Dr. C D Modhera

Professor (HAG)
Department of Civil Engineering
S V National Institute of Technology, Surat
cdm@amd.svnit.ac.in
cdmodhera@gmail.com
M - (+91) 9824437861

Educational Qualification

- ✓ **Doctor of Philosophy, 2001:** Indian Institute of Technology, Bombay, India - "Some Studies on Partially Set Fibre Reinforced Concrete under Sustained Temperature Cycle Using Selfing Concept:"
- ✓ **Master of Technology. 1992:** Structural Engineering, Sardar Vallbhbhai Patel College of Engineering and Technology, South Gujarat University, Surat, Gujarat, India
- ✓ **Bachelor of Engineering, 1989:** Civil Engineering, Sardar Vallbhbhai Patel College of Engineering and Technology, South Gujarat University, Surat, Gujarat, India

Research Interests

- ✓ Field of Specialization are Concrete Technology, Structural Dynamics, and Earthquake Engineering and Monitoring health of structural and special concrete. His research interest lies in the area of Special concrete and relevant application to the field.

Research Area

- ✓ Concrete Technology, Supplementary Cementitious Material, Construction and Demolition Waste, Geo Polymer Concrete, High Strength Concrete, Self Compacting Concrete, NDT Testing.

Specialized Field

- ✓ Concrete Technology
- ✓ Structural Dynamics
- ✓ Machine Foundations
- ✓ Earthquake Engineering
- ✓ Repair, Rehabilitation and Retrofitting
- ✓ NDT Testing
- ✓ Condition Assessment

Honor, Award and Prize

- ✓ Session Chair

Foreign Country Visited

- ✓ United States of America, Canada, Sri Lanka and Singapore

Employment Details

- ✓ Professional Experience
  - 1990-1991 (8 Months) as Assistant Engineer
- ✓ Academic Experience
  - 1991-1996 – Lecturer (Senior Scale)
  - 1996-2006 – Lecturer (Selection Grade)
  - 2006-2009 – Associate Professor
  - 2009-2019 – Professor
  - 2019 Professor (HAG) onwards

M Tech Supervised

Year 2023

1. **Ujjwal Patel:** Parametric study of Diaphragm wall
2. **Kshitij Chaudhari:** Behavior studies on diagrid structural system for optimal configuration of steel building with comparison to x – braced steel building

Year 2022

3. **Mihir Yadav:** Experimental Studies on Textile Reinforced Concrete
4. **Rahul Varanwal:** Experimental Studies on Ternanry Blended Concrete Using Microfine and Cinder
5. **Mayank Bose:** Development of Sustainable Concrete Using Industrial Waste and Manufactured Sand

Year 2021

6. **Jayshree Jambhulkar:** State of Art on Retrofitting and Rehabilitation of Heritage Buildings and Steel Structures
7. **Kuru Moda:** State of Art on Retrofitting and Rehabilitations of RCC Structure

Year 2020

8. **Priyanka Bharti:** Parametric Studies on seismic behavior of multistory RCC building using different configurations of shear wall
9. **Khan Juned Azam:** Parametric and cost economic study of Intze Tank.

Year 2019

10. **Aashish Sing:** Some Studies on Mechanical Behaviour of Engineered Cementitious Composites
11. **Ningraj Benal:** Experimental Studies on Some Durability Aspects of Engineered Cementitious Composites
12. **Kakadia Tushar:** Behavioral Studies on Diagrid Structural System Optimal Configuration of Steel Building with Comparison to Inverted V – Braced Steel Building.

Year 2018

13. **Pratul Singhal:** Experimental Studies on use of GGBS and Copper Slag in Concrete Mixture
14. **Vishal Sing:** Experimental Studies on use of GGBS and Steel Slag in Concrete Mixture

Year 2017

15. **Swapnil Gavit:** Experimental studies on mortar and concrete containing steel slag.

Year 2016

16. **Akshay Patel:** Study of some property of SCC using copper slag as a replacement material with sand.
17. **Piyush Jain:** Experimental studies of self-compacting concrete using fly ash.

Year 2015

18. **Dhat S Somesh:** Parametric studies on post-tensioned flat slab using adapt-pt software.
19. **Sudani B Jaydeep:** Suitability of recycle coarse aggregate.
20. **Khatuwala S Amit:** Experimental studies on various mixes using untreated and treated recycled coverage aggregate.

Year 2014

21. **Mistry Sanket:** an experimental study on high volume fly ash self-fibrous concrete.
22. **Kannauzia Anilkumar:** High volume fly fiber reinforced self-compacting concrete
23. **Basawa Sharan: Analysis** of deep beams using STM approach and ATENA 3d software.
24. **Korat P Jignesh:** Study of Rincon an innovative material.

Year 2013

25. **Jadav Bhargav:** Experimental study on mortar using recycled fine aggregate
26. **Thakor Nikunj:** Experimental studies on recycled coarse aggregate in concrete
27. **Badgha Damyanti:** Experimental studies on various fibrous reinforced mortars.

Year 2012

28. **K P Mswamy:** Some studies as rebar protection using corrosion inhibitor.
29. **Sharad Kadbhane:** Soil-structure interaction of vertically anchored foundation elements.
30. **Mrs. Palak Shukla:** Study of extreme loading on bridges-application of blast and seismic loading.
31. **Kasar Akshay Lalit:** Performance analysis of various bracing configurations in steel buildings.
32. **Mayank T. Velwan:** Parametric studies of chimney under dynamic wind loading.
33. **Shah Krutik R:** Comparative studies of different structural parameters for open cylindrical shell under wind loading.

Year 2011

34. **Teke Arjun Krishnat:** Experimental study on flexural strength of beam using glass fibre reinforced polymer.
35. **Khunt Vaibhav G.:** An experimental study on temperature effect of properties of self-compacting concrete.
36. **Digambar J. Kadbhane:** Analysis and parametric study of reinforced concrete Voided slab bridge.
37. **Patel Nileshkumar D:** Earthquake analysis of multi-storied building with different configuration.
38. **Shah Keyur Pravinchandra:** Some study on high volume fly ash concrete

Year 2010

39. **Dilip Vaghasiya:** Studies on various mixes of accelerated cured specimen with different curing time duration using plasticizer
40. **Khunt Hardik Bhikhabhai:** Some studies on accelerated cured concrete.
41. **Vijay Prakash Meena:** Some studies on strength of partially set concrete mixes.
42. **Vikram Jaisingh Kadam:** Analysis of curved box Girder Bridge.
43. **Tulesh N Patel:** Analysis & design of high capacity water tank on round using spread sheet and cost prediction by artificial neural networks.

Year 2009

44. **Divyesh Patel:** Design of reinforced concrete & post tensioned slab using software.
45. **Kamlesh S Dalal:** Visible and invisible problem &some methods of concrete repair.

Ph D Supervised

Year 2024

1. **Raval Sachinkumar:** Experimental Studies on Strength and Durability Properties of Concrete incorporating GGBS and Silica Fume

Year 2023

2. **Patel Dhavalkumar:** Experimental Studies on Strength and Durability Characteristics of Ternary Blended Conventional Concrete using Manufactured Sand
3. **Salla Sanjay:** Experimental Investigation on Optimized Ternary Blended Concrete Containing Slag-based Mineral Admixtures

Year 2022

4. **Meghayau Adhvaryu:** Design and Development of Flexible NDT Sensors for Structural Health Monitoring

Year 2020

5. **Vyom Pathak:** Experimental Studies on Recycled Aggregate Concrete using Selfing Concept
6. **Palak Shukla:** Response of Reinforced Concrete Panel Subjected to Blast Loading

Year 2019

7. **Digambar Kadbhane:** Analytical Studies on RCC Box Type Cross Drain using Artificial neural Network
8. **Archana Tanawade:** Studies on Ferrocement Overlay using Self-Compacting Concrete
9. **Kamal Padhiyar:** Parametric Studies of Post Tensioned Floor System by using ADAPT-PT Software

Year 2018

10. **Hema Munnot:** Electro-Chemical Studies on Corrosion of Polypyrrole Coated Low Carbon Steel Plates in Simulated Concrete Pore Solution
11. **Vimal Patel:** Experimental Studies on the Performance of Concrete Containing Recycled Aggregates Manufactured from C & D Waste and Ceramic Waste
12. **Damyanti Badagha:** Experimental Studies on High Performance Concrete using Industrial Waste (Steel Slag)

Year 2017

13. **Tejendra Tank:** Performance Evaluation of Externally Strengthened RC Slab Using Various Mechanisms.
14. **Vijay Rathi:** Studies on Effect of Colloidal Nano Silica on Properties of Concrete
15. **Dubal Rajkuwar Ajit:** Applications of Performance Based Seismic Design method to Reinforced concrete moment Resisting Frames with Vertical Irregularities

Year 2016

16. **Shah Ujjawal:** Parametric study of fiber reinforced high volume fly ash Self-compacting concrete.
17. **Tulesh N Patel:** Development of Spreadsheet-Tool, Design AID and Neural Approaches for Predicting Crack width in Ground Supported Tanks Reinforced and Fibre Reinforced Concrete Wall Subjected to Seismic Loading

Year 2015

18. **K S Dalal:** Studies on bond strength of repair materials and substrate concrete.

Year 2014

19. **M N Bajad:** Effect of Chloride and Sulphate attack on the Properties of Conglasscrete

Year 2013

20. **D N Parekh:** Some studies on recycled aggregate concrete
21. **K B Parikh:** Experimental and Analytical Studies on Flexure Strength of Reinforced Concrete Using GFRP

Year 2012

22. **D L Shah:** Evaluation of shear strength in self-compacting fiber reinforced concrete and conventional concrete deep beams.
23. **M K Maroliya:** Study on behavior of reactive powder concrete containing steel fibers and silica fume.
24. **I N Patel:** Study of engineering and durability properties of fiber reinforced concrete incorporating high volume fly ash.
25. **W N Deulkar:** Seismic response of steel buildings using different bracing Configurations.

Research Publication – International

Year 2023

1. Gaurav, J., **Modhera, C.**, Patel, D., "Proposed Mixture Design Method for High-Strength Geopolymer Concrete", *ACI Materials Journal*, 2024, 121(1), 67
2. Gaurav, J., **Modhera, C.**, Patel, D., Patel, V.N., "Mechanical and Microstructural Characteristics of Manufactured Sand-Based High-Strength Geopolymer Concrete and Its Environmental Impact", Practice Periodical on Structural Design and Construction, 2023, 28(4), 04023036
3. Gaurav, J., **Modhera, C.**, Patel, D., Patel, V.N., "Mechanical and microstructural behavior of high strength geopolymer concrete inclusion of various industrial wastes", Innovative Infrastructure Solutions, 2023, 8(6), 181.
4. Patel, D., **Modhera, C.**, Gaurav, J., Patel, V.N., "Experimental investigation on mechanical properties of ternary blended concrete using manufactured sand", Innovative Infrastructure Solutions, 2023, 8(5), 136.
5. Salla, S.R., Uppara, R.B., Kannazia, A.K., Kondraivendhan, B., **Modhera, C.D.**, "An experimental and environmental impact assessment of slag-based mineral admixture for sustainable development", Innovative Infrastructure Solutions, 2023, 8(1), 29.

Year 2022

6. Patel T., Salla S., Vasanwala S., **Modhera C**., Strengthened of a Square RC Columns using BFRP and GFRP: The Experimental Investigations (2022) Trends in Sciences, 19 (15), DOI: 10.48048/tis.2022.5602.

Year 2021

7. Tejash Patel, Sanjay Salla, S A Vasanwala, **C D Modhera**, Purvesh Patel and Darshan Patel (2021). Experimental and Analytical Studies on Strengthened Axially Loaded RC Columns. Walailak Journal of Science and Technology (WJST), 18(17), Article 23305 (18 pages).
8. Shukla, P.J., Desai, A.K. & **Modhera, C.D**. Dynamic response of cut and cover tunnel section under blast loading. Innov. Infrastruct. Solut. 6, 27 (2021). https://doi.org/10.1007/s41062-020-00391-y
9. Sanjay R. Salla, Chetankumar D. Modhera, Uppara Raghu Babu, An Experimental Study on Various Industrial Wastes in Concrete for Sustainable Construction, Journal of Advanced Concrete Technology, 2021, Volume 19, Issue 2, Pages 133-

148, Released February 25, 2021, Online ISSN 1347-3913, https://doi.org/10.3151/jact.19.133.

Year 2019

10. Adhvaryu, M., Patel, P.N. & **Modhera C. D.** Sens Imaging (2019) 20: 34. https://doi.org/10.1007/s11220-019-0256-9.
11. Palak J Shukla, Atul K Desai, **Chetankumar D Modhera** Dynamic Response of RC Panel with and Without Openings Subjected To Blast Loading, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8 Issue-10, August 2019
12. D. J. Kadbhane and **C. D. Modhera**, Development of Innovative Block Charts for a Box-Type Cross Drain with a Constant Width for Various Depths of Soil Cushion, Practice Periodical on Structural Design and Construction, Vol. 24, Issue 3 (August 2019)
13. Palak J Shukla, Atul K Desai, **Chetankumar D Modhera**, Transient Response of RC Panel Protected with Slurry Infiltrated Micro Reinforced Concrete Jacket Under Blast Loading, International Journal of Recent Technology and Engineering (IJRTE), Volume-8 Issue-2, July 2019
14. Damyanti G. Badagha, **C. D. Modhera**, Parametric Experimental Studies on Sustainable Concrete Containing Waste under Different Curing Conditions, International Journal of Recent Technology and Engineering (IJRTE), Volume-7 Issue-6S2, April 2019
15. D.J.Kadbhane and **C.D.Modhera**, Performance of RCC box drain under fluctuating depth of a road embankment, Engineering Science and Technology, an International Journal, Volume 22, Issue 2, April 2019, Pages 548-554.
16. A.G.Tanawade and **Dr. C. D. Modhera**, Tensile Properties Of Ferrocrete Overlay For Parking Pavement, International Journal of Civil Engineering and Technology (IJCIET) Volume 10, Issue 02, February 2019, pp.1686-1695.
17. H. Munot, P. Deshpande and **C. D. Modhera**, Electrochemical Investigations on Semi-conducting Properties of a Passive Film on Conducting Polypyrrole Coated Low Carbon Steel in a Simulated Concrete Pore Solution, Portugaliae Electrochimica Acta 2019, 37(1), 43-50
18. A.G.Tanawade and **Dr. C. D. Modhera**, Experimental Study on Self-Compacting Ferrocrete Slab under Axial Compression Load, Materialstoday: Proceedings, Volume 11, Part 3, 2019, Pages 1066-1072

19. Patel J.R., Patel M.R., Tank T.G., Vasanwala S.A., **Modhera C. D.** (2019) Flexural Strengthening of RC Beams Using NSM Technique. In: Deb D., Balas V., Dey R. (eds) Innovations in Infrastructure. Advances in Intelligent Systems and Computing, vol 757. Springer, Singapore

Year 2018

20. Damyanti G. Badagha, **C. D. Modhera**, "Experimental Studies On Shear Strength Of High Performance Concrete Containing Steel Industry Waste By Different Test Methods Considering Durability", Journal CIVIL ENGINEER Časopis GRAĐEVINAR (SCI), Reviewed Corrected manuscript submitted with copyright transfer, 2018
21. Damyanti G. Badagha, **C. D. Modhera**, "Sustainable Experimental Investigation Of Mortar Adopting Industrial Waste Considering Environmental Effect", VBRI Press, Advanced Materials Proceedings,2018
22. Damyanti G. Badagha, **C. D. Modhera**, S. A. Vasanwala, " Mix Proportioning and Strength Prediction of High Performance Concrete Including Waste Using Artificial Neural Network", WASET Journal, Accepetd for World Academy of Science, Engineering and Technology International Journal of Civil and Environmental Engineering Vol:12, No:2, 2018 (Peer reviewed reffered International Journal (Free)),
23. Damyanti G. Badagha, **C. D. Modhera**, B. K. Vendhan, " Parametric Experimental Studies on Sustainable Concrete Containing Waste under Different Curing Conditions**,** 2nd International Conference on Sustainable Technologies in Building & Environment, January 2018, Chennai, Accepted for publication in Scopus indexed journal

Year 2017

24. Damyanti G. Badagha, **C. D. Modhera**, "Experimental Approach To Enhance Mechanical Properties Of Concrete Using Steel Industry Waste As Cement Replacement", International Journal Of Civil Engineering And Technology, Volume 8, Issue 4, April 2017, pp. 226-233
25. Hema Munot, Pravin Deshpande, **Chetankumar Modhera**, "Effect of chloride ions on the corrosion resistance of conducting polypyrrole coated steel in simulated concrete pore solution", U.P.B. Sci. Bull., Series B, Vol. 79, Issue.2, 2017 ISSN 1454-2331
26. Damyanti Badagha, **C D Modhera**, "M55 grade concrete using industrial waste to

minimize cement content incorporating CO_2 Emission Concept: An Experimental Investigation", Materials today: Proceedings 4 (2017) 9768-9772

27. Tejendra Tank, **C D Modhera**, "Finite Element Modelling of RC Slab Strengthened with GFRP", Materials today: Proceedings 4 (2017) 9784-9791

Year 2015

28. Damyanti Badagha, **C D Modhera**, "Experimental approach to Enhance the Indirect Split Tensile Strength for cylindrical and cubic specimen for various fibrous mortars under different environment conditions", Indian Journal of Science and Technology, Vol 8 (28), October 2015, 0974-5654
29. Damyanti Badagha, **C D Modhera**, "An Experimental Approach to Investigate effects of Curing Regimes on Mechanical Properties and Durability of Different Fibrous Mortar", Advances in Structural Engineering, DOI 10.1007/978-81-322-2187-6_148
30. Mitali R Patel, Tejendra Tank, S A Vasanwala and **C D Modhera**, "Assessment of Debonding Load for RC Beam Strengthened with pre-designed CFRP strip mechanism", Advances in structural Engineering, DOI 10.1007/978-81-322-2187-6_152

Year 2014

31. U N Shah, **C D Modhera**, "Study on fresh properties of Self-compacting concrete with process Fly ash", Impact journals, ISSN:2347-4599, pp. 271-274

Year 2013

32. Mohankumar N Bajad, **Chetankumar D Modhera** and Atulkumar K Desai, "Use of waste glass powder in concrete" The Indian Concrete Journal, July 2013
33. K B Parikh, **C D Modhera**, "Design Oriented Model for Flexural Strength of Retrofitted RC Beam with GFRP", International Journal of Earth Sciences and Engineering, ISSN 0971-5904, Volume 06, No. 01, February 2013, P.P 158-165
34. Shah Ujjawal N, Mistry Sanket R, **Modhera C D**, "State of art – study on HVFA SCC Durability point of View" Global Research Analysis, ISSN No. 2277-8160, pp.52-55

Year 2012

35. M N Bajad, **C D Modhera** and A K Desai, "Higher strength concrete using glass powder", Journal of structural engineering, vol.39, No.3, August-September 2012, pp. 380-383
36. D N Parekh, **C D Modhera**, "Recycled Aggregate Fly Ash Concrete: An Exploratory Study", the IUP Journal of Structural Engineering, Vol.5, No.3, July 2012.

37. M N Bajad, **C D Modhera** and A K Desai, "Effect of Sodium Chloride and Magnesium Sulphate on Glass Concrete", IUP Journal, 2012
38. Dinesh L. Shah, **C D Modhera**, "Evaluation of shear strength in self-compacting fibre reinforced concrete and conventional deep beams", Magazine of Concrete Research, Volume 64, Issue 1-11, 2012
39. Patel I N & **Modhera C D**, Experimental Investigation on Study Effect of Polyester Fibre on Abrasion and Impact Resistance of High-Volume Fly Ash Concrete with class-F Fly Ash, International Journal of Emerging Technology and Advanced Engineering, Volume 2, Issue 9, September 2012.
40. Parekh D N and **Modhera C D**, Recycled aggregate fly ash concrete", IUP Journal of Structural Engineering, pp 7 – 19, July 2012.
41. Parekh D N and **Modhera C D**, Percentage variation effect of silica fume and recycled aggregate on recycled aggregate concrete", International Journal of Advanced Engineering & Research Studies, Vol 1, Issue 3, pp 76 – 80, April – June 2012
42. Parekh D N and **Modhera C D** Effect of varying source of recycled aggregate on concrete properties by experimental evolution", International Journal of Civil and Structural Engineering, Vol 2; No 1; pp 1420 –1430, 2012.

Year 2011

43. M N Bajad, **C D Modhera** and A K Desai, "Use of waste glass powder as replacement of cement in Concrete- Experimental Study", CE & CR October, 2011.
44. Parekh D N and **Modhera C D**, "Characterization of recycled aggregate concrete", International Journal of Advanced Engg. & Tech, – 2(4) pp 321-330, Oct – Dec 2011
45. Patel I N & **Modhera C D**, Study Effect of Polyster-Fibres on Flexural Strength and Abrasion Resistance of High-Volume Fly Ash Concrete with Class F-Fly ash, International Journal of Civil Engineering Research, Volume 2, pp. 83-92, November 2 2011
46. Parekh D N and **Modhera C D**. "Assessment of Recycled aggregate concrete", Journal of Engg. & Research Studies, 2(1) pp 1-9, Jan – Mar2011.
47. Patel I N & **Modhera C D**, Study Crushing and Flexural Strength of Fiber Reinforced Concrete Containing High Volume Fly Ash, International Journal of Advanced Engineering Technology, Vol. II, Issue I, pp 299-305, January-March 2011.
48. Parekh D N and **Modhera C D**, "Experimental study of recycled aggregate concrete by varying source and percentage of recycled aggregates", Global journal of

engineering and applied sciences, pp161-164, 2011

Year 2010

49. W N Deulkar, **C D Modhera**, Buckling Restrained Braces for Vibration control of building structures, Buckling Restrained Braces for Building Structure, IJRRAS 4(4), September 2010.
50. M K Maroliya, **C D Modhera**, Anant Parghi, "Influence of steel fiber Variation on Impact strength of Reactive powder concrete", International Journal of Earth Sciences & Technology, ISSN:0974-5904, vol:03, 03 SPL, July 2010
51. Deulkar W N, **Modhera C D** and Patil H S Response of Structure with Conventional and Buckling Restrained Braces, International Journal of Applied Engineering Research, Vol. 5, No. 11, pp. 2001-2014. 2010.
52. Deulkar W N, **Modhera C D** and Patil H S Buckling Restrained Braces for Vibration Control of Building Structure, International Journal of Research and Review in Applied Science, Vol. 4, No. 2., 2010.
53. Deulkar W N, **Modhera C D** and Patil H S, Parametric study of braced steel building structures, Journal of Advances in Structural Engineering, Paper No. 10- 1083, 2010.
54. Shah D L & **Modhera C D**, International Journal: "Parametric study on influence of steel and polyester fibers in SCC, International Journal of Applied Engineering Research, ISSN 0973-4562, Vol.5 No.5, pp. 795-806,2010
55. Shah D L & **Modhera C D**, International Journal: "Evaluation of Shear strength of SCC Deep Beam", International Journal of Advanced Engineering Technology (IJAET), ISSN 0976-3945 Vol.1, No 2, July-Sept.,2010
56. Parikh K B & **Modhera C D**, Design guidelines for flexural strength of singly reinforced concrete beam strengthened with fibre reinforced polymer sheet at bottom, International Journal of Advanced Engg. Tech., Vol. I Issue 2, pp 274- 282, July-Sept, 2010.
57. M K Maroliya, Anant Parghi & **Dr C D Modhera**, Influence of steel fibers variation on Impact strength of Reactive powder Concrete. International Journal of Earth science s and Engineering. Vol.03 No.03spl, ISSN 0974-5904, July2010.
58. M K Maroliya, Anant Parghi, & **Dr C D Modhera**, An Evaluation of some of the parameter in producing normal weight reactive powder concrete. International Journal of Civil Engineering. 2(2) 93-100, ISSN-0975-5314, Feb.2010.

Research Publication – National

Year 2018

59. Damyanti G. Badagha, **C. D. Modhera**, "Experimental Study to Make Sustainable Concrete by Reducing Cement Consumption and CO2 Emission in Environment", VIER Journal of Engineering Research Volume 4, Article in press,2018

Year 2013

60. Damyanti Badagha, **C D Modhera**, "Experimental Investigation of Mechanical Properties of Polyester fibrous mortar", NBM&CW, December 2013.

Year 2012

61. Parekh D N and **Modhera C D**; "Effect of fly ash on recycled aggregate concrete", New Building Materials& Construction World,– 18 (2) pp 202 – 212,August – 2012
62. Parekh D N and **Modhera C D**; "Effect of silica fume on recycled aggregate concrete", Journal of Construction Engg, Tech, & Management- 2(2) pp 17-28, August –2012
63. Parekh D N and **Modhera C D**; "Workability Study for recycled aggregates", IOSR Journal of Engineering, Vol 2(5, pp 1040 - 1044), May2012

Year 2010

64. Shah D L & **Modhera C D**, National journal: "Evaluation of fresh and hardened properties of SCC", Civil engineering and construction review (CECR), Aug-2010)
65. Patel I N & Modhera C D, Study Basic Properties of Fiber Reinforced High Volume Fly Ash Concrete, Journal of Engineering Research and Studies, Vol. I, Issue I, pp 60-70, July-Sept. 2010
66. M K Maroliya, Anant Parghi and **Dr C D Modhera**, A Comparative Study of Reactive Powder Concrete Containing Steel Fibers and Recron 3s Fibers. Journal of Engineering and research studies. JERS/Vol. I/Issue I/July-Sept. 2010/83-89, E-ISSN 0976-7916, July2010.

Year 2009

67. Shah D L & **Modhera C D**, Journal: "SFRC Deep Beam", ADIT-V.V.NAGAR, India.2009

Research Publication – Conference (International)

Year 2023

68. Salla, S.R., Uppara, R.B., Patel, T., **Modhera, C.**, Experimental studies on mechanical properties of concrete by using artificial fine aggregate and as replacement of natural fine aggregate for sustainable development, IOP Conference Series: Earth and Environmental Science, 2023, 1193(1), 012007
69. Salla, S.R., Uppara, R.B., Patel, T., **Modhera, C.**, Indirect Split-tensile Strength, Modulus of Rapture of Artificial Sand Concrete, and its relationship with Compressive Strength, IOP Conference Series: Earth and Environmental Science, 2023, 1193(1), 012016
70. Raval, S.S., Modhera, C.D., Patel, T.K., Parametric Experimental Studies of Durability Properties of Concrete Incorporating Ground Granulated Blast Furnace Slag (GGBFS) and Silica Fume, Lecture Notes in Civil Engineering, 2023, 277, pp. 565–576

Year 2022

71. Rathi, V.R., **Modhera, C.D.**, Effect of Elevated Temperature on Mechanical Properties of High-Strength Concrete Produced by Adding Fly Ash and Colloidal Nanosilica, Lecture Notes in Civil Engineering, 2022, 222, pp. 137–143
72. Shukla, P.J., Desai, A.K., **Modhera, C.D.**, Dynamic Response of RC Wall Panel Subjected to Air Blast Loading, Lecture Notes in Civil Engineering, 2022, 222, pp. 299–309
73. Patel, D., **Modhera, C.D.**, Jagad, G.B., Utilization of GGBFS and Micro-fine as Partial Replacement of Cement in Mortar with Manufactured and River Sand, Lecture Notes in Civil Engineering, 2022, 222, pp. 161–166
74. Raval, S.S., **Modhera, C.D.**, Parametric Experimental Studies of Mortar Incorporating Ground Granulated Blast Furnace Slag (GGBFS) and Silica Fume, Lecture Notes in Civil Engineering, 2022, 222, pp. 167–172
75. Jagad, G., **Modhera, C.D.**, Patel, D., Experimental Investigation on Geopolymer Concrete Containing Recycled Plastic Waste Aggregates, Lecture Notes in Civil Engineering, 2022, 222, pp. 401–407
76. Adhvaryu, M., Patel, P.N., **Modhera, C.D.**, A New EBG Superstrated Rectangular Slotted Microwave Patch Antenna Sensor with Enhanced Gain for Steel Rebar Nondestructive Corrosion Monitoring in Civil Structures, Lecture Notes in Civil Engineering, 2022, 222, pp. 105–113

77. Kakadia, T.P., **Modhera, C.D.**, Sheth, K.N., Naik, S., Comparative Study of Diagrid Steel Building with Conventional Steel Braced Building, Lecture Notes in Civil Engineering, 2022, 222, pp. 285-297

78. Jagad, G., **Modhera, C.D.**, Patel, D., Experimental Investigation on Development of Compressive Strength of High-Strength Geopolymer Concrete Containing M-Sand, Lecture Notes in Civil Engineering, 2022, 222, pp. 21-29

Year 2019

79. Tanawade, A.G., **Modhera, C.D.**, Experimental Determination of Energy Absorption of SCC Ferrocrete Overlay Slab under Tension Test, Materials Today: Proceedings, 2019, 24, pp. 2073-2081

80. Tanawade, A.G., **Modhera, C.D.**, Experimental Study on Self-Compacting Ferrocrete Slab under Axial Compression Load, Materials Today: Proceedings, 2019, 11, pp. 1066-1072

Year 2018

81. Damyanti G. Badagha, **C. D. Modhera**, D. B. Raijiwala, S. R. Suryvansi, "Durability of Concrete Incorporating Blast Furnace Slag to Reduce Cement Consumption Under MgSO4 Exposure", PiCET 2018, Accepted for Mc. Graw hill Publication Proceedings

Year 2017

82. Damyanti G. Badagha, **C. D. Modhera**, "Effect of Steel Industry Waste as a Cement Replacement to Produce Sustainable Concrete Considering Strength and Durability", ASCE India Conference, December 2017,IIT Delhi, ASCE India Conference Proceeding

83. A. G. Tanawade and **C. D. Modhera**, Study On Flexural Strength Of Self Compacting Ferrocrete Slab For Parking Lot Overlay, 42nd Conference on Our World in Concrete & Structures 24-25 August 2017, Singapore, PP. 411 – 422

84. Damyanti G. Badagha, **C. D. Modhera,** "Experimental Investigation On High Performance Concrete Containing Steel Industry Waste Focusing Rapid Chloride Penetration Test", 42nd Conference on Our World in Concrete & Structures, August 2017, Singapore, Conference Proceeding, pp. 151-158

85. Damyanti G. Badagha, **C. D. Modhera**, "Critical Reviews on Utilization of Steel Industry Waste in Concrete Considering Environment Issues and Solution", 32nd Indian Engineering Congress, The Institution of Engineers (India), 2017, Chennai, Published in IE Technical Volume

86. Damyanti G. Badagha, **C. D. Modhera**, " Laboratory Investigation On The Mechanical Behavior Of Concrete Containing Steel Industry Waste", 33rd National Convention of Civil Engineers Organized by Gujarat State Center The Institution of Engineers (India), Published in conference Proceeding

87. Damyanti G. Badagha, **C. D. Modhera**, " Experimental approach to produce sustainable concrete with optimum utilization of steel industry waste introducing waste management concept" International Conference On New And Renewable Energy Resources For Sustainable Future, February 2017, Jaipur, Published in Conference Proceeding

Year 2016

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Research Publication – Book Chapter

Year 2023

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2. D G Badagha and **C D Modhera** Waste Material Utilization as a Cementitious Material to Understand Tensile Behavior of Concrete under Alkaline and Acidic Exposure – Bloomsbury Publishing India Pvt. Ltd. (SCOPUS), Page No 135 – 139, February 2017, Advances in Concrete, Structural & Geotechnical Engineering

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3. A M Parghi and **C D Modhera**, An Experimental Study on The Effect of Steel Fiber Reinforced Concrete on The Behavior of The Exterior Beam-Column Junctions Subjected to Cyclic Loading – Concrete Solution, Year 2009, Tailor and Francis
4. A M Parghi and **C D Modhera** Strengthening and Repair of Reinforced Concrete Structures Using Composite Material – Concrete Solution, Year 2009, Tailor and Francis

STTP/ Workshop/ Conference Organized

Sponsored by AICTE

- ✓ Recent Advance in Concrete Technology (RACT) – 25.01.2010 to 29.01.2010

Self-Sponsored

- ✓ Recent Advances in Testing Methodology and Techniques for Engineered Materials – 20.06.2016 to 24.06.2016
- ✓ Recent Advances in Testing Methodology and Techniques for Engineered Materials – 27.06.2016 to 01.07.2016

Sponsored by QIP

- ✓ Recent Advances in Concrete Technology and Testing Of Materials – 19.12.2010 to 25.12.2010

National/ International Conference organized as Chairman/ Secretary

- ✓ Biennial Conference on Structural Engineering Conventional (SEC- 2012) – 19.12.2012 to 21.12.2012

Funded Projects

Sr. No.	Title of Project	Sponsoring Agency	Duration
1.	Some Studies of Recycled Aggregate Concrete	GUJCOST	2 Years
2.	Sustainable High Performance Concrete Infrastructure, UKIERI Collaborative Research Project	UKIERI	3 Years
3.	Experimental studies on High Performance Concrete using Industrial Wastes	GUJCOST	2 Years
4.	Enhancing the Service life of concrete structures through cementless concrete or geopolymer	GUJCOST	On Going

Membership

1. Indian Association for Structural Engineering Life member
2. Indian Association for Computational Mechanics
3. The Institution of Engineers – F 1251453
4. Indian Society of Earthquake Technology – LM 1062
5. Indian Concrete Institute – M5384
6. The Indian Society for Technical Education – LM1994
7. Indian Society for Wind Engineering – LM2009
8. Association of Structural Rehabilitation – A00175