engineering and Disaster Management.)

6. **Alternative materials of constructions.** All India Seminar on Economics and Management of Concrete construction and its Maintenance. 24-25th Feb., 1994 by ICI, IEI and MNRE, Allahabad. pp III (43 – 48).

7. **Analysis of water distribution network by FEM.** 3rd Regional Conference on Computer Applications in Civil Engineering, 2 – 4th August, 1994. Organized by Faculty of Civil Engineering. Universisty Teknologi, Kuala Lumpur, Malaysia. pp.1-5.

8. **Polymer modified mortar**: **A material for strengthening of earthquake damaged structures.** 10th Symposium on Earthquake Engineering, Nov. 16 – 18th 1994. Department of Earthquake Engineering, University of Roorkee, India, pp. 203 – 209.

9. **Minimum weight design of ductile frames using linear programming**. National Conference on Civil Engineering Materials and Structures19 – 21, Jan., 1995, Department of Civil Engineering, Osmania University, Hyderabad. pp. 284 – 290.

10. **Robotics in construction**: National Seminar on High Rise Structures and XI National Conference of Civil Engineers, 14 – 16th Nov.1995. Organized by The Institution of Engineers (India), & MRN Engg. College, Allahabad. pp. v (101-108).

11. **The load bearing performance of doubly curved lightweight concrete tiles**. International Seminar on Civil Engineering Practices in 21st Century. Feb. 26-28th,

1996. Organized by The Institution of Engineers (India), Roorkee local Centre, Roorkee, and U.P. India. Vol.2, pp. 988-995.

12. **Low-cost locally available materials of construction.** Regional Seminar on Low Cost Flood Resisting Energy Efficient Houses for Eastern U.P. March 13-14th 1996. Organized by Deptt. of Civil Engineering, M. M. M. Engg. College, Gorakhpur, U.P., India. pp. 68-74.

13. **Structural behaviour of lightweight concrete shells of double curvature**. Procs. National Conference on Cost Effective Materials and Techniques for Mass Housing. Organized by Centre for Low-cost Housing, Deptt. of Civil Engineering , JNTU College of Engineering, Anantpur (A.P), India, June 27-28, 1997.

14. **Effect of teacher vacancies on technical education and remedial measures**. Procs. National Seminar on Teacher Vacancies in Degree and Diploma Level Technical Institutions: Causes and Possible Remedial Measures. Organized by Department of Civil Engineering, Govt. College of Engineering, Aurangabad, Maharashtra, India, Jan, 21-22, 1998, pp. 13-18.

15. **A Layerwise Trigonometric Shear Deformation Theory for Flexural Analysis of Cross-ply Laminated Beams.** In Proc. International Conference on Theoretical, Applied Computational, and Experimental Mechanics (ICTACEM 98), I.I.T. Kharagpur, Indai, Paper No.133, 1-5 Dec.1998.

16. **A Trigonometric Shear Deformation Theory for Flexural and Free Vibration of Thick Isotropic Beams.** In Procs. Structural Engineering Convention – An International Meet, 5-8 Jan,2000, SEC-2000, Indian Institute of Technology, Bombay, Powai, Mumbai, India. pp. 255-263.

17. **Effect of steel fibers on various strengths of concrete**, Part-I. Procs. International Symposium on Innovative World of Concrete, Organized by Indian Concrete Institute, Pune, India., Sept. 19-21, 2003.

18. **Effect of alkali resistant glass fibers on various strengths of concrete**: Part-I, Procs. International Symposium on Innovative World of Concrete, Organized by Indian Concrete Institute, Pune, India. Sept. 19-21, 2003.

19. **Fibre reinforced concrete: A promising material for road pavements**. Procs. National seminar on Improvement, Rehabilitation and Maintenance of Roads. (IRAM-2003), August 22-23, 2003. Organized by Civil Engineering Department, Govt. College of Engineering Aurangabad and Sponsored by AICTE, New Delhi.

20. **Use of recycled aggregates concrete with steel fibres for pavements**. Procs. National seminar on Improvement, Rehabilitation and Maintenance of Roads. (IRAM-2003), August 22-23, 2003. Organized by Civil Engineering Department, Govt. College of Engineering Aurangabad and Sponsored by AICTE, New Delhi.

21. **Use of recycled aggregates concrete with polymers and steel fibres for pavements**. Procs. National seminar on Improvement, Rehabilitation and Maintenance of Roads. (IRAM-2003), August 22-23, 2003. Organized by Civil Engineering Department, Govt. College of Engineering Aurangabad and Sponsored by AICTE, New Delhi.

22. **Strength performance of silica fume concrete. Procs. ICFRC International Conference on Fibre Composites, High Performance Concretes and Smart Materials**, January 8-10, 2004, Organized by ICFRC, ECC Convention Center, Manappakam, Chennai, India.

23. **Performance of Polymer Modified Polypropylene Fiber Reinforced Concrete under Direct Shear.** Procs. National Conference on Recent Advances in Structural Engineering (NCRASE), February 11-12, 2006, Organized by Civil Engineering Department, JNTU College of Engineering, Kakinada –533003, (AP), India.

24. **Structural Health Monitoring of Transmission Line Towers with Dynamic Response Characteristics.** Procs. National Conference on Recent Advances in Structural Engineering (NCRASE), February 11-12, 2006, Organized by Civil Engineering Dept., JNTU College of Engineering, Kakinada –533003, (AP), India.

25. **Strength performance of silica fume concrete:** Part I. Procs. The Tenth East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-10), August-3-5, 2006, organized by Civil Engg. Dept., AIT Bangkok, Thailand, pp. 633-638.

26. **Modeling of Steel Fiber Reinforced Concrete with High Fiber Volume Fractions.** Procs. 2nd International Conference on Computational Mechanics and Simulation (ICCMS-06), 8-10 Dec. 2006, Organized by Indian Association for Computational Mechanics in collaboration with IIT Guwahati, India.

27. **Effect of glass fibers on various strengths of concrete.** 4th International Speciality Conference on Fiber Reinforced Materials, 30-31, October 2006, Hong Kong, China.

28. **A Single Variable Parabolic Shear Deformation Theory for Flexure and Flexural Vibration of Thick Beams.** Procs. 3rd International Conference on Structural Engineering, Mechanics and Computation (SEMC-2007), 10-12 September 2007. Organized by Department of Civil Engineering, University of Cape Town, Rondebosch, Cape Town, South Africa.

29. **Flexural Analysis of Thick Isotropic Plate using a New Shear Deformation Theory.** Procs. International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM 2007), 10-12 December 2007. Organized by Departments of Aerospace and Mechanical Engineering, IIT Kharagpur, India.

30. **Prediction of Compressive Strength by Incorporating Steel Fibers.** (Co-authored with Damgir R. M.). Procs. 35th Conference on Our World in Concrete and Structures, Singapore, 26-27 August 2010.

31. **Cylindrical Bending of Thick Isotropic Plates using Trigonometric Shear Deformation Theory.** Co-author: George Jiji T., Procs. 4rd International Conference on Structural Engineering, Mechanics and Computation (SEMC-2010), 6-8 September 2010. Organized by Department of Civil Engineering, University of Cape Town, Rondebosch, Cape Town, South Africa. Paper No. SEMC 2010/320.

32. **Free Vibration of Thick Isotropic Plates using Trigonometric Shear Deformation Theory.** Co-author: George Jiji T., Procs. 4rd International Conference on Structural Engineering, Mechanics and Computation (SEMC-2010), 6-8 September 2010. Organized by Department of Civil Engineering, University of Cape Town, Rondebosch, Cape Town, South Africa. Paper No. SEMC 2010/535.

33. **Performance of High Strength Fiber Reinforced Concrete.** Co-author: Sawant, R. M. Procs. 4rd International Conference on Structural Engineering, Mechanics and Computation (SEMC-2010), 6-8 September 2010. Organized by Department of Civil Engineering, University of Cape Town, Rondebosch, Cape Town, South Africa. (Accepted) Paper No. SEMC 2010/377.

34. **Trigonometric Shear Deformation Theory for Thick Isotropic Plates.** Co-author Jiji George. Procs. International Conference on Mathematical Modeling and Non-Linear Equations. 20-22 January 2010. Organized by Department of Mathematics, B. N. M. Institute of Technology, Bangalore, India.

35. **An Experimental Investigation on Glass Fiber Modified Properties of Structural Concrete.** Co-authors: Londhe, R. S. and Deshmukh, S. B. Procs. 5th International Conference on FRP Composites in Civil Engineering, CICE 2010, 27-29 September 2010. Bejing, China. Accepted: Abstract No.: 05-003.

36. **Effect of Different Sizes of Aggregate on Steel Fiber Reinforced Concrete.** Procs. International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. I, pp. 367 – 374.

37. **Performance of High Strength Fiber Reinforced Concrete.** (Co-authored with Sawant, R. M.) Procs. International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. I, pp. 438 – 445.

38. **Behaviour of Alkali Resistant Glass Fiber Reinforced Concrete.** (Co-authored with Lad, V. M. and Waghe, U. P.). Procs. International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. I, pp. 446 – 453.

39. **Performance of Steel Fiber and Silica Fume on High Strength Concrete.** (With Kakade, D. N.). Procs. International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. I, pp. 463 – 470.

40. **Effect of Temperature Curing on Flow and Strength of Fly Ash based Geopolymer Mortar.** (Co-authored with Patankar, S. V., and Jamkar, S. S.). Procs. International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. I, pp. 490 – 495.

41. **Strength and Durability of Concrete with Pond Ash and Crushed sand as Fine Aggregate.** (Co-authored with Bang Radha S. and Pateriya, I. K.). Procs. International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. I, pp. 587 – 596.

42. **Analysis of Simply Supported Orthotropic Plates using Trigonometric Shear Deformation Theory.** (Co-authored with Jiji T. George). International Conference on Innovative World of Structural Engineering (ICIWSE 2010). Organized by Department of Applied Mechanics, Govt. Engineering College, Aurangabad, M.S., India, 17-19 Sept 2010, Vol. II, pp. 813-821.

43. **Comparative Study of Refined Beam Theories for Static Flexure of Deep Beams.** (Co-authored with Sayyad A. S.). Procs. 7th Structural Engineering Convention (SEC 2010), Annamalai University, Annamalai Nagar, Tamilnadu, India, 8-10 December 2010, Vol. 1, pp. 202-210.

44. **A Refined Shear Deformation Theory for Thick Isotropic Plates.** (Co-authored with Jiji T. George). Procs. 7th Structural Engineering Convention (SEC 2010), Annamalai University, Annamalai Nagar, Tamilnadu, India, 8-10 December 2010, Vol. 1, pp. 202-210.

45. **Effect of Sodium Hydroxide on Flow and Strength of Fly Ash based Geopolymer Mortar.** (Co-authored with Patankar S. V. and Jamkar S. S.). Procs. 7th Structural Engineering Convention (SEC 2010), Annamalai University, Annamalai Nagar, Tamilnadu, India, 8-10 December 2010, Vol. 1, pp. 202-210.

46. **Effect of Highly Alkaline Solution in the Production of Fly Ash based Geopolymer Mortar.** (Co-authored with Patankar S. V. and Jamkar S. S.). Procs. International Conference on Sunrise Technology, Dhule, India, 01-03 January 2011, pp. 1.8.1 – 1.8.7.

47. **Flexural Strength of Polymer Modified Fiber Reinforced Concrete.** Procs. National Conference on Advances in Materials and Structures (AMAS-2011), Pondicherry Engineering College, Pondicherry, India, 3-4 Feb 2011, pp. 122 – 126.

48. **Some Properties of Steel Fiber Reinforced Concrete.** Procs. International Conference on Sunrise Technologies (iCOST 2011 – Civil Engg.), 13-15, Jan 2011. Organized by B. S. Deore College of Engineering and Polytechnic, Dhule, India, pp. CE-4.23.1- 5.

49. **Free Vibration of Cross-ply and Angle-ply Laminated Plates using Trigonometric Shear Deformation Theory.** Authored by *Yuwaraj M. Ghugal*, *R. L. Wankhade and P. K, Deshpande*. Procs. 4th International Conference on Structural Stability and Dynamics (ICSSD 2012), 4-6 January 2012. Organized by Malviya National Institute of Technology, Jaipur and Texas A & M University, USA. Vol. 1, pp. 160-174.

50. **Investigation of Flexural Strength of FRC by using Silica Fume.** Authored by *Yuwaraj M. Ghugal*, and *R. M. Damgir*. Procs. 4th International Conference on Structural Stability and Dynamics (ICSSD 2012), 4-6 January 2012. Organized by Malviya National Institute of Technology, Jaipur and Texas A & M University, USA. Vol. 1, pp. 126-128.

51. **Utilization of Flyash in Production of Geopolymer Concrete. National Conference on Emerging Vistas of Technology in 21st Century**, 2012, Gujarat Technological University, Gujarat, pp. 15-19.

52. **Effect of Solution to Fly Ash Ratio on Flow and Compressive Strength of Geopolymer Concrete.** Co-Authored by Patankar, S. V., Jamkar, SS. *Procs*. SEC-2012, Structural Engineering Convention-2012 (8th Biennial Conference), 19-21 December 2012, organized by Applied Mechanics Department, SVNIT Surat, Gujarat, India.

53. **Thermo-flexural Response of Symmetric Cross-ply Laminated Plates subjected to Linear and Non-Linear Thermo-Mechanical Loads.** Co-authored by Kulkarni, S. K. *Procs*. SEC-2012, Structural Engineering Convention-2012 (8th Biennial Conference), 19-21 Dec. 2012 organized by Applied Mechanics Department, SVNIT Surat, Gujarat, India.

54. **Effect of Grading of Fine Aggregate on Flow and Compressive Strength of Geopolymer Concrete.** Co-Authored by Patankar, S. V., Jamkar, SS. *Procs*. UKIERI Concrete Congress 2013: Innovations in Concrete Construction, 5-8 March 2013, organized by Civil Engineering Department, Dr. B. R. Ambedkar NIT Jalandhar, Punjab, India.

55. **Experimental Study on Steel Fiber Reinforced Concrete Deep Beams.** Co-authored with Ekatpure, S. N. National Conference on Research and Developments in Structural Engineering (RDSE), 15-16 March 2013, RIT Sakharale, M.S., India, pp. 255-262.

56. **Analysis of Thick Simply Supported Beam using Refined Shear Deformation Theory.** Authors: Ajay D. Dahake and Yuwaraj M. Ghugal. National Conference on Recent Advances in Structural Engineering, 12-14 Sept. 2013, Hyderabad, India.

57. **Effect of Polymer Modified Steel Fiber Reinforced Concrete on Various Strengths of Concrete.** Authors: Uttam B. Kalwane, Yuwaraj M. Ghugal and Ajay D. Dahake. National Conference on Recent Advances in Structural Engineering, 12-14 Sept. 2013, organized by Osmania University, Hyderabad, India.

58. **Strength of Polypropylene –Steel Fiber Reinforced Concrete Deep Beams.** Procs. National Conference on Advances in Civil and Structural Engineering, 22-23 August 2014. Organized by Department of Civil Engineering and Applied Mechanics, Govt. Engineering College, Karad, M.S., India. Co-author: Avanti M. Anjungikar. 234-242.

59. **Mix Design of Fly Ash Based Geopolymer Concrete.** Authored by: Subhash V. Patankar; Yuwaraj M. Ghugal; Sanjay S. Jamkar. Structural Engineering Convention 2014, **SEC2014**, 22-24 Dec. 2014. Organized by Department of Civil Engineering, Indian Institute of Technology (IIT) Delhi.

60. **Effect of Degree of Orthotropy on Transverse Deflection of Composite Laminates Under Thermal Load.** Author(s): Sanjay Kantrao Kulkarni; Yuwaraj M. Ghugal. Structural Engineering Convention 2014, **SEC2014**, 22-24 Dec. 2014. Organized by Department of Civil Engineering, Indian Institute of Technology (IIT) Delhi.

61. **Thermoelastic Stress Analysis Perfectly Clamped Metallic Rod Using Integral Transform Technique.** Author(s): Gandhe G. R.; Kulkarni V. S.; Ghugal Y. M. Structural Engineering Convention 2014, **SEC2014**, 22-24 Dec. 2014. Organized by Department of Civil Engineering, Indian Institute of Technology (IIT) Delhi.

62. **Effect of Fineness and Quantity of Fly Ash on Geopolymer Concrete.** Co-Authored by Patankar, S. V., Jamkar, SS. *Procs*. UKIERI Concrete Congress 2013: Innovations in Concrete Construction, 2-5 Nov. 2015, organized by Civil Engineering Department, Dr. B. R. Ambedkar NIT Jalandhar, Punjab, India.

63. **Flexural Analysis of Sandwich Plate using Higher Order Shear Deformation Theory**. National Conference on Advancements and Challenges in Civil Engineering, Procs. 23rd April 2015, Valliammai College of Engineering, Kattankulathur-603203, Kanchipram, Tamilnadu. pp. 316-322. Co-author: Ms. Priyanka S. Borage.

64. **Mechanical Properties of Polymer Modified Steel Fiber Reinforced Concrete.** Procs. National Conference for Engineering Post Graduates RIT NConPG-15. 1st June 2015. Rajarambapu Institute of Technology, Islampur-415414, Dist. Kolhapur, India, pp. 193-199, ISBN-13:978-151209469. Co-authored by Miss Shivani Bothra.

National Conferences: 32 papers
International Conferences: 32 papers

LIST OF PUBLICATIONS BASED ON Ph.D WORK at IIT BOMBAY

1. Shimpi R.P. and Ghugal Y.M. **A Layerwise Trigonometric Shear Deformation Theory for Flexural Analysis of Cross-ply Laminated Beams.** In Proc. International Conference on Theoretical, Applied Computational, and Experimental Mechanics (ICTACEM 98), I.I.T. Kharagpur, Indai, Paper No.133, 1-5 Dec.1998.

2. Shimpi R. P. and Ghugal Y. M. **A Layerwise Trigonometric Shear Deformation Theory for Two – Layered Cross-ply Laminated Beams.** *Journal of Reinforced Plastics and Composites*, U.S.A., Vol. 18, No.16, pp.1516-1542, 1999.

3. Shimpi R. P. and Ghugal Y. M. **A New Layerwise Trigonometric Shear Deformation Theory for Two – Layered Cross-ply Laminated Beams.** *Composites Science and Technology*, U.K., Vol.61, No.9, pp.1271-1283, 2001.

4. Shimpi R. P. and Ghugal Y. M. **A Layerwise Shear Deformation Theory for Two Layered Cross-ply Laminated Plates.** *Mechanics of Composite Materials & Structures- An International Journal*, U.S.A., Vol.7, No.4, pp. 331-353, 2000.

5. Ghugal Y. M. and Shimpi R. P. **A Trigonometric Shear Deformation Theory for Flexural and Free Vibration of Thick Isotropic Beams.** In Procs. Structural Engineering Convention – An International Meet, 5-8 Jan,2000, SEC-2000, Indian Institute of Technology, Bombay, Powai, Mumbai, India. pp. 255-263.

6. Ghugal Y. M. and Shimpi R. P. **A Review of Refined Shear Deformation Theories for Isotropic and Anisotropic Laminated Beams.** *Journal of Reinforced Plastics and Composites*, U.S.A., Vol.20, No. 3, pp. 255-273, 2001.

7. Ghugal Y. M. and Shimpi R. P. **A Review of Refined Shear Deformation Theories for Isotropic and Anisotropic Laminated Plates.** *Journal of Reinforced Plastics and Composites*, U.S.A, Vol.21, No.9, pp. 775-813, 2002.

JOURNAL PUBLICATIONS

1. Shimpi R. P. and Ghugal Y. M. **A Layerwise Trigonometric Shear Deformation Theory for Two – Layered Cross-ply Laminated Beams.** *Journal of Reinforced Plastics and Composites*, U.S.A., Vol. 18, No.16, pp.1516-1542, 1999.

2. Shimpi R. P. and Ghugal Y. M. **A New Layerwise Trigonometric Shear Deformation Theory for Two – Layered Cross-ply Laminated Beams.** *Composites Science and Technology*, U.K., Vol.61, No.9, pp.1271-1283, 2001.

3. Shimpi R. P. and Ghugal Y. M. **A Layerwise Shear Deformation Theory for Two Layered Cross-ply Laminated Plates.** *Mechanics of Composite Materials & Structures- An International Journal*, U.S.A., Vol.7, No.4, pp. 331-353, 2000.

4. Ghugal Y. M. and Shimpi R. P. **A Review of Refined Shear Deformation Theories for Isotropic and Anisotropic Laminated Beams.** *Journal of Reinforced Plastics and Composites,* U.S.A., Vol. 20, No. 3, pp. 255-273, 2001. Most Read and cited paper.

5. Ghugal Y. M. and Shimpi R. P. **A Review of Refined Shear Deformation Theories for Isotropic and Anisotropic Laminated Plates.** *Journal of Reinforced Plastics and Composites,* U.S.A, Vol.21, No.9, pp. 775-813, 2002. Most Read and cited paper.

6. **Effects of steel fibers on various strengths of concrete.** ***ICI Journal*** **(**Indian Concrete Institute Journal), Chennai, India, Vol. 4, No.3, pp. 23-29, 2003.

7. **Performance of Alkali Resistant Glass Fiber Reinforced Concrete**. *Journal of Reinforced Plastics and Composites,* Vol. 25, No. 6, pp. 617-630, 2006. (USA).

8. **Strength performance of silica fume concrete: Part II.** *Civil Engineering and Construction Review* (***CE & CR Journal***), Vol. 19, No. 12, 2006, pp. 62-69, New Delhi.

9. **Performance of Steel Fiber Reinforced High Strength Silica Fume Concrete.** *Civil Engineering and Construction Review* (***CE & CR Journal***)**,** Vol. 22, No. 10, 2009, pp. 32-44, New Delhi, India.

10. **A Hyperbolic Shear Deformation Theory for Flexure and Vibration of Thick Isotropic Beams.** *International Journal of Computational Methods***,** Vol. 6, Issue: 4, pp. 585-604, December 2009.

11. **Flexure of Thick Beams using Trigonometric Shear Deformation Theory.** *The Bridge and Structural Engineer,* The quarterly Journal of the Indian National Group (ING) of the International Association for Bridge and Structural Engineering (IABSE), Zurich, Switzerland, Vol. 39, No. 4, pp. 1-17, December 2009.

Year 2010

12. **A Static Flexure of Thick Isotropic Plates using Trigonometric Shear Deformation Theory.** *Journal of Solid Mechanics: An International Journal*, Vol. 2, No. 1, pp.79-90, 2010. Co-author with A. S. Sayyad.

13. **Flexure and Vibration of Thick Beams using Trigonometric Shear Deformation Theory.** *Journal of Experimental & Applied Mechanics: An International Journal*, Vol. 1, No. 1, pp. 1-27, 2010.

Year 2011

14. **Buckling and vibration of Plates by hyperbolic Shear Deformation Theory.** *Journal of Aerospace Engineering & Technology: An International Journal*, Vol. 2, No. 1, pp. 1-12, 2011.

15. **A Refined Shear Deformation Theory for Flexure of Thick Beams.** *Latin American Journal of Solids and Structures*, Vol. 8, No. 2, pp. 183-195, June 2011.

16. **Cylindrical Bending of Thick Orthotropic Plates using Trigonometric Shear Deformation Theory**. *International Journal of Applied Mathematics and Mechanics*, Vol. 7, No. 5, pp. 98-116, 2011.

17. **Effect of Transverse Shear and Transverse Normal Strain on Bending Analysis of Cross-Ply Laminated Beams.** *International Journal of Applied Mathematics and Mechanics*, Vol. 7, No. 12, pp. 85-118, 2011.

18. **Flexural Analysis of Deep Beams using Trigonometric Shear Deformation Theory.** *Journal of The Institution of Engineers* (India), IE(I), *Civil Engineering Division* , CV, Vol. 92, pp. 24-30, 2011. Authored by *Yuwaraj M. Ghugal and Uday P. Waghe.*

19. **Flexural Analysis of Thick Plates by Hyperbolic Shear Deformation Theory.** *Journal of Experimental & Applied Mechanics: An International Journal*, Vol. 2, No. 1, pp.17-37, 2011. Authored by *Yuwaraj M. Ghugal and Meghraj D. Pawar*

20. **A Discrete Layer Shear Deformation Theory for Flexure of Thick Cross-ply Laminated Beams.** *Journal of Experimental & Applied Mechanics: An International Journal*, Vol. 2, No. 1, pp. 1-16, 2011. Authored by *Y. M. Ghugal and S. B. Shinde* (*Mrs*).

21. **Thermal stress analysis of cross-ply laminated plates using refined shear deformation theory.** *Journal of Experimental & Applied Mechanics: An International Journal*, Vol. 2, No. 1, pp. 47-66, 2011. Authored by Y. M. Ghugal and S. K. Kulkarni.

22. **Free Vibration of Thick Orthotropic Plates using Trigonometric Shear Deformation Theory.** *Latin American Journal of Solids and Structures*, Vol. 8, No. 3, pp. 229-243, 2011. Co-author with A. S. Sayyad.

23. **Free Vibration of Thick Isotropic Plates using Trigonometric Shear Deformation Theory.** *Journal of Solid Mechanics*, Vol.3, No. 2, pp. 172-182, 2011. Co-author with A. S. Sayyad.

24. **Stress Analysis of Deep Cantilever Beams.** *The Bridge and Structural Engineer*, The quarterly Journal of the Indian National Group (ING) of the International Association for Bridge and Structural Engineering (IABSE), Vol. 41, No. 1, pp. 77 - 88, March 2011.

25. **Flexure of Thick Beams using New Hyperbolic Shear Deformation Theory.** *International Journal of Mechanics*, Vol. 5, No. 3, pp. 113-122, 2011. Authored by *Yuwaraj M. Ghugal and A. S. Sayyad.*

26. **Analysis and Design of Three and Four Legged 400 KV Steel Transmission Line Towers: Comparative Study.** *International Journal of Earth Sciences and Engineering,* Vol. 4, No. 6, pp. 691-694, Oct. 2011. Co-authored by Salunkhe, U.

Year 2012

27. **Static Flexure of Thick Orthotropic Plates using Trigonometric Shear Deformation Theory.** *SERC Journal of Structural Egineering*, Vol. 39, No.5, pp. 512-521, December 2012- January 2013. Authored by *Yuwaraj M. Ghugal and A. S. Sayyad.*

28. **Strength and Durability Studies of Pond Ash Concrete.** *Civil Engineering and Construction Review* (**CE & CR Journal**), Vol. 25, No. 1, 2012, pp. 120-126, New Delhi, India. ISSN 0975- 9034.

29. **Flexural Analysis of Thick Isotropic Clamped-clamped Beams using Trigonometric Shear Deformation Theory.** *International Journal of Advances in Management, Technology and Engineering Sciences,* Vol. 1, No. 6, pp. 46- 53, 2012 (March), ISSN – 2249-7455. Co-authored by Dahake, A. G.

30. **Strength Performance of Pond Ash Concrete:** *International Journal of Earth Sciences and Engineering,* Vol. 5, No. 1, pp. 180-185, Feb. 2012. Co-authored by Bang, R. S. and Pateriya I, K.

31. **Preliminary Design of Double Layer Grids using ANN**. *Journal of Structural Engineering,* SERC Madras, Accepted on 30 March 2012 for publication (in Press).

32. **Effect of Sodium Hydroxide on Flow and Strength of Fly Ash based Geopolymer Mortar.** *Journal of Structural Engineering*, Vol. 39, No. 1, pp. 43-48, April-May 2012. Co-authored by *Patankar S. V. and Jamkar S. S.*

33. **Flexure of Thick Cantilever Beams using Trigonometric Shear Deformation Theory.** *Journal of Experimental & Applied Mechanics: An International Journal*, Vol. 3, No. 1, pp. 17-31, 2012. Co-authored by *Dahake, A. G.*

34. **Bending and Free Vibration Analysis of Thick Isotropic Plates by using Exponential Shear Deformation Theory.** *Applied and Computational Mechanics*, Vol.6, No. 1, pp. 65-82, 2012. Authored by *Yuwaraj M. Ghugal and A. S. Sayyad*.

35. **Flexure of Thick Fixed Beams using Trigonometric Shear Deformation Theory.** *International Journal of Applied Mathematics and Mechanics,* Vol. xx, No. xx, pp. xx-xx, 2012. (Communicated). Co-authored with *Dahake, A. G.*

36. **Flexure of Thick Simply Supported Beam using Trigonometric Shear Deformation Theory.** *International Journal of Scientific and Research Publications,* Vol. 2, No. 11, pp. 1-7, 2012. Authored by Dahake, *A. G. and Ghugal, Y. M.*

37. **Effect of Stress Concentration on Laminated Plates.** *Cambridge Journal of Mechanics,* Vol. 29, No. 02, June 2013, pp. 241-252. Published online 19th December 2012. DOI: 10.1017/jmech.2012.131, Co-authored by *Sayyad, A. S.*

38. **Flexural Analysis of Cross-ply Laminated Beams using Layerwise Trigonometric Shear Deformation Theory.** *Latin American Journal of Solids and Structures*, Vol. 10, No. 4, pp. 675-705, 2012. Authored by *Yuwaraj M. Ghugal and Mrs. S. B. Shinde.*

39. **Effect of Aspect Ratio on Transverse Displacements for Orthotropic and Two Layer Laminated Plates subjected to Non-linear Thermal Loads and Mechanical Loads.** *International Journal of Civil and Structural Engineering,* Vol. 3, No. 1, pp. 186-196, August 2012. Co-authored by *Kulkarni, S. K.*

40. **Thermal Response of Symmetric Cross-ply Laminated Plates subjected to Linear and Non-Linear Thermo-Mechanical Loads.** ***Journal of Thermal Stresses*** (Taylor and Francis Publication, USA). Vol. 36, No. 5, pp. 466-479, 2013, Co-authored with *S. K. Kulkarni*. DOI:

41. **Flexural Analysis of Cross-ply Laminated Plates subjected to Nonlinear Thermal and Mechanical Loadings.** ***Acta Mechanica*** (Springer-Verlag Wien 2012 publication). Vol. 224, No. 3, pp. 675-690, 2013, Co-authored with *S. K. Kulkarni*. DOI: 10.1007/s00707-012-0774-1.

42. **Thermal Flexural Analysis of Cross-ply Laminated Plates using Trigonometric Shear Deformation Theory.** *Latin American Journal of Solids and Structures*, Vol. 10, No. 5, pp.1001-1023, 2013. Authored by *Yuwaraj M. Ghugal and Mr. S. K. Kulkarni.*

43. **Flexure of Thick Beams using Refined Shear Deformation Theory.** *International Journal of Civil and Structural Engineering,* Vol. 3, No. 2, pp. 321-335, November 2012. Co-authored by *Dahake, A. G.*

44. **Flexural Analysis of Deep Beam subjected to Parabolic Load using Refined Shear Deformation Theory.** *Applied and Computational Mechanics*, Vol. 6, No. 2, pp. 163-172 , 2012. Authored by Yuwaraj *M. Ghugal and Dahake, A. G.*

45. **Buckling Analysis of Thick Isotropic Plates by using Exponential Shear Deformation Theory.** *Applied and Computational Mechanics*, Vol. 6, No. 2, pp. 185-196, 2012. Authored by A. *S. Sayyad* and *Y. M. Ghugal.*

46. **Cylindrical Bending of Shear Flexible Plates using Trigonometric Shear Deformation Theory**. *Journal of Experimental & Applied Mechanics: An International Journal* Vol. 3, No.2-3, pp. 1-11, December 2012. Co-author: Mrs Jiji T. George.

Year 2013

47. **Bidirectional Bending of Laminated Plates using Trigonometric Shear Deformation Theory**. *Journal of Experimental & Applied Mechanics: An International* Vol. 4 , No.1, pp. 1-7, 2013. Co-author: Mrs Jiji T. George.

48. **Effect of Fly Ash Fineness on Workability and Compressive Strength of Geopolymer Concrete.** *The Indian Concrete Journal***,** Vol. 87, No. 4, pp. 57- 62, April 2013. Co-authored with S. S. Jamkar and V. S. Patankar.

49. **Stress Analysis of Thick Laminated Plates using Trigonometric Shear Deformation Theory.** *International Journal of Applied Mechanics*, Vol. 5, No. 1, pp. 1-23, 2013. Authored by *Yuwaraj M. Ghugal and A. S. Sayyad.* DOI: 10.1142/S1758825113500038.

50. **Analysis and Design of Three Legged 400 KV Double Circuit Steel Transmission Line Towers.** *International Journal of Civil Engineering and Technology*. Vol. 4, No. 3, May- June 2013, pp. 197 - 209.

51. **Thermoelastic Bending Analysis of Orthotropic Plates using Hyperbolic Shear Deformation Theory.** *Composites: Mechanics, Computations Applications*. *An International Journal*, Vol. 4, No. 3, pp. 257-278, 2013. Authored by *Yuwaraj M. Ghugal, A. S. Sayyad and B. M. Shinde.* Publ. by Begell House, Inc., USA.

52. **Flexure of Simply Supported Thick Beams using Refined Shear Deformation Theory.** *International Journal of Civil Science and Engineering,* Vol. 7, No. 1, pp. 1419-1429, 2013. Authored by *Yuwaraj M. Ghugal and Ajay D. Dahake.* Publ. by World Academy of Science, Engineering and Technology.

53. **Flexure of Cantilever Thick Beams using Trigonometric Shear Deformation Theory.** *International Journal of Mechanical, Industrial Science and Engineering*, Vol.7, No. 5, pp. 131-140, 2013. Authored by *Yuwaraj M. Ghugal and Ajay D. Dahake.* Publ. by World Academy of Science, Engineering and Technology.

54. **Effect of Water to Geopolymer Binder Ratio on the Production of Fly Ash based Geopolymer Concrete.** *International Journal of Advanced Technology in Civil Engineering*, Vol. 2, Issue 1, pp. 79-83, 2013, Co-authored by *Patankar S. V. and Jamkar S. S.* DOI:10.13140/2.1.47921284

Year 2014

55. **Static Flexure of Thick Cross-ply Laminated Beams using Layerwise Theory.** *International Journal of Applied Mathematics and Mechanics*, Vol. 10, No. 1, pp. 1-17, 2014. Authored by *Yuwaraj M. Ghugal and Mrs. S. B. Shinde.*

56. **On the Buckling of Isotropic, Transversely Isotropic and Laminated Composite Rectangular Plates.** *International Journal of Structural Stability and Dynamics.* Volume 14, No. 6, 2014. 1450020 (32 pages: 1- 32) Authored by *Yuwaraj M. Ghugal and A. S. Sayyad.* DOI:10.1142/S0219455414500205.

57. **A New Shear and Normal Deformation Theory for Isotropic, Transversely Isotropic, Laminated Composite and Sandwich Plates.** ***International Journal of Mechanics and Materials in Design***. Vol. 10, No. 3, pp. 247-267, 2014. Published online 12 February 2014. Authored by *Yuwaraj M. Ghugal and A. S. Sayyad.* DOI:10.1007/s10999-014-9244-3. Springer publication.

58. **Buckling and Free Vibration Analysis of Orthotropic Plates by using Exponential Shear Deformation Theory.** *Latin American Journal of Solids and Structures*, Vol.11, No. 8, pp. 1298-1314, 2014. Co-author with A. S. Sayyad. Impact Factor 1.21, ISSN 1679-7825 (electronic version).

59. **Flexural Analysis of Fibrous Composite Beams under Various Mechanical Loadings using Refined Shear Deformation Theories.** *Composites: Mechanics, Computations Applications. An International Journal*, Vol. 5, No. 1, pp. 1-19, 2014. Authored by *Yuwaraj M. Ghugal, A. S. Sayyad and R. R. Borkar*. Publ. by Begell House, Inc., USA.

60. **Effect of Concentration of Sodium Hydroxide and Degree of Heat Curing on Fly Ash based Geopolymer Mortar.** *Indian Journal of Materials Science*, Vol. 2014, Article ID 938789, pp. 1-6, April-May 2014. DOI: 10.1155/2014/938789, Co-authored by *Ghugal, Y. M. Patankar S. V. and Jamkar S. S.*

61. **Flexure of Cross-ply Laminated Plates using Equivalent Single Layer Trigonometric Shear Deformation Theory.** *Structural Engineering and Mechanics, An International Journal*, Vol. 51, No. 5, pp. 867-891, 2014. Techno Press Ltd; Korea. Authored by *Yuwaraj M. Ghugal and A. S. Sayyad.*

62. **Cylindrical Bending of Anti-symmetric/Symmetric Laminated Composite and Sandwich Plates using a new Shear and Normal Plate Theory.** *Meccanica*, Vol. xx., No. yy., pp. xx-yy, 2014. (Under Review). Authored by *Atteshamuddin S. Sayyad and Yuwaraj M. Ghugal.*

63. **Static Flexure Of Cross-Ply Laminated Cantilever Beams.** *Composites: Mechanics, Computations, Applications. An International Journal*, Vol. 5, No. 3, pp. 219–243, 2014, Yuwaraj M. Ghugal1 & Sangita B. Shinde

Year 2015

64. **Thermoelastic Bending Analysis of Laminated Composite Plates According to Various Shear Deformation Theories.** *Open Engineering* (*formerly Central European Journal of Engineering*) Vol. 5, No. 1, pp. 18-30, 2015. Authored by

Atteshamuddin Shamshuddin Sayyad, Bharati Machhindra Shinde, Yuwaraj M. Ghugal.

65. **A Four Variable Plate Theory for Thermoelastic Bending Analysis of Laminated Composite Plates.** *Journal of Thermal Stresses*, Vol. 38, No. 8, pp. 904-925, 2015. Authored by *Atteshamuddin S. Sayyad, Yuwaraj M. Ghugal and Bapusaheb A. Mhaske*. (Taylor and Francis Publication, UK).

66. **A Four Variable Refined Theory For Laminated Composite Plates.** *Ships and Offshore Structures.* Vol. Xx, No. Yy, pp. Zz, 2015. (Taylor and Francis Publication, UK). Authored by *Atteshamuddin S. Sayyad, Bharati M. Shinde and Yuwaraj M. Ghugal*.

67. **Bending Analysis of Laminated Composite and Sandwich Beams according to Refined Trigonometric Beam Theory.** *Curved and Layered Structures.* Vol. 2, No. 1, pp. 279-289, March 2015. Authored by *Atteshamuddin S. Sayyad, Yuwaraj M. Ghugal and Naik Nitin S.* DOI 10.1515/cls-2015-0015. (DE GRUYTER OPEN, Berlin, Germany).

68. **A *n*th order Shear Deformation Theory for Composite Laminates in Cylindrical Bending.** *Curved and Layered Structures.* Vol. 2, No. 1, pp. 290-300, May 2015 Authored by *Atteshamuddin S. Sayyad, Yuwaraj M. Ghugal and Naik Nitin S*. DOI 10.1515/cls-2015-0016. . (DE GRUYTER OPEN, Berlin, Germany).

69. **On the Free Vibration Analysis of Laminated Composite and Sandwich Plates: A Review of Recent Literature with some Numerical Results.** *Composite Structures*, Vol. 129, pp. 177-201, 2015. By *Atteshamuddin S. Sayyad, Yuwaraj M. Ghugal*. (Online 15 April 2015). DOI:10.1016/j.compstruct.2015.04.007**.** Elsevier Ltd., UK.

70. **Bending Analysis of Sandwich Beams According to Refined Trigonometric Beam Theory.** *Journal of Aerospace Engineering and Technology*, Vol. 5, No. 3, pp. 27-37, 2015. Authored by Y. M. Ghugal and G. U. Shikhare.
71. **Elastic Constants of Polymer Modified Fiber Reinforced Concrete.** *The Asian Review of Civil Engineering*, Vol. 3, No. 2, pp. 27- 40, 2014. ISSN: 2249-6203. Authored by Y. M. Ghugal, U. B. Kalwane and A. G. Dahake.

72. **Performance of Extruded Polyester Fiber Reinforced Concrete.** *Journal of Structural Engineering*, SERC Madras, Vol. xx, No. yy, pp. Xx-yy, April-May 2015. Co-Authored by S. V. Naghate. (Accepted on **13th August 2015, In Press**).

National Journal papers: 12
International Journal papers: 60.

LIST OF SEMINARS, CONFERENCES, SYMPOSIA, LECTURES ATTENDED

1. All India Seminar on Computer Applications in Structural Engineering, 1-2, December 1990, Organized by Institution of Engineers India (IEI), Pune Centre, Pune.

2. Seminar on Revamping of Technical Education, 27-28, Jan, 1991. Sponsored by Directorate of Tech. Education, M.S. Bombay and ISTE, New Delhi held at Aurangabad, India.

3. Roving seminar on Modular coordination and prefabrication. 11-12, Oct. 1991. Organized by MIT, Aurangabad and Sponsored by NBO New Delhi.

4. All India Seminar on Effect of Air Pollution on Concrete Structures, 28-29 Feb, 1992. Organized by IEI, Nagpur Centre, Nagpur.

5. All India Seminar on Housing in First Decade of 21st Century in India 13-14 Feb., 1993. Organized by IEI, Jabalpur Centre, Jabalpur.

6. All India Seminar on The Role of Industry in Technical Education. 27-28 Feb., 1993. Organized by ISTE Goa state section in collaboration with Canada-India Institutional cooperation project. Conducted by Govt. Engg. College, Aurangabad.

7. International Symposium on Innovative world concrete. Aug.30-Sept 3, 1993, Organized by Indian Concrete Institute, Bangalore, India.

8. All India Seminars on Economics and Management of Concrete Construction and Its Maintenance. 24 - 25 Feb. 1994. Organized by IEI and MNREC Allahabad.

9. Seminar on Earthquake: Challenges to Engineers and Scientist. 14-15 May, 1994. Organized by IEI Aurangabad Centre, Aurangabad.

10. 10th Symposium on Earthquake Engineering, 16-18 Nov., 1994 Deptt. of Earthquake Engg. University of Roorkee, Roorkee, India.

11. National Conference on Civil Engg. Materials and Structures, 19-20 Jan, 1995. Civil Engg. Deptt., University College of Engg. Osmania University, Hyderabad.

12. International Conference on Theoretical, Applied Computational and Experimental Mechanics, Dec. 1-5, 1998, IIT, Kharagpur, India (ICTACEM-98).

13. Structural Engineering Convention, SEC-2000, 5-8 Jan.2000, Indian Institute of Technology Bombay, Powai, Mumbai, India.

14. One day seminar on “I.S. 456 – 2000: Plain and Reinforced Concrete Code of practice,” 12th Jan, 2001. IEI Pune local center, Pune.

15. The Workshop on Earthquake Resistant Structures. 18th March, 2001, Organized by Architects, Engineers Surveyors Association, Pimpri-Chinchwad, Pune.

16. "2001 Workshop on Good Concrete Construction Practices," RIT (Rajarambapu Institute of Technology) Sakhorale, (Rajaramnagar), Dist. Sangli (M.S.), India 415 414, on 23-24 Feb. 2001.

17. One day workshop on "Design of Earthquake Resistant Structures and Retrofitting". 14th September, 2002, organized by Association of Civil Engineers (Practicing), Aurangabad.

18. National seminar on Improvement, Rehabilitation and Maintenance of Roads. (IRAM-2003), August 22-23, 2003. Organized by Civil Engineering Department, Govt. College of Engineering Aurangabad and Sponsored by AICTE, New Delhi.

19. Lecture on "40 Years (1963-2003) of Progress in Concrete Technology – A Broad Perspective," by Dr. Adam M Neville, 1st Dec. 2003, at Hotel Ajanta Ambassador , Organized by ACE (P), Aurangabad, India.

20. Lecture on "Sustainable cost-effective options for road pavements" by Dr. L. R. Kadiyali organized by UltraTech cement at VITS Aurangabad on 07th August 2009 is attended.

21. Lecture on "Bacterial concrete, Basalt fibers and Synthetic fibers: Concrete Talk" by Dr. V. Ramakrishnan, Regents Distinguished Professor Emeritus, South Dakota School of Mines and Technology, USA. 24th January 2011 at Hotel Rama International, Aurangabad.

22. **Indo-US Education Colloquium 2013. On "Exploring new frontiers of Excellence in Technical Education"** Feb 5-6, 2013. Organized by AISSMS Pune, M.S., India.

23. **VTU-International CANEUS Symposium on Aerospace and Energy Sectors (VICAS-2013).** 19th-20th April 2023, Organized by Visveswaraya Technological University, Belgaum, Karnataka.

24. **TEQIP-II Project Review Workshop of TEQIP-II Institutions.** 23- 24 September 2013. Organized by NPIU and SPFU Govt. of Karnataka, at Bangalore.

25. International Interactive Workshop on **Effective Academia Leadership Strategies: A Global Perspective**. 12-14, Dec. 2013. Organized by SEGi University, Malaysia and ADCC Infocad Pvt. Ltd., Nagpur at Kuala Lumpur, Malaysia.

26. **TEQIP-II** National Workshop on **Environment Management Framework and Procurement**. 27-28 May 2014. Organized by NPIU, SPFU and Commissionerate of Technical Education , Gandhinagar, Gujarat, India.

27. **102nd Indian Science Congress-2015.** 3-7 January 2015. Organized by University of Mumbai, Maharashtra, India. (Poster presentation of Best Practices at The Institute.).

SHORT TERM COURSES AND TRAININGS ATTENDED

1. **Specialist course on Finite Elements in Non-Linear Mechanics.** 4-16th Jan., 1993. Organized by IEI Roorkee center and Coordinated by Civil Engineering Deptt., University of Roorkee, Roorkee, India.

2. **QIP short term, course on Earthquake Resistant Design of Buildings.** June 22 – July 6, 1993. Organiazed by Department of Earthquke Engineering, University of Roorkee, Roorkee, India.

3. **QIP short term course on Introduction to Engineering Optimazation,** December 21-24, 1998. Organized by Department of Aerospace Engg. Indian Institute of Technology Bombay, Powai, Mumbai. 400 076.

4. **Continuing Education and Quality Improvement Program on Management Capacity and Vision Development Training for Deans and Heads,** Conducted by IIT Bombay, Powai, Mumbai during 16-18, Nov. 2005.

5. **Geoinformatics Applications in Disaster Management.** September 16-21, 2013. Organized by Geosciences and Geohazards Department, Indian Institute of Remote Sensing, ISRO, Department of Space, Govt. of India, Dehradun, India. Attended under TEQIP Program.

LECTURE DELIVERED (Resource Person)

1. **Ferrocement for Low Cost Housing.** 20th Nov., 1992 in the series of lectures Organized by IEI Aurangabad local center, Aurangabad, India.

2. **Refined theories of Laminated Composites Beams and Plates**. 15th April, 2002 in the series of lectures Organized by IEI Aurangabad local center, Aurangabad, India.

3. **Planning of Experiments and Data Analysis.** February 18-19, 2006, in a Two days Workshop on *Research Methodologies and Report Writing* (RMRW), under TEQIP, Organized by Govt. College of Engineering, Aurangabad, India.

4. **Flexural Vibrations of Thick Beams and Thick Plates using Refined Shear Deformation Theories.** In 3-days course on *Vibrations in Structures and Data Acquisition Systems,* under Networking of Institutions in TEQIP during 24-26 April 2006, organized by College of Engineering, Pune, India.

5. **Fundamentals of FEM and Shear Deformable Beam and Plate Theories.** STTP on Finite Element and Analytical Solutions for Composite Laminates. Organized by Civil Engineering Dept., Sanjivani College of Engineering, Kopargaon. 26th – 30th April 2015.

International Assignments

1. **Reviewer of International Journals, India and Abroad**.
    1. International Journal of Computational Methods. World Scientific Co., Sgp.
    2. International Journal of Non-Linear Mechanics, Elsevier, UK.
    3. International Journal of Mechanical Sciences, Elsevier, UK.
    4. Latin American Journal of Solids and Structures, Sao Paulo, Brazil.
    5. Structural Engineering and Mechanics: *An International Journal*. Korea.
    6. International Journal of Applied Mechanics. Imperial College Press, UK.
    7. The Indian Concrete Journal. *ACC* Ltd, Thane, India.
    8. Ain Shams Engineering Journal, Elsevier, UK.

2. **Editorial Board Member of Following International Journals.**
    1. Journal of Experimental & Applied Mechanics, STM Journals, India.
    2. Journal of Aerospace Engineering & Technology, STM Journals, India.
    3. Journal of Space Science: Research and Reviews, STM Journals India.

Awards / Rewards

- **Fellow of Institution Engineers India**. **FIE**(*I*)
- **Author of most read papers in Solid Mechanics, Composite Science and Technology**.
- Listed in **Marquis's Who's Who of America** in the division of Engineering Science and Technology.
- **Received Dr. K. Rammurthy award constituted for Building Construction and Materials for the paper "Effect of Sodium Hydroxide on Flow and Strength of Fly Ash based Geopolymer Mortar."** *Journal of Structural Engineering*, Vol. 39, No. 1, pp. 43-48, April-May 2012. Co-authored by Patankar S. V. and Jamkar S. S.
- **Received Dr. J. M. Chandra Kishen award in Structural Engineering for the paper "Effect of Alkaline Solution on the Production of Geopolymer Mortar".** 4th National Conference on Emerging Vistas of Technology in 21st Century organized by Gujarath Technological University, Ahmadabad, 10-11, May 2013.

OTHER ACTIVITIES IN THE INTEREST OF REGION and NATION (India)

1. Played active role in approving the Applied Mechanics Department as a **Ph.D. Centre in Structural Engineering** and this degree is introduced in the statute of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

2. Member of Board of Studies and Research and Recognition committees and Local Inquiry Committee (LIC) of Dr. B. A. Marathwada University, Aurangabad.

3. Handled additional charge of **Officer-in-Charge of Furniture** during the period 1990-1996 and **Rector of Hostels**, Government College of Engineering, Aurangabad.

4. Providing consultancy and testing services to the Govt. and Private sectors in this region in the area of construction and structural engineering. Generating revenue for the state, Govt. of Maharashtra.

5. Member of third party inspection of Aurangabad Municipal Corporation, Aurangabad for inspection of structures during construction and quality control at various levels.

6. Worked as a Nodal officer of **Construction activities** under TEQIP Program of World Bank Project, Govt. of India at Govt. Engineering College, Aurangabad, during 2005-2010. Presently having a charge of **Nodal Officer Refurbishment and Civil Works** at **GCOE Karad.**

7. **Member of AICTE Committee** of New Delhi for inspections, approvals of UG/PG courses of in Engineering Institutes and national board of accreditation (NBA).

8. Approved Post Graduate Teacher and Ph.D. Guide in Structural Engineering of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. Guided **56** PG students for their M.E. Dissertations. Research guide of Structural Engineering at Department of Applied Mechanics, Govt. Engineering College, Aurangabad, an autonomous Institute of Govt. of Maharashtra. Number of students awarded PhD Degree = **11**. And remaining four scholars are working on their research topics.

9. **List of M. E. Dissertation works guided by in Structural Engineering.**

Sr. No.	Year	Name of Dissertation work	Name of Candidate
1	1993 GECA	Experimental studies on polymer modified properties of cement mortars.	Kalwane, U. B.
2	1994 GECA	Structural behaviour of Ferro-cement doubly curved roof tiles: An Investigation.	Kharate, J. P.
3	1996 GECA	Fly ash fiber reinforced concrete beam under flexural action & cyclic load behaviour.	Damgir R. M.

4	1996 GECA	Cyclic load behaviour of fiber reinforced concrete beam under flexure.	Sutrave S.S.
5		Experimental investigation on fly ash lean concrete mixes.	Kamble S. P.
6		Use of fly ash in lean concrete.	Nikam P. M.
7		Analysis of of space truss (Microwave tower) by finite element method.	Kulkarni S. A.
8		Some studies on behaviour of preset concrete mixes.	Patil, A. S.
9		Study on the strength behaviour of recycled aggregates in concrete.	Nimkar, N. R.
10		Suitability of crushed stone dust as fine aggregates in concrete.	Dhake, K. L.
11		Influence of polymer on natural, recycled and stone dust concrete.	Thakare S. R.
12		Structural behaviour of lightweight concrete shells of double curvature.	Ingle, Y. M.
13	2002 GECA	Investigations for development of high performance concrete using silica fume at relatively higher water binder ratios.	Deshpande, R. B.
14		Study of use of glass fibers in cement concrete.	Deshmukh, S. B.
15		Effect of steel fibers on various strengths of concrete.	Wadekar, A. P.
16	2003 GECA	Effect of polymers and steel fibers on recycled aggregates concrete.	Patodkar, S. C.
17		Analysis of water tanks on sloping ground.	Ms. Sangita Merlecha
18		Seismic analysis of gravity dam.	Tandale, V. T.
19		Flexural analysis of thick isotropic plate using trigonometric shears deformation theory.	Jiji T. Jeorge
20		Seismic base isolation of bridges in practice.	Ms. Shubhada A. Gadkar
21		Effect of steel fiber on recycled aggregates concrete.	Bhandari, J. P.
22	2005 GECA	Performance of polypropylene fiber reinforced polymer modified concrete.	Lokmanwar, D. M.
23	2006 GECA	Analysis of block type machine foundations for reciprocating machines.	Joshi, R. M.

24	2006 GECA	Seismic analysis of shear wall buildings.	Shingade, B. R.
25		Modelling of glass and steel fiber reinforced concrete with high fiber volume fraction.	Dahake, A. G.
26		Flexural analysis of thick plate unloading transits shear and transverse flexibility.	Sayyad, A. S.
27		Flexural analysis of thick beam including transverse shear and transverse flexibility.	Sonawane, S. J.
28	2007 GECA	Performance of silica fume fiber reinforced concrete.	Bhaware, R. S.
29		Seismic analysis of buildings situated on sloping ground.	Khandare, S. D.
30		Bending and free vibration analysis of thick isotropic plates.	Pawar Eshwar G.
31		Flexural analysis of thick isotopic beams using hyperbolic shear deformation theory.	Rajneesh Sharma
32	2008 GECA	Effect of polyester fibers on various properties of structural concrete.	Atul S. Kulkarni
33		Some studies on seismic performance evolutions of reinforced concrete buildings using pushover analysis.	K. R. R. Chandran
34		Performance of extruded polyester fiber reinforced concrete.	Naghate S. V.
35		Finite element analysis of hyperbolic paraboloid shell.	Gandhe, G. R.
36		Behaviour of crimped steel fiber reinforced concrete.	Ms. Dhampalwar Priyanka R.
37	2009 GECA	Preliminary design of double layer grids using ANN.	Deshmukh, G. S.
38		Performance of high strength fiber reinforced concrete.	Sawant, R. M.
39		A new hyperbolic deformation theory for flexural and vibration of thick plates.	Deore, C. V.
40		Shear strength of steel fiber reinforced concrete deep beams with and without stirrups.	Ausama K. M. Ali
41		Analysis and design of three and four legged 400kv double circuit steel transmission line towers.	Salunkhe, U. S.
42		Bending, buckling and vibration of isotopic and composite plates using hyperbolic shear deformation theory.	Pawar, M. D.

43	2009 GECA	Performance of alkali resistant glass fiber reinforced concrete.	Lad, V. M.
44		Flexural analysis of thick isotropic beams using trigonometric shear deformation theory.	Nakhate, V. V.
45		Performance of steel fiber reinforced concrete.	Abdul Gaffar Noor Mohd.
46		Analysis of R.C.C. elevated service reservoirs with planer and diagonal brace system.	Jyaulla M. Ismail
47		Shear strength of steel fiber reinforced concrete beams without stirrups.	Dhadge, A. L.
48		Shear strength of steel fiber reinforced concrete beams with stirrups.	Hajare, R. B.
49	2010 GECA	Exponential shear deformation theory for thick beams.	Mundhe, R. U.
50		Performance of high strength fiber reinforced concrete using silica fume.	Kakade, D. N.
51		New Hyperbolic shear deformation theory for flexure and vibration of thick beams.	Binawade, P. M.
52	2013 GECK	Analysis of thick beams using refined shear deformation theory.	Kalaskar Nisha S.
53		Experimental study on shear strength of steel fiber reinforced concrete deep beam.	Ekatapure, S. N.
54		Experimental study on crimped steel fiber reinforced concrete deep beam in shear.	Gaikwad, A. M.
55	2014 GECK	Analysis of thick cross ply laminated beams using exponential shear deformation theory.	Bichu Athar H. I. A.
56		An assessment of shear deformation theories for static and dynamic analysis of thick beams.	Patil Suhas M.
57		An experimental investigation on some properties of alkali resistant glass fiber reinforced concrete.	Shete Pallavi S.
58		Experimental study on hybrid fiber reinforced concrete beam under shear.	Shelke Angad S.
59		An experimental investigation on some properties of fiber reinforced metakaolin concrete.	Birajdar Savita S.
60		Comparative experimental and analytical cold formed steel sections under tension with special emphasis to shear lag effect.	Babar Vikram T.

61	2014 GECK	An experimental investigation on some properties of polypropylene-steel fiber reinforced concrete deep beam with and without stirrups.	Anjungikar Avanti M.
62	2015 GECK	Influence of recycled aggregate on physical properties and shear performance of concrete.	Jadhav Vaibhav V.
63		Experimental investigation on high strength steel fiber reinforced concrete with metakaolin.	Sabale Vishal D.
64	2015 GECK	An Experimental investigation on polymer modified fiber reinforced concrete.	Bothra Shivani R.
65	2015 GECK	Analysis of sandwich plates using higher order shear deformation theory.	Borge Priyanka S.
66	2015 GECK	Evaluation of polymer modified fiber reinforced concrete under flexural, bond and tensile strengths.	Mane Ajit C.
67	2015 GECK	Static flexure of shear deformable sandwich beams using refined beam theories.	Shikhare G. U.

10. **List of PhD candidates with award of PhD Degree in Engineering and Technology. (Structural Engineering): Sr. No. 1-11: PhD Degree is awarded.**

Sr No.	Name of Scholar & Registration Date	Topic of Research	**Date of Defense**	Date of University **Notification**
1	Wadekar A. P. May 2006	Performance of high strength fiber reinforced concrete.	30th Dec. 2010	January 2011
2	Damgir, R. M. May 2006	Experimental investigation on high strength fiber reinforced concrete with silica fume.	12th Feb. 2011	February 2011
3	Mrs. George, J. T May 2006	Comparative study of various shear deformation theories.	26th Feb. 2011	March 2011
4	Kalawane, U. B. May 2006	Performance of polymer modified high strength fiber reinforced concrete.	24th June 2011	July 2011
5	Sayyad, A. S. (Autonomous) July 2007	Assessment of refined shear deformation theories on laminated composites.	23rd July 2011	August 2011
6	Varma M. B. May 2006	Use of FRP Bars in Concrete Beams.	21st Dec. 2013	21st Dec. 2013
7	Bang Radha S.	Performance Evaluation of		

	31.07.2009	Concrete using Pond Ash as Part Replacement of Fine Aggregate.	28th Jan. 2013	30. 03. 2013
8	Patankar S. V. 31.07.2009	Mixed Proportioning of Fly Ash based Geopolymer Concrete.	25th Nov. 2014	25th Nov. 2014
9	Mrs. Shinde S. B. 31.07.2009	Flexural Analysis of Cross-ply Laminated Beams and Plates using Trigonometric Shear Deformation Theory.	30 Sept. 2013	5th Oct. 2013
10	Kulkarni S. K. 31.07.2009	Thermoelastic Flexure of Laminated Plates using Trigonometric Shear Deformation Theory.	4th Dec. 2013	20. 12. 2013
11	Dahake A. G. 27.07. 2009	Flexural Analysis of Thick Beams using Trigonometric Shear Deformation Theory.	3rd Dec. 2013	20. 12. 2013
12.	Gandhe G. R. 27.07.2010	Thermal analysis of beams and plates using thermoelasticity.	Work in progress	-
13	Kakade D. N. 01. 07. 2012	Performance of temperature on various properties of high strength fiber reinforced concrete.	Work in progress	
14	Sawant R. M. 01. 07. 2012	Performance of high strength fiber reinforced metakaolin concrete.	Work in progress	

All the above candidates who completed and pursuing their research work at Structural Engineering Research Center at Govt. Engineering College, Aurangabad, are affiliated to the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

11. Worked as Dean Research and Development at Govt. Engineering College, Aurangabad.
12. Member of Board of Management for Building and Construction Committee of GECA. Member Board of Studies of Structural Engineering at GECA.
13. Worked as **Principal-in-Charge of Govt. Engineering College, Karad** from 11th January 2013 to 10th February 2014.

14. **Organized International Conference** on **Innovative World of Structural Engineering. ICIWSE 2010,** during Sept. 17- 19, 2010 at Govt. Engineering College, Aurangabad, M.S., India and published proceedings in two volumes with ISBN 81-7088-089-1, 2.

15. **Organized National Conference** on **Advances in Civil and Structural Engineering. NCACSE-2014,** during August 17- 19, 2010 at Govt. Engineering College, Karad, M.S., India and published proceedings in single volume with ISBN 978-93-5156-532-1.

16. Edited Book (Proceedings): **Innovative World of Structural Engineering. 2010.** ISBN 81-7088-089-1, Vol. 1, pp. 1- 617. ISBN 81-7088-089-2, Vol. 2, pp. 618-1136.

17. Edited Book (Proceedings): **Advances in Civil and Structural Engineering. 2014** ISBN 978-93-5156-532-1, pp. 1-483.

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