B I O – D A T A

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

2. Designation : **Professor and Head, Retired;**
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, Beed-by-Pass,
Aurangabad – 431 010, 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	Total Period 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. (GCEK)	01.05.11 Retired :	30.06.21 30.06.21	10	01
9. Adjunct Professor	GCE Karad VJTI Mumbai	01 July 2021 December 2022		01 Till date	05

Total Teaching Experience: 36 Yrs. 4 Months

Total Experience in Engineering Profession: 37 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

Chartered Engineer, Institution of Engineers, India. (LM = Life Member).

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 into 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 Newspaper 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 Engineering 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 Department of Civil Engineering, M. M. M. Engineering 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, Department 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, January 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, 25-27 August 2010. Organized by Singapore Concrete Institute & CI-Premier Pte. Ltd.

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.

65. **Thermoelastic Stress Analysis of Rectangular Plate by Using Integral Transform Technique.** Author(s): Gandhe G. R.; Ghugal Y. M., Kulkarni V. S. Structural Engineering Convention 2016, **SEC-2016**, 21-23 Dec. 2016. Organized by CSIR-SERC and IIT Madras, Chennai, India.

66. **A New Higher Order Shear Deformation Theory for bending Analysis of Isotropic and Orthotropic Plates with Linear Thermal Loading**. Authored by Sandhya K. Swamy and Ghugal, Y.M. International Conference on Innovative Realms in Civil

Engineering (IRICE-2018), 24-25 January 2018. Organized by KDK College of Engineering and IE(I) Nagpur Local Centre, Nagpur.

67. **Linear Thermal Analysis of Laminated Composite Plates using Higher Order Shear Deformation Theory.** Authored by Sandhya K. Swamy, Ghugal, Y. M. and Bhalchandra, S. A. International Conference on Recent Trends in Engineering & Sciences (**ICRTES),** 20-21 Feb 2018, Vishakhapatnam, AP., India. Paper code 554.

68. **Seismic Analysis of Buildings Resting on Sloping Ground.** Authored by Sawant, A., and Ghugal, Y. M. Procs. International Conference on Recent Developments in Science, Engineering, Management & Humanities. 14th April 2018. Held at The Institution of Engineers, India, Maharashtra State Center, Khadye Marg, Mumbai.

69. **Effect of Soil-structure Interaction on Seismic Analysis of Structures.** Authored by Battise, A. S, and Ghugal, Y. M. Procs. International Conference on New Era in Technologies, Science, and Role of Management. 9-10 April April 2018. Held at Moze College of Engineering, Wagholi, Pune, Maharashtra State, India.

70. **Comparison of Innovative Corrugated Hollow Steel Columns with Conventional Hollow Steel Column: Experimental and Numerical Study.** Authored by Mulani Zakeer M. and Ghugal, Y. M. Procs. International Conference on New Era in Technologies, Science, and Role of Management. 9-10 April 2018. Held at Moze College of Engineering, Wagholi, Pune, Maharashtra State, India.

71. **Investigation on the Use of Crumb Rubber and Bagasse Ash in Road Construction.** Procs. Recent Developments in Pavement Engineering, 3rd GeoMEast International Congress, Egypt, 2019. Sustainable Civil Infrastructure, **Springer.** Edited by Badawy, S., Chen, D. H. Authored by Patil A. M., Tapase, A. B., Ghugal, Y. M., Konnur, B. A., and Dombe, S.

72. **Investigation on the Use of E-Waste and Waste Plastic in Road Construction.** Procs. Recent Developments in Pavement Engineering, 3rd GeoMEast International Congress, Egypt, 2019. Sustainable Civil Infrastructure, Springer**.** Edited by Badawy, S., Chen, D. H. Authored by Patil A. M., Tapase, A. B., Ghugal, Y. M., Konnur, B. A., and Dombe, S.

73. **Impact Analysis of Soil and Water Conservation Structures- Jalyukta Shivar Abhiyan– A Case Study.** Procs. Innovative Solutions for Soil Structure Interaction. 3rd GeoMEast International Congress, Egypt, 2019. Innovative Solutions for Soil Structure Interaction. **Springer.** Edited by El-Naggar H., El-Zahaby K. and Shehata H. Authored by Kolekar, A., Tapase, A. B., Ghugal, Y. M., Konnur, B. A.

74. **Elastic Properties of Polymer Modified Steel Fibre Reinforced High Strength Concrete.** Procs. The 6th International Conference on Composite Materials and Material Engineering (ICCMME2021), Bangkok, Thailand, January 12-14, 2021. To be Published in **Key Engineering Materials Journal**, ISSN:1662-9795, Indexed by **Elsevier, Scopus**. Authored by Deshpande, P.K., Sangle, K.K., Ghugal, Y.M.

75. **Selection of Suitable Quantity of Fly Ash and Water to Achieve Desired Workability and Strength of Geopolymer Concrete.** Procs. 35th Indian Engineering Congress, 18-20 December 2020. Authored by Patankar, S.V., Jamkar, S.S., Ghugal, Y.M.

76. **Levy's Solution Method for Thick and Thin Plates.** Procs. Two days ONLINE International Conference on Advances in Construction Technology and Management - 2021 (ACTM-2021) at College of Engineering Pune, Maharashtra, India, during March 11-12, 2021. Authored by Pandey, Shivam Kumar and Ghugal, Y. M.

77. **Thermal Analysis of Thick Isotropic Steel Plate by Higher Order Shear Deformation Theory.** Procs. Two days ONLINE International Conference on Advances in Construction Technology and Management - 2021 (ACTM-2021) at College of Engineering Pune, Maharashtra, India, during March 11-12, 2021. Authored by Pandey, Sandhya Swami and Ghugal, Y. M.

78. **Analysis of Steel Braced RCC Building using Designed Base Isolator**. Paper No.290. Global Virtual Conference on Disaster Risk Reduction- Civil Engineering for a Disaster Resilient Society, 19-21 March 2021. Organized by ADRRN, IHRR and NITK, Surathkal. By Y M Ghugal and Mohini N. Khade.

79. **Behavior of Steel Structure Subjected to Blast and Suggesting Measures to Reduce the Effect on Structure.** Paper No.291. Global Virtual Conference on Disaster Risk Reduction- Civil Engineering for a Disaster Resilient Society, 19-21 March 2021. Organized by ADRRN, IHRR and NITK, Surathkal. By Mule, SS and Ghugal YM.

80. Dhepe, S.N., Bambole, A.N., Mutha, R.V., Ghugal, Y.M. (2024). **Stress Analysis of FGM Cylindrical Shell.** In: Goel, M.D., Vyavahare, A.Y., Khatri, A.P. (eds) Recent Developments in Structural Engineering, Vol. 4. **SEC 2023**. Lecture Notes in Civil Engineering, vol 549. Springer, Singapore. https://doi.org/10.1007/978-981-97-6603-1_56.

National Conferences: 35 papers. International Conferences: 45 papers. Total: 80

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, India, 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.

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98. **Static and Free Vibration Analysis of Laminated Composites and Sandwich Spherical Shells using a Generalized Higher-order Shell Theory.** *Composite Structures*, Vol. 219, pp. 129-146, 2019. Authored by *Atteshamuddin S. Sayyad*, *Yuwaraj M. Ghugal*. DOI: 10.1016/j.compstruct.2019.03.054. Elsevier Ltd., UK.

99. **A Unified Five-degree-of-freedom Theory for the Bending Analysis of Softcore and Hardcore Functionally Graded Sandwich Beams and Plates**. *Journal of Sandwich Structures and Materials*, Vol. 23, Issue 2, pp. 473-506, 2021. Authored by *Atteshamuddin S. Sayyad*, *Yuwaraj M. Ghugal*. Sage Publ. USA. (Accepted on 11th March 2019). https://doi.org/10.1177/1099636219840980. online April 4, 2019.

100. **A Sinusoidal Beam Theory for Functionally Graded Sandwich Curved Beams.** *Composite Structures*, Vol. 226, pp. 111246(1-13), 2019. Authored by *Atteshamuddin S. Sayyad, and Yuwaraj M. Ghugal.* Elsevier Ltd., UK. (Accepted July 26, 2019.)

Year 2020

101. **Bending, Buckling and Free Vibration Analysis of Size-dependent Nano-scale FG Beams using Refined Models and Eringen's Nonlocal Theory**. *International Journal of Applied Mechanics*. Vol. 12, No. 1, 20500076(34 pages), 2020. World Scientific Publishing Europe Ltd. Authored by A.S. Sayyad and Y. M. Ghugal.

102. **On the Buckling of Advanced Composite Sandwich Rectangular Plates.** Journal of Sandwich Structures & Materials, SAGE Publications, USA. 19 May 2020. Authored by A. S. Sayyad and Y. M. Ghugal. https://doi.org/10.1177/1099636220925084 online.

103. **Stress Analysis of Laminated Composite and Sandwich Cylindrical Shells using a Generalized Shell Theory**. *Composite Materials and Engineering: An Int. Journal*, Vol. 2, No. 2, pp. 103-124, 2020. Techno Press, Korea. Authored by Atteshamuddin S. Sayyad, Yuwaraj M. Ghugal. DOI: https://doi.org/10.12989/cme.2020.2.2.103.

104. **Analytical Solutions for the Flexural Analysis of Advanced Composite Arches.** *Int. Journal of Bridge Engineering,* Vol. 8, Issue 1, pp. 53-70, Jan-April 2020. Authored by A.S. Sayyad and Y. M. Ghugal.

105. **Flexure of Deep Rectangular Beams with Different Boundary Conditions.** *Int. Journal of Bridge Engineering,* Vol. 8, No. 2, pp. 57-81, May-August 2020. Authored by Y. M. Ghugal and A. G. Dahake. Indexed in ESCI Thomson Reuters.

106. **Closed–form Solutions for Laminated Composite and Sandwich Beams Loaded by Temperature Field**. *Composites: Mechanics, Computations, Applications, An International Journal,* Vol. 11, Issue 3, pp. 239-265, 2020. Publ. by Begell House, Inc., USA. DOI:10.1615/ComMechComputApplIntJ.2020032576. Authored by Sanjay K. Kulkarni, Yuwaraj M. Ghugal.

107. **Synergistic effect of SBR latex and steel fibres on mechanical properties of high strength concrete.** *Journal of Structural Engineering.* SERC Madras, Vol. 47, No. 3, pp. 259-268, 2020. Authored by *Y. M. Ghugal, P. K. Deshpande and K. K. Sangle*.

108. **On the buckling analysis of functionally graded sandwich beams using a unified beam theory**. *Journal of Computational Applied Mechanics* Vol. 51, No. 2, 2020, pp 443-453, 2020 by A.S. Sayyad and Y. M. Ghugal. Publ. University of Tehran, Iran. ISSN / eISSN:2423-6713 / 2423-6705. DOI: 10.22059/jcamech.2020.310180.557.

109. **Thermally induced stresses in cross-ply laminated plates using four variable theory.** *Int. Journal of Structural Engineering and Analysis*, Vol. 6, No. 2, pp. 35-54, 2020. Published by Journals Pub., India.

110. **Assessment of refined higher order theories for the static and vibration analysis of laminated composite cylindrical shells**. *Journal of Mechanical Engineering and Sciences* (JMES), Vol. 14, Issue 1, pp. 6393-6404, 2020. Published by Penerbit Universiti Malaysia Pahang (UMP). Authored by A.S. Sayyad and Y. M. Ghugal.
DOI: https://doi.org/10.15282/jmes.14.1.2020.15.0500.

Year 2021

111. **Interlaminar Stress Analysis of Orthotropic Laminated Doubly Curved Shells on Rectangular Planform under Concentrated Force.** *ASCE Journal of Aerospace Engineering,* Vol. 34, Issue 2, pp. 04020116 (1-18) March 2021 by A.S. Sayyad and Y. M. Ghugal. https://doi.org/10.1061/(ASCE)AS.1943-5525.0001237.

112. **Performance of Polymer Modified Fibre Reinforced High Strength Concrete.** *The Indian Concrete Journal* (ICJ), Vol. 95, No. 6, pp. 1-10, 2021. Authored by PK Deshpande, YM Ghugal and KK Sangle (VJTI). Accepted on Jan 5, 2021.

113. **Study on Elastic constants of Polymer Modified Steel Fibre Reinforced High Strength Concrete with High Fibre Volume Fraction**. *Journal of Structural Engineering, SERC Madras,* Vol. 48, No. 1, pp. 12-23, 2021. Authored by Y. M. Ghugal, P. K. Deshpande and K. K. Sangle. Accepted Jan 20, 2021, Publ. May 2021.

114. **Free Vibration Analysis of Thick Isotropic Plate by using 5th order Shear Deformation Theory.** *Progress in Civil and Structural Engineering,* Vol. 1, Issue 1, pp. 1-11, 2021. Authors Gajbhiye, P., Ghugal, Y.M., and Bhaiya, V. Accepted Jan 21, 2021.

115. Bending, Buckling and Free Vibration Analysis of Functionally Graded Nano- Beams using using an Inverse Trigonometric Beam Theory. *International Journal of Nano Dimensions*. Vol. 12, No. 2, pp. 164-174, 2021. Publ. by Islamic Azad University, Iran. Authored by A.S. Sayyad and Y. M. Ghugal. ESCI, Web of Science index.

116. **Thermoelastic Bending of Laminated Plate.** *Composites: Mechanics, Computations, Applications, An International Journal.* Vol. 12, No. 2, pp. 21-43, 2021, Publ. by Begell House, Inc., USA. Authored by Sandhya K. Swami, Yuwaraj M. Ghugal and Surekha A. Bhalchandra. DOI: 10.1615/CompMechComputApplIntJ.2021031638.

117. **Elastic Properties of Polymer Modified Steel Fibre Reinforced High Strength Concrete**. *Key Engineering Materials*, SERC Madras, Vol. 889, pp. 163-170, 2021. Trans Tech Publications, Switzerland. Authored by Y. M. Ghugal, P. K. Deshpande and K. K. Sangle.

118. **Static and Free Vibration Analysis of Doubly Curved Functionally Graded Material shells.** *Composite Structures*, Vol. 269, 114045 (pp.1-17), 2021. DOI Number https://doi.org/10.1016/j.compstruct.2021.114045. Scopus Indexed, Published by Elsevier Ltd., UK. Authored by Atteshamuddin S. Sayyad, and Yuwaraj M. Ghugal.

119. **Bending Analysis of Sandwich Plate Under Concentrated Force using Quasi-3D Theory**. *AIAA J*., Vol. 60, No. 1, pp. 316-329, 2022. Authors Gajbhiye, P. D., Ghugal, Y.M., and Bhaiya, V. Accepted on 27th May 2021. Published online 13th Oct. 2021. https://doi.org/10.2514/1.J060815.

120. **Thermoelastic Bending Analysis of Laminated Plates subjected to Linear and Nonlinear Thermal Loads**. *Advances in Aircraft and Spacecraft Science, An International Journal.* Vol. 8, No. 3, pp. 213-237, 2021, Techno-Press, South Korea. Authored by Sandhya K. Swami, Yuwaraj M. Ghugal. Accepted on July 22, 2021. https://doi.org/10.12989/aas.2021.8.3.213.

Year 2022

121. **Thermoelastic bending analysis of laminated composite shells using trigonometric shear and normal deformation theory.** *Journal of Thermal Stresses*, Vol. 45, No. 3, pp. 171-190, 2022. Taylor & Francis Pub. UK., Authors: Ghugal, Y. M., Sayyad, A. S., and Girme, Sandesh. Accepted on Jan 1st, 2022. Published online 16 Feb 2022. https://doi.org/10.1080/01495739.2022.2030836.

122. **Flexural mode, shear mode and twist mode frequencies of laminated composite shells of double curvature**. *Composite Structures*, Vol. 291, 1 July 2022, 115577. Authored by

Atteshamuddin S. Sayyad, and Yuwaraj M. Ghugal. Accepted on 7 April 2022. https://doi.org/10.1016/j.compstruct.2022.115577.

123. **Bending analysis of sandwich plates subjected to various mechanical loadings using Quasi-Three-Dimensional Theory.** *ASCE Journal of Aerospace Engineering*, Vol. 35, No. 4, 04022030 pp.1-24, 2022. ASCE ISSN 0893-1321. Authors Gajbhiye, P. D., Ghugal, Y.M., and Bhaiya, V. https://doi.org/10.1061/(ASCE)AS.1943-5525.0001428.

124. **A unified formulation of various shell theories for the analysis of laminated composite spherical shells.** *Vietnam Journal of Mechanics*, VAST, Vol. 44, No. 2, pp. 97-116, 2022. https://doi.org/10.15625/0866-7136/15715.

125. **An elasticity solution of laminated cylindrical panel.** *Forces in Mechanics*, Vol. 9, 100147(pp. 1-16), 2022. Elsevier. Authored by Sharvari N. Dhepe, Abhay N. Bambole, and Yuwaraj M. Ghugal. https://doi.org/10.1016/j.finmec.2022.100147**.**

126. **Flexural analysis of thermally loaded symmetric sandwich beam.** *The Journal of the Serbian Society for Computational Mechanics,* Vol. 16, No. 1, pp. 29-42, 2022. Authored by S. K. Kulkarni and Y. M. Ghugal. DOI: 10.24874/jsscm.2022.16.01.03.

Year 2023

127. **Higher-order static and free vibration analysis of doubly-curved FGM sandwich shallow shells.** *Forces in Mechanics.* Vol. 11, 2023, 100194. Online 18 April 2023. https://doi.org/10.1016/j.finmec.2023.100194. Authored by A. S. Sayyad, Y. M. Ghugal and T. Kant (IITB).

128. **Static analysis of an exponentially varying functionally graded beam using trigonometric shear deformation theory**. *Composites: Mechanics, Computations, Applications, An International Journal.* Vol. 14, No. 03, pp. 1-23, 2023, Publ. by Begell House, Inc., USA. Authored by Yadav, S., Pandare, P., Pendhari, S., Sangle, K. K., and Ghugal, Y. M. DOI: 10.1615/CompMechComputApplIntJ.2023047080.

129. **Bending analysis of FGM plates using sinusoidal shear and normal deformation theory**. *Forces in Mechanics, Elsevier.,* Vol. 11, 100185, 2023, Authored by Sunil S. Yadav, Keshav K. Sangle, Swapnil A. Shinde, Sandeep S. Pendhari, and Yuwaraj M. Ghugal, VJTI. https://doi.org/10.1016/j.finmec.2023.100185.

130. **Bending analysis of exponentially varied FG plates using trigonometric shear and normal deformation theory**. *Advances in Aircraft and Spacecraft Sciences-An Internal Journal,* Vol. 10, No. 03, pp. 281-302, 2023. Techno-Press, South Korea. Authored by Sunil Yadav, Parag Pandhare, Sandeep Pendhari, Keshav Sangle, and Y. M. Ghugal. VJTI Mumbai. https://doi.org/10.12989/aas.2023.10.3.281.

131. **Flexural response of cross-ply laminated beams subjected to combined thermal and mechanical loads**. *Acta Mechanica* (Springer-Verlag Wien 2023 publication). Vol. 234, No. 8, pp. 3725-3735, 2023, Authored by *Y. M. Ghugal*, *S. K. Kulkarni and R. Borate*. https://doi.org/10.1007/s00707-023-03564-9. Published 18 April 2023 online.

132. **Stress analysis of FGM arch and cylindrical shell**. *Forces in Mechanics*. Vol. No. pp. xx, 2023. Authored by Sharvari N. Dhepe, Abhay N. Bambole, Revati V. Mutha, and Yuwaraj M. Ghugal. VJTI, Mumbai. Submitted.

133. **Stress analysis of laminated and sandwich beams subjected to concentrated load by using quasi-two-dimensional theory.** International Journal of Computational Materials Science and Engineering, 2023**,** 2350046 (26 pages), Authored by Yuwaraj M. Ghugal, Eugenio Ruocco, Param D. Gajbhiye, Vishisht Bhaiya, and Nitesh P. Yelve. https://doi.org/10.1142/S204768412350046X. World Scientific Publishing, Europe Ltd.

Year 2024

134. **An elasticity solution of FGM rectangular plate under cylindrical bending**. *Acta Mechanica*, Springer Nature Vol. 235, No. 1, pp. 303-322, January 2024. Authored by Sharvari N. Dhepe, Abhay N. Bambole, and Yuwaraj M. Ghugal. VJTI, Mumbai. https://doi.org/10.1007/s00707-023-03758-1.

135. Quasi-3D flexural analysis of laminated composite plates resting on elastic foundations using higher-order displacement model. *Progress in Engineering Science.* Authored by A. S. Sayyad, Y. M. Ghugal and T. Kant (IITB). https://doi.org/10.1016/j.pes.2024.100005.

136. **Influence of transverse normal strain on buckling and vibration of sandwich plates.** *AIAA Journal***,** Vol. 63, No. 2, pp. 476-490, February 2025. Authored by Param D. Gajbhiye, Nitesh P. Yelve Y. M. Ghugal and Avik K. Das (China). https://doi.org/10.2514/1.J064594. Published online 15 August 2024.

Year 2025

137. **Displacement and stress analysis of laminated and sandwich beams under various loads using a quasi-2D theory.** *Archive of Applied Mechanics*, **95**:47, 2025. Authored by Param D. Gajbhiye, Nitesh P. Yelve Yuwaraj M. Ghugal and Avik K. Das (China). https://doi.org/10.1007/s00419-024-02751-x. Published online 13 January 2025.

138. **Exact elasticity solution of functionally graded beam subjected to transverse loads.** *Structural Engineering and Mechanics: An International Journal,* Vol. 94, No. 2, pp. 129 - 141, 2025. Authored by Manasi S. Raundal, Sharvari N. Dhepe, Abhay N. Bambole and Yuwaraj M. Ghugal. VJTI, Mumbai. https://doi.org/10.12989/sem.2025.94.2.129.

139. **Displacements and stresses in orthotropic beam under thermal environment.** *Composites: Mechanics, Computations, Applications, An International Journal.* Vol. xx,

No. xx, pp. xx-xx, 2025, Publ. by Begell House, Inc., USA. Authored by Ghugal, Y. M. and S. K. Kulkarni. **Article ID: CMCA 57199 in press**.

140.

National Journal papers: 18, International Journal papers: 121. Total: 139
Conferences + Journals Papers = 80+138 = 218.

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, January 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 February 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 February 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 November 1994, Dept. of Earthquake Engg. University of Roorkee, Roorkee, India.

11. **National Conference** on **"Civil Engineering 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 January 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 January 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. Workshop on **"Good Concrete Construction Practices,"** RIT (Rajarambapu Institute of Technology) Sakharale, (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).

28. **4th World Summit on Accreditation** (7th - 9th September 2018) organized by National Board of Accreditation at The Ashok Hotel, New Delhi-110021.

29. **Workshop on Environment Safeguard.** 11th January 2019 organized by MHRD / NPIU / World Bank at SGSITS Indore.

SHORT TERM COURSES AND TRAININGS ATTENDED

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

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

3. **QIP short term course on Introduction to Engineering Optimization,** 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, November 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-II Program.

6. **Vision and Mission Formulation of GCE Karad.** Two Days Workshop under Faculty Development Program of TEQIP-II, 14-15 April 2016, Mahabaleshwar, India. By TCS.

LECTURE DELIVERED (Resource Person)

1. **Ferrocement for Low-Cost Housing.** 20th November 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.

6. **Refined Shear Deformation Theories.** In ***National Conference*** *on* ***Advances in Structural Engineering. NCASE-2016,*** during February 27- 28, 2016 at Govt. Engineering College, Karad, M.S., India.

7. **Recent Trends in Structural Engineering- Present State of the Art.** In **All India Workshop on *Salient Features of New Seismic Codes IS 1893 and IS 13920 – 2016***. 3-4, November 2017. Organized by The Institution of Engineers (India), Pune Local Centre, held at RIT Rajaramnagar, Sakharale, M.S., India.

8. **Calculus of Variations: Applications to Beam Bending Theories.** Faculty Development Program on ***Advances in Applied Mathematics to Engineering*****.** 11-22 December 2017. Organized by Department of Mathematics, Govt. Engineering College, Karad, M.S., India.

9. **Properties of Polymer based FRC.** A Two Days Workshop on ***Study of Special Types of Concrete and its Applications*****.** 12 -13 January 2018**.** Organized by Department of Civil Engineering, Sanjivani College of Engineering, Kopargaon, M.S., India.

10. **Experimentation on Polymer based FRC (Bending, Shear & Torsion).** A Two Days Workshop on ***Study of Special Types of Concrete and its Applications*****.** 12 -13 January 2018**.** Organized by Department of Civil Engineering, Sajivani College of Engineering, Kopargaon, M.S., India. Sponsored by Savitribai Phule University Pune.

11. **Basic Concepts of Matrix Methods of Structural Analysis (Refined beam and Plate Theories).** Faculty Development Program under QIP on ***Matrix Methods of Structural Analysis*****.** Organized by VJTI, Matunga Mumbai during 23rd -28th January 2018.

12. **Classical Beam Theory: History, Development and Applications**. Two Days workshop on ***Structural Design*****.** 2-3 February 2018. Organized by Civil Engineering Department, MIT Aurangabad and Indian Society of Structural Engineers, Aurangabad.

13. **Plate and Beam Theories**. Organized by Civil Engineering Department, G. H. Raisoni College of Engineering and Management, Wagholi, Pune on 25th August 2018.

14. **Advanced Concrete Technology.** Organized by Civil Engineering Department, G. H. Raisoni College of Engineering and Management, Wagholi, Pune on 9th January 2019.

15. **Literature Review.** PG Research Symposium, Organized by Govt. Engineering College, Karad., 20th Sept. 2019. Also, in 2018.

16. **Variational and Energy Principles in Solid Mechanics. Refined Theories of Laminated Beams and Plates. FDP** on ***Mechanics of Composite Materials and Structures.*** Organized by Applied Mechanics Department, Govt. Engineering College, Karad during 30th Dec 2019- 3rd Jan 2020.

Conferences, STTP, FDP Organized and Books Edited.

1. **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. Worked as **Chairman** and **Chief Editor** for this conference.

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

3. **Organized National Conference** on **Advances in Structural Engineering. NCASE-2016,** during February 27- 28, 2016 at Govt. Engineering College, Karad, M.S., India and published proceedings in **Two International Journals.** Worked as **Chairman.**

4. **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.

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

6. **Organized STTP on Application of MATLAB in Engineering and Science during** December 23- 27, 2015, at Govt. Engineering College, Karad, M.S., India.

7. **Organized STTP on Structural Analysis and Design** using **STAAD-Pro** during December 21- 25, 2015, at Govt. Engineering College, Karad, M.S., India.

8. **Organized expert lecture** on "**Stiffened Plates and Shells**" by Prof. Eugenio Ruocco, Department of Engineering, **University of Campania "Luigi Vanvitelli", Italy** during 11th and 15th September 2018 under TEQIP-III, R & D Component at Govt. Engineering College, Karad.

9. **Organized STTP on Structural Analysis and Design of Bridges** using **MIDAS (Civil)** FE Software for **PG students** during 29 - 31 March and 6 -7 April 2019, at Govt. Engineering College, Karad, M.S., India.

10. **Organized STTP on Structural Analysis Buildings** using **ETAB** FE Software for **UG students** during 21- 24 March and 13-14 April 2019, at Govt. Engineering College, Karad, M.S., India.

11. **Organized FDP on Mechanics of Composite Materials and Structures** during 30th Dec 2019 – 3rd Jan 2020 at Govt. Engineering College Karad, M.S., India**.**

12. Springer Book Chapter Publication: **Buckling Analysis of Thick Plates Using 5th Order Shear Deformation Theory.** Gajbhiye, P.D., Bhaiya, V., **Ghugal, Y. M. (2022)**. In: Singh, S.B., Barai, S.V. (eds) Stability and Failure of High-Performance Composite Structures. **Composites Science and Technology.** Springer, Singapore. Print ISBN978-981-19-2423-1, Online ISBN978-981-19-2424-8, Published 06 July 2022. https://doi.org/10.1007/978-981-19-2424-8_19.

13. **Thermal Analysis of Laminated Plates Using Quasi-Three-Dimensional Theory.** By Gajbhiye, P.D., Bhaiya, V., **Ghugal, Y. M. (2023)**. Dynamic Behavior of Soft and Hard Materials: Proceedings of 13th International Symposium on Plasticity and Impact Mechanics 2022. IMPLAST IIT Madras. Editors R. Velmurugan, G. Balaganesan, Kakur Naresh, Krishnan Kanny. Published by Springer Nature Singapore Pte Ltd. 1. A Springer book series Springer Proceedings in Materials.

International Assignments

1. **Reviewer of International Journals, India and Abroad**.
    1. International Journal of Computational Methods. **World Scientific, Singapore.**
    2. International Journal of Non-Linear Mechanics, **Elsevier, Amsterdam.**
    3. International Journal of Mechanical Sciences, **Elsevier, Amsterdam, Netherlands.**
    4. Latin American Journal of Solids and Structures, **Sao Paulo, Brazil.**
    5. Structural Engineering and Mechanics: *An International Journal.* **Techno-Press, 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, Amsterdam, The Netherlands**.
    9. Aerospace Science and Technology, **Elsevier, Amsterdam, The Netherlands**.
    10. International Journal of Structural Stability and Dynamics. **World Scientific Co., Singapore.**

11. Construction and Building Materials**, Elsevier, Amsterdam, The Netherlands.**
12. Steel and Composite Structures: *An International Journal*. **Techno-Press, Korea.**
13. American Concrete Institute Structural and Materials Journals. **ACI, USA.**
14. Mechanics of Advanced Materials and Structures. **Taylor & Francis, USA**.
15. Journal of Structures. **Hindawi Publications Ltd., USA.**
16. International Journal of Structural Integrity. **Emerald Gr. Publishing Ltd., UK**.
17. Composite Structures. **Elsevier, Amsterdam, The Netherlands**.
18. European Journal of Mechanics / A Solids, **Elsevier, Amsterdam, Netherlands.**
19. Composites Part B., **Elsevier, Amsterdam, The Netherlands**. (2016, 25th Nov.)
20. Journal of Mechanics of Materials and Structures, USA. (June 26, 2017).
21. Journal of Central South University, China. (27 Sept. 2017).
22. Engineering Structures**, Elsevier, Amsterdam, The Netherlands**. (21.12. 2017).
23. ICE (London) Proceedings: Construction Materials Journal, UK. (12.12.2017)
24. Mathematical Problems in Engineering. **Hindawi Limited., London, UK.**
25. Advances in Mechanical Engineering, **SAGE Publications, UK. (2018).**
26. International Journal for Computational Methods in Engineering Science & Mechanics. **Taylor & Francis, USA. (Sept. 2018, 2021)**
27. International Journal of Advanced Structural Engineering. **Springer, Switzerland.**
28. Heliyon**. Elsevier Ltd., London, UK.** (New Journal for all discipline articles.)
29. Shock and Vibration. **Hindawi Limited., London, UK.** (April 2019)
30. Computer Methods in Applied Mechanics and Engineering, **Elsevier, Amsterdam.**
31. Journal of Sandwich Structures and Materials, **SAGE Publication, UK.** 2019
32. Results in Engineering, **Elsevier, Amsterdam, The Netherlands**. (Sept. 2019).
33. Thin-Walled Structures, **Elsevier, Amsterdam, The Netherlands**. (7.1. 2020).
34. ZAMM: Zeitschrift für Angewandte Mathematik und Mechanik, **Wiley, Berlin**.
35. Advances in Concrete Construction, *An International Journal*. **Techno-Press, Korea**. (18 Jan 2020).
36. Ocean Engineering. **Elsevier, Amsterdam, The Netherlands**. (7.1. 2020).
37. Journal of Mechanical Engineering Science, **SAGE** Publications, CA, USA. (2020)
38. Mathematical Problems in Engineering. **Hindawi Ltd., London, UK.** (2 Mar 2019)
39. Waves in Random and Complex Media. **Taylor and Francis, USA.** (31 May 2021).
40. Journal of Indian Society of Earthquake Technology, **IIT Roorkee**. (August 2021).
41. Mechanics Based Design of Structures and Machines, An International Journal, Taylor and & Francis, UK.
42. International Journal of Engineering Science, Elsevier, **Amsterdam, Netherlands.** 2023**.**
43. Int. J. of Structural Engineering. Inderscience Publishers, Switzerland. 2024.

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 / Accolades

1. **Fellow of Institution Engineers India**. **FIE(I)**
2. **Author of most read papers in Solid Mechanics, Composite Science and Technology**.
3. Listed in **Marquis's Who's Who of America** in the division of Engineering Science and Technology.
4. 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.
5. 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.
6. Received **Best Paper Award** for a paper **"A New Higher Order Shear Deformation Theory for bending Analysis of Isotropic and Orthotropic Plates with Linear Thermal Loading"**. Authored by Sandhya K. Swamy and Ghugal, Y.M. Presented in ***International Conference on Innovative Realms in Civil Engineering*** **(IRICE-2018)**, 24-25 January 2018. Organized by KDK College of Engineering and IE(I) Nagpur Local Centre, Nagpur.
7. Recipient of **Outstanding Reviewer Award** from **Elsevier, London, UK. 2019.**
8. **Included in Who's who of America 2021 second time.**

OTHER CONTRIBUTIONS 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 Municipal Corporation**, Aurangabad and Karad 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, Nodal officer Incremental Operating Cost, TEQIP-II (2012-16) 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. Worked as **Dean Research and Development** at Govt. Engineering College, Aurangabad (An Autonomous Institute of Govt. of Maharashtra). 2007-2011.

9. Worked as a member of **Board of Management (BOM)** at Govt. Engineering College, Karad (An Autonomous Institute of Govt. of Maharashtra). During 2012- 2016.

10. Presently working as a **Dean Research and Development** at Govt. Engineering College, Karad (An Autonomous Institute of Govt. of Maharashtra). Since July 2017.

11. **Member of Board of Management** for Building and Construction Committee of GECA. Member Board of Studies of Structural Engineering at GECA, 2007-2010.

12. Worked as **Principal-in-Charge of Govt. Engineering College, Karad** from 11th January 2013 to 10th February 2014.

13. Presently appointed as a **Chairman Board of Studies (Civil Engineering and Technology)** of Shivaji University Kolhapur. From 29th May 2018.

14. **Approved Post-Graduate Teacher and Ph.D. Guide in Structural Engineering** of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and Shivaji University Kolhapur.

15. Research guide of Structural Engineering at Department of Applied Mechanics, Govt. Engineering College, Karad, An autonomous Institute of Govt. of Maharashtra.

16. **Reviewer of National and International peer Reviewed Journals** of Springer, Elsevier etc.

17. **Number of PG Dissertations Guided = 110**. **Number of PhD students guided = 22.**

18. **List of M. E./MTech. Dissertation works guided in Structural Engineering.**

	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		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	1996 GECA	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		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	2006 GECA	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	2009 GECA	Bending, buckling and vibration of isotopic and composite plates using hyperbolic shear deformation theory.	Pawar, M. D.
43		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	2014 GECK	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		An Experimental investigation on polymer modified fiber reinforced concrete.	Bothra Shivani R.
65		Analysis of sandwich plates using higher order shear deformation theory.	Borge Priyanka S.
66		Evaluation of polymer modified fiber reinforced concrete under flexural, bond and tensile strengths.	Mane Ajit C.
67		Static flexure of shear deformable sandwich beams using refined beam theories.	Shikhare G. U.
68	2016 GECK	Bending and free vibration analysis of thick isotropic plates using fifth order shear deformation theory.	Gajbhiye Param D
69		Thermal analysis of laminated plates using fifth order shear deformation theory with transverse normal effect.	Jadhav Avinash V.
70		Dynamic behavior of framed structures subjected to blast loadings.	Mahesh P. Ozarde
71		Performance based Seismic design of RCC building with plan irregularities.	Karkhanis Vishwajit V.
72		Effect of soil-structure interaction on seismic response of RC frames.	Yesane Prakash M.
73	GECK 2017	Analysis of three legged 400kV transmission tower lines.	Ms. Pournima Shinde B.
74		Performance assessment of multistoried RC SMRF and OMRF buildings Earthquake.	Mapari Ajinkya K
75		Seismic analysis of high-rise steel structures with and without bracings.	Mapari Ajay A
76		Earthquake analysis of multistory buildings with and without shear walls considering base isolation.	Kumbhar S. S.
78	GECK 2018	An experimental investigation on polymer modified fiber reinforced concrete by using crushed sand and natural sand.	Kadam Rahul T.

79	GECK 2018	Bending and free vibration analysis of thick isotropic shell using third order shear deformation theory.	Patil Ganesh N.
80		An experimental investigation on structural properties of polymer modified fiber reinforced concrete using manufactured sand.	Patil Yogesh Y.
81		Seismic analysis of buildings resting on sloping ground.	Sawant Avinash G.
82		Effect of soil structure interaction on seismic response of RC frames.	Battise Amol S.
83		Comparison of innovative corrugated hollow steel columns with conventional hollow steel column: Experimental and Numerical study.	Mulani Zakeer M.
84	GECK 2019	Thermo-elastic bending analysis of laminated composite spherical shells using trigonometric shear deformation theory.	Girme Sandesh Mahesh
85		Thermal stress analysis of laminated composite beams using refined shear deformation theories.	Borate Rahul Dhondiba
86		Dynamic analysis of multi-storied symmetric RCC building with pile foundation considering soil-structure interaction.	Kulkarni Purva Mahesh
87		Seismic analysis of asymmetric RCC buildings using passive energy dissipating devices.	Mane Shruti Suryakant
88		Experimental investigation on metakaolin modified fiber reinforced concrete.	Gaikwad Girija Vidnyan
89		An Experimental investigation on structural properties of polymer modified fiber reinforced concrete.	Darade Ashish Vitthal
91	GECK 2020	Behavior of steel structure subjected to blast and suggesting measures to reduce effect of blast on structure	Mule, Shubham Sunil
92		Levy's solution method for thick and thin plates.	Pandey, Shivam Kumar Avanindra
93		Analysis of steel braced RCC building using designed base isolation.	Khade, Mohini Namdeo
94	GECK 2021	Analysis and design of mono-column building.	Nilkanth manali
95	27/9/21	The study of effects of surface blast on multistorey buildings.	Birajdar Varsha
96		Seismic analysis of buildings resting on sloping ground with effect of R. C. shear wall.	Patil Kunal K

97		Seismic analysis of flat slab buildings with shear wall and base isolation.	Mukane V. J.
98	GECK 2022	Nonlinear Pushover Analysis of Composite Structures.	Sutar Vaibhav B.
99	21/7/22	Dynamic Analysis of Bridge Super Structure for Moving Loads.	Nemade H. B.
100		Design of Air Traffic Control (ATC) Tower in Severe Seismic Zone (Zone V).	Kadam V. P.
101		Analysis and Design of Post-Tensioned Concrete Box Girder Bridge.	Kadam K. C.
102		Seismic Performance of Steel Structure under Vertical Ground Motion.	Shingate Divya G.
103	GECK 2023	Dynamic Wind Analysis of Tall Building.	Kale Shivani R.
104		Strengthening of Reinforced Concrete Beam using Basalt Fiber Wrapping.	Deshmukh Tanishka S.
105		Performance of Steel and FRP Reinforced Column under Blast Load.	Kadam Aditya S.
106		Analysis of Hexagrid and Octagrid systems in Highrise Buildings.	Janakar S. V.
107		Analysis and Optimization Major Highway Bridge.	Yadav U. N.
108		Structural Health Monitoring and Structural Analysis of Existing RC Building.	Bhatbhage M. B.
109	VJTI 2024	Stress analysis of FGM plate subjected to Thermo-mechanical loading using TSNDT.	Anuj S. Kadam
110	VJTI Mumbai	Stress analysis of FGM Beam subjected to Thermo-mechanical loading using TSNDT.	Bharati C. Gangurde

19. **List of PhD candidates Completed PhD Degree in Engineering and Technology. (Structural Engineering). All the following candidates awarded PhD Degree.**

Sr No.	Name of Scholar & Registration Date	Topic of Research	**Date of Defense**	Date of University **Notification**
1	Wadekar A. P.	Performance of high strength fiber reinforced	30th Dec. 2010	January 2011

	May 2006	concrete.		
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. 31.07.2009	Performance Evaluation of 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	Thermoelastic stress analysis of beams and plates by using integral transform technique.	29th August 2016	29th August 2016
13	Sawant R. M. 01. 07. 2012	Performance of high strength fiber reinforced metakaolin concrete.	26th September 2016	26th September 2016
14	Swamy Sandhya K. 2014	Thermal Analysis of Laminated Composite Plates.	29th August 2020 (Online mode)	11th September 2020
15	Deshpande P. K At VJTI 2016	Polymer modified FRC (Under Co-guidance)	October 2021	
16	Dhepe Sharvari	Elasticity solutions for	23rd November	7th February

	N. VJTI 2016	Laminated and Functionally Graded Plate and shell under Cylindrical Bending.	2023	2024 Degree Received
17	Yadav Sunil VJTI 2018	Bending Analysis of Functionally Graded Beam using TSDT	8th November 2023	7th February 2024 Degree Received
18	Gajbhiye Param D. SVNIT Surat, Gujrat.	Flexural analysis of laminated and sandwich composite beams and plates using Fifth order shear deformation theory.	28th December 2023	28th December 2023
19	Shelar Sagar 2020 SUK	Geopolymer concrete	On going	
20	Kumbhar 2020 SUK	Thermal stresses in plates	On going	
21	Shinde 2020 SUK	Layerwise theories of plates	On going	
22	Jadhav 2020 SUK	Polymer modified SFRC	On going	

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, VJTI Bombay University Mumbai, SVNIT Surat, Gujrat, and Shivaji University, Kolhapur (Sr. No. 16-21).

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