## Dr C D Modhera

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## **Education:**

- B. E. ( CIVIL) in 1989from( SVRCET, Surat ) South Gujarat University ,Surat, Gujarat, India
- M. E. ( CIVIL) specialization in Structure in 1992 ( SVRCET, Surat ) from South Gujarat University, Surat, Gujarat, India
- Ph. D. on "SOME STUDIES ON PARTIALLY SET FIBRE REINFORCED CONCRETE UNDER SUSTAINED TEMPERATURE CYCLE USING SELFING CONCEPT" in Indian Institute of Technology, Bombay, 2001

### **Professional Interests:**

Dr C D Modhera field of Specialization are Concrete Technology, Structural Dynamics, and Earthquake Engineering and Monitoring health of structural concrete. His research interest lies in the area of Special concrete and relevant application to the field.

## Official assignment:

- Charge taken as I/C. Estate Civil Works (for 2 yrs.) on 01/08/2002.
- Charge taken as Secretary Cum Treasurer of ISTE SURAT Chapter on 22/09/01
- Dept. level: (i) Member of Time-Table Committee from June 2002
  - (ii) I/C Computer Lab. From Jan 2001
- Charge taken as Secretary Cum Treasurer of ISTE Gujarat section. On 8/3/03.
- Taken charge as Incharge Superintending Engineer Prof. Incharge Estate & Store Section.
   2006.
- Dean (P&D) since 2008 onwards.
- Head, AMD from 11/06/2013 onwards for 2 yrs.

# List of M.Tech. Guided-

Sr.No	Name of Candidate	Thesis Title
1.	Chinmay A. Gorantiwar	Modal Analysis for Multi-Storey Building Considering
	(2002)	the Effect of Infill.
2.	D .G. Soni	An Experimental Study on Shear Strength Test
	(2003)	Methods for SFRC
3.	Vijay M. Upadhyay	Effect of Fly Ash (Ukai Power Plant) on Properties of
	(2004)	Concrete.
4.	Ritesh Chauhan	Retrofitting of Beam &Column Using Glass Fibre
	(2004)	Reinforced Polymer.
5.	Rajesh Patel	Analysis & Design of Earthquake Resistant Multi-Storey
	(2004)	Building for Different Configuration
6.	Vikrant Tapase	Base Isolation Technique to Control Response of
	(2005)	Structure Induced Due to Earthquake
7.	Anant M. Parghi	An Experimental Study on Behaviour of Exterior Beam-
	(2006)	Column Junction of SFRC Subjected Cyclic Loading.
8.	Ganvit Kanti Z	Effect of Structural Mass Irregularity on Seismic
	(2007)	Performance of Building.
9.	Bharatsinh S Solanki	Seismic Response of Unsymmetrical RCC Building with
	(2008)	LRB Base Isolation System.
10.	Mayan A Patel	The Performance of Various Mixes With Plasticizer In
	(2008)	Thermal Environment.
11.	Kamlesh S Dalal	Visible And Invisible Problem &Some Methods of
	(2009)	Concrete Repair.
12.	Divyesh Patel	Design of Reinforced Concrete & Post Tensioned Slab
	(2009)	Using Software.
13.	Tulesh N Patel	Analysis & Design Of High Capacity Water Tank on
	(2010)	Ground Using Spread Sheet and Cost Prediction by
		Artificial Neural Networks.
14.	Vikram Jaisingh Kadam	Analysis of Curved Box Girder Bridge.
	(2010)	
15.	Vijay Praksah Meena	Some Studies on Strength of Partially Set Concrete
	(2010)	Mixes.
16.	Khunt Hardik Bhikhabhai	Some Studies on Accelerated Cured Concrete.
	(2010)	
17.	Dilip R.Vaghasiya	Studies on Various Mixes of Accelerated Cured
	(2010)	Specimen With Different Curing Time Duration Using
		Plasticizer.
18.	Shah Keyur Pravinchandra	Some Study on High Volume Fly Ash Concrete(HVFAC).
	(2011)	
19.	Patel Nilesh Kumar Dahyabhai	Earthquake Analysis of Multi-storied Building With
	(2011)	Different Configuration.
20.	Digambar Jagannath Kadbhane	Analysis and Parametric Study of Reinforced Concrete
	(2011)	Voided Slab Bridge.
21.	Khunt Vaibhav G.	An Experimental Study on Temperature Effect of
	(2011)	Properties of Self Compacting Concrete.

22.	Teke Arjun Krishnat (2011)	Experimental Study on Flexural Strength of Beam Using Glass Fibre Reinforced Polymer.
23.	Shah Krutik R (2012)	Comparative Studies of Different Structural Parameters for Open Cylindrical Shell Under Wind Loading.
24.	Mayank T. Velwan (2012)	Parametric Studies of Chimney Under Dynamic Wind Loading.
25.	Kasar Akshay Lalit (2012)	Performance Analysis of Various Bracing Configuration in Steel Buildings.
26.	Mrs. Palak Shukla (2012)	Study of Extreme Loading on Bridges-Application of Blast and Seismic Loading.
27.	Sharad Kadbhane (2012)	Soil-Structure Interaction of Vertically Anchored Foundation Elements.

# List of PhD guided:

Sr.	Name of candidate	Thesis Title
No		
1	W N Deulkar	Seismic response of steel buildings using different
	(D05AM202)	bracing configurations.
2	I N Patel	Study of engineering and durability properties of fibre
	(DS07AM207)	reinforced concrete incorporating high volume fly ash.
3	M K Maroliya	Study on behaviour of reactive powder concrete
	(DS07AM208)	containing steel fibres and silica fume.
4	D L Shah	Evaluation of shear strength in self compacting fibre
	(DS07AM209)	reinforced concrete and conventional concrete deep
		beams.
5	K B Parikh (DS08AM211)	Experimental and analytical studies on flexure strength
		of reinforced concrete using GFRP
6	D N Parekh	Some studies on Recycled Aggregate Concrete
	(D09AM204)	

## **Representative Publications:**

#### a. International Journal

- 1. Modhera C D, Study on Setting time of Concretes using Penetration Resistance Method International Journal of Structures, Vol. No.02, 1998.
- 2. 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. (Accepted), 2010.
- 3. 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. (Accepted for August issue), 2010.
- 4. 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. (Under review), 2010.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. Parikh K B & Modhera C D, Flexural Strength prediction of RC beam strengthened by fibre reinforced polymer sheet, International Journal of Applied Engineering Research, Paper Accepted.
- 9. Parekh D N and Modhera C D; "Assessment of Recycled aggregate concrete", Journal of Engg. & Research Studies, 2(1) pp 1-9, Jan Mar 2011.

- 10. 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, pp 161-164.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. Parekh D N and Modhera C D, Recycled aggregate fly ash concrete", IUP Journal of Structural Engineering, ) pp 7 19,July 2012.
- 15. 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.
- 16. 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.
- 17. 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, Number 2 2011.
- 18. 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.

19. 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, July 2010.

## b. National journal

- 1. Modhera C D Shear Strength of Fiber Reinforced Concrete, National Journal, Indian Concrete Institute, Vol.01, No.04, 2001
- 2. Shah D L & Modhera C D, National journal: "Evaluation of fresh and hardened properties of SCC", Civil engineering and construction review (CECR), (Accepted and will be published in Aug-2010)
- 3. Shah D L & Modhera C D, Journal: "SFRC Deep Beam", ADIT-V.V.NAGAR, India. 2009
- 4. Parikh K B & Modhera C D, Flexural strength behaviour of RC beam with FRP, Civil Engg. & const. Review (national Journal), Paper Accepted
- 5. 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
- 6. 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
- 7. Parekh D N and Modhera C D; "Workability Study for recycled aggregates", IOSR Journal of Engineering, Vol 2(5, pp 1040 1044), May 2012
- 8. 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
- 9. 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

- 10. M K Maroliya, Anant Parghi, Dr C D Modhera, Dec 2008, Socio -Economic Aspect For Sustainability of ultra High Performance Reactive powder Concrete, National journal of Civil Engineering & Construction Review. Pp 86-92 CE&CR Dec.2008.
- 11. M K Maroliya, Anant Parghi, 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, July 2010.

#### c. International Conference

- Modhera C D , Experimental Study of Polymer Concrete Adopting Various Gradation of Coarse Aggregates, 22nd International Conference Our World in Concrete and Structures, Singapore, Aug. 1997
- 2. Modhera C D. Use of Industrial Waste (Fly -ash as a Building Materials), 22nd International Conference Our World in Concrete and Structures, Singapore, Aug.1997
- 3. Modhera C D, Fiber Reinforced as Special Concrete, International Conference on Fiber Reinforced Concrete (ICFRC), Guangzhou, China, Nov-1997
- 4. Modhera C D, An Experiment al Study on Shear Strength Test Methods of SFRC Bridge, Proceedings of the International National Conference on Advances in Concrete and Construction, (ICACC), Hyderabad, Dec-2004
- 5. Modhera C D, Effect of Ductility and Deformation Behavior of Self Compaction Concrete Structures, The 33rd Conference on Our World in Concrete & Structures, Singapore
- Modhera C D, Micro Mechanical Crack and Deformations Study of SFRC Deep Beams, The 33rd Conference on Our World in Concrete & Structures, Singapore, Aug-2008
- Modhera C D, Physio Mechanical Behavior of Reactive Powder Concrete Under Aggressive Environment of Contaminated Soil, The 33rd Conference on Our World in Concrete Structures, Singapore, Aug-2008
- 8. Modhera C D, A State of The Art: Repair of Reinforced Concrete Members The 4th International Conference & Exhibition on Innovative World of Concrete 2008, New Delhi, Dec-2008

- 9. Modhera C D, Effect of Ductility and Deformation Behavior on Structural Members The 4th International Conference & Exhibition on Innovative World of Concrete 2008, New Delhi, Dec-2008
- 10. Modhera C D Mechanical Properties of Normal to High Strength Steel Fiber-Reinforced Concrete, The 4th International Conference & Exhibition on Innovative World of Concrete 2008, New Delhi, Dec-2008
- 11. Deulkar W N, Modhera C D and Patil H S, Time History Analysis of Braced Frame Structures, International conference on Innovative World of Structural Engineering, (ICIWSE-2010), Govt. College of Engineering Aurangabad, India, 17-19 September, 2010. (Accepted) ,2010.
- 12. Deulkar W N, Dr Modhera C D and Patil H S, Controlling the Seismic Response of Building using Bracings, Pravara International Conference on Emerging Trends in Engineering, (PICETE-2008), Pravara Rural College of Engineering, Loni, Maharashtra, India, 20-22 December 2008 pp. 55, Paper No. CV-40. (Published), 2008.
- 13. Shah D L & Modhera C D, International Conference at Singapore-"Shear strength of deep Beam", Our world of concrete, Aug-2008.
- 14. K B Parikh & Modhera C D, Application of GFRP to structural Components − A state of Art Review, International Conference on Advances in conc. Str. and geo. Engg. At BITS, Pilani, pp 1 − 10,25-27 Oct-2009.
- 15. K B Parikh & Modhera C D, Analytical work on beam by using GFRP, International Conference on Advances in materials & Techniques in civil Engg. At VLBJECT, Coimbatore, pp 67-79, 07-09 Jan- 2010,
- 16. K B Parikh & Modhera C D, Analytical model of RCC beam using Glass fibre reinforced polymer sheet, International Journal of Advanced Engg. Tech., Apr-June, 2010,, pp 46-58, Apr-June, 2010
- 17. Parekh D N and Modhera C D;" Experimental evolution of recycled aggregates", Proceedings' of 2<sup>nd</sup> International conference on current trends in technology; Nirma University; Ahmedabad, NUICONE; 8 10, pp 1 5, Dec'11
- 18. M K Maroliya, Anant Parghi, Dr C D Modhera, Aug 2008, Physio-Mechanical Behavior of Reactive Powder Concrete under Aggressive environment of contaminated Soil. International Conference on "OUR WORLD OF CONCRETE" (CI PREMIER PTE LTD), Singapore. August 2008

- 19. M K Maroliya, Anant Parghi & Dr C D Modhera, Dec 2008, Experimental investigation on Reactive powder concrete using steel fibers and silica, International Conference on Concrete for new age Structure 11 -14, new Delhi. December 2008.
- 20. M K Maroliya, Anant Parghi & Dr C D Modhera, Influence of steel fibers variation on Impact strength of Reactive powder Concrete. International Conference on Advances in Concrete, Structural and Geotechnical Engineering (ACSGE 2009) 25 27th Oct 2009, BITS, Pilani, Oct 2009.
- 21. M K Maroliya & Dr C D Modhera, An Investigation on RPC Using Different Mineral Admixtures and Curing regime. International Conference on Advances in materials, mechanics and Management (IMMM2010) 14 16th Jan 2010, College of Engineering, Trivendrum, kerala, Jan 2010.

#### d. National Conference

- 1. Modhera C D Techniques of Controlling the Seismic Response of Building Structures, Proceeding of the National Conference for Pune University Teachers, Pune, Feb-2007
- 2. Modhera C D Deformability and Ductility in Over Reinforced Self compacting Concrete Structures, Proceeding of the National Conference MAST. NIT Warangal, Dec. 2007
- 3. Modhera C D Finite Element Analysis of RC Columns Confined with FRP Sheets, Proceeding of the National Conference held at NITHamirpur (IDC), NIT Hamirpur, May 2008
- 4. Deulkar W N, Dr Modhera C D and Patil H S, Response of Structure using Conventional Brace and Buckling Restrained Brace, Regional Conference for Pune University and College Teachers (Innovation-2009), organized by Amrutvahini College of Engineering, Sangamner, Dist. Pune, Maharashtra, India,11-12 December, pp. 38,2009.
- 5. Deulkar W N, Dr Modhera C D and Patil H S, Effect of Conventional Brace and Buckling Restrained Braces in Response Reduction of Building Structure, Regional Conference for Pune University and College Teachers (Innovation-

- 2009), organized by Amrutvahini College of Engineering, Sangamner, Dist. Pune, Maharashtra, India,11-12 December, pp. 39. 2009.
- 6. Deulkar W N, Dr Modhera C D and Patil H S, Techniques of Controlling the Seismic Response of Buildings, Regional Conference for Pune University College Teachers (Innovation-2008), organized by S R E S's college of Engineering Kopergaon, Dist. Ahamednagar, Maharashtra, India, 24-25 November, paper No. 149,2008.
- 7. Deulkar W N, Dr Modhera C D and Patil H S, Techniques of Controlling the Seismic Response of Building, Regional Conference for Pune University College Teachers (Innovation-2008), organized by S R E S's college of Engineering Kopergaon, Dist. Ahamednagar, Maharashtra, India, 24-25 November, pp. 26, Paper No. Civil-148, 2008.
- 8. Deulkar W N, Dr Modhera C D and Patil H S, Techniques of Controlling the Seismic Response of Building, First Conference for Pune University Teachers (Innovation-2007), organized by Board of College and University Development (BCUD), Maharashtra, India 19-20 November, pp. 102, Paper No. 224.,2007.
- Deulkar W N, Dr Modhera C D and Patil H S, Study and Review of Literature of Base Isolation Systems, Proceeding of National Conference on Recent Developments in Geotechnical Engineering and Rock Mechanics (NCGRM-2007), D. Y. Patil College of Engineering, Pune, India, 25-26 August, pp. 287,2007.
- 10. Deulkar W N, Dr Modhera C D, Shintre D P and Gupta I D, Prediction of Earthquake Magnitude and Ground Acceleration for the Design of Important Structure, National Conference on Recent Advances in Structural Engineering,(NCGRASE-2006), Jawaharlal Nehru Technological University, Andrapradesh, India, 11-12 February, pp- 137-143, Paper No ERD/3., 2006.
- 11. Shah D L & Modhera C D, National Conference: "Crack and deformation study on steel fiber reinforced concrete deep beam", NIT Hamirpur-IDCE-2008.
- 12. Shah D L & Modhera C D,, National Conference: "State of- the- art review on SELF-COMPACTING CONCRETE", ACSGE, BITS Pillani, INDIA, 2009.

- 13. Parikh K B & Modhera C D, Experimental work on beam by using GFRP sheet, a national conference on current trends on research & development in civil & Env. Engg. AN Indian PerspectiveAt SVIT, Vasad, , pp 1-8,21-22 Jan- 2010.
- 14. Patel I N & Modhera C D Study Effect of Polyester Fibres on Engineering and Durability Properties of High Volume Fly Ash Concrete.
- 15. M K Maroliya, Anant Parghi &Dr C D Modhera, May 2008, Influence of curing condition on Compressive and Flexural strength of Reactive powder Concrete. Proceedings of national Conference on Infrastructure Development in civil Engineering (IDCE 2008) 16th May 19th NIT, Hamirpur, May 2008.