# **CURRICULUM VITAE (BIO - DATA)**

(Dr.) Paratibha Aggarwal

# **Dr.Paratibha Aggarwal**

Professor Department of Civil Engineering National Institute of Technology Kurukshetra-136119 (M) +91-9416345245



# **Educational qualifications**

Exam Passed	Univ./Board	Year of passing	% Age obtained
Ph.D.(Stuructures)	N.I.T.Kurukshetra	2009	
M.Tech(Structures)	R.E.C.Kurukshetra	1999	74.36
B.Tech (Civil)	R.E.C.Kurukshetra	1991	72.12
10+2	C.B.S.E.	1987	78.60
10	C.B.S.E.	1985	69.00

<u>Additional Qualification</u>: O-Level Certificate in computers (Buisness Programmer certificate) from DOEACC, (Deptt., of Electronics Accredited Computer Courses)

Ph.D. Topic: Study of Mechanical Properties and Durability Aspects of Self-Compacting Concrete

# M.Tech Topic: Application of Turbo C to Design of Concrete Tanks

#### **Current areas of Research**

- Self-Compacting Concrete using waste materials
- ➤ High Performance Concrete
- Fuzzy Logic for Mix Design and Properties of Concrete
- Micro Structure Analysis, XRD and XRF Analysis of Concrete.
- Use of nano technology in concrete.
- Application of various predictive techniques i.e. use of Artificial Neural Network, SVM's, M5 Model tree to model and predict the various properties of concrete

# **Date of grant of Professor**

23-08-2013

No. of completed years in service on regular basis: 31 years

#### Reviewer

- Journal of Waste Management and Research (International Solid Waste Association)
- Journal of Construction and Building Material (An international journal dedicated to the investigation and innovative use of materials in construction and repair, Elsevier Publications
- Journal of Advance Research, Elsevier Publications
- Journal of Materials and Research, Elsevier Publications
- Journal of Resources Conservation and Recycling, Elsevier Publication
- Ecological Engineering, Elsevier Publication
- Materials and Structures, Elsevier Publication

**Expert Lectures delivered** 

Title	Venue	Date
Sustainability in Construction	One Week Workshop on Creative Thinking:	23.02.24
Industry; A Review	Techniques tools and training, NIT Kurukshetra	27.02.24
Towards Sustainable Building	One Week Workshop on Creative Exploration and	13.09.23-
Solutions: An Insight	Empowerment, NIT Kurukshetra	19.09.23

STC Organized Chair Person

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Title	Venue	Date
One Week Workshop on Creative Thinking: Techniques	NIT	23.02.24
tools and training,	Kurukshetra	27.02.24
One Week Workshop on Virasat-2024	NIT	15.01.24-
One week workshop on virasat-2024	Kurukshetra	21.01.24
One Week Workshop on Creative Exploration and	NIT Kurukshetra	13.09.23 to
Empowerment (CEE 2023)	NII Kuluksiletia	19.09.23
5-day Workshop on Professional Skill Proficiency (PSP	NIT Kurukshetra	04.05.23 to
2023)	NII Kuluksiletia	08.05.23
5-day Workshop on Professional Skill Development	NIT Kurukshetra	08.02.23 to
(PSD 2023)	NII Kuluksiletia	12.02.23
Stress Management Through Music and Mediation	Yogdhara NIT,Kurukshetra	01.02.23
EBSB (Ek Bharat Shreshtha Bharat Scheme	NIT Kurukshetra	10.09.22 to
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**Conference Organized Chair Person** 

Title	Venue	Date
National Conference on Metacognition, Creativity &	NIT	16-17 March,
Divergent Thinking (NC-MCDT-2024)	Kurukshetra	2024

# ${\bf Session\ Chair\ in\ \underline{Conference\ \underline{Chair\ Person}}}$

Title	Venue	Date
National Conference on Metacognition, Creativity & Divergent Thinking (NC-MCDT-2024)	NIT Kurukshetra Session 8 11.30 am to 01.00 pm	17 March, 2024

Topic of Ph.D completed/ongoing

_	Topic of Ph.D completed/ongoing				
Sr. No	Year	Торіс	Students	Co- supervisor	Completed/ ongoing
1.	2013	Study of Properties of Cementitious Compositions Incorporating Nano-Silica.	Rahul Partap Singh		Completed
2.	2015	Experimental Investigations on Cement Mortar and Concrete Incorporating Admixture and Stone Slurry Powder	Kiran Devi	Babita Saini	Completed
3.	2018	Production and Optimization of eco efficient SCC with Plastic Wate	Ankit Sharma		Ongoing
4.	2021	Optimization of Marble Dust in concrete using DOE and ML Techniques	Ravi Kant Sharma	Mahesh Pal	Ongoing
5.	2022	A study on Light weight aerated concrete (LAC) incorporating Industrial By-products	Pankaj Kumar	Yogesh Aggarwal	On going

M.Tech. Dissertations Supervised = 47

_	M.Tech. Dissertations Supervised = 47					
Sr.	LODIC	Students	Co- superviso	Year		
1.	Design of Reinforced Concrete Columns under Bi-axial Bending using Turbo-C	Kuldeep Kumar (199712)		2000-0		
	Design of Flat Slab using Turbo-C	Rajeev Singla (199718)		2000-0		
3.	Design of Pile Foundation using Turbo-C	Indu Rani (199711)		2000-0		
4.	Design of Connections in Steel Structures using Turbo-C	Deepika Jangra (199713)		2000-0		
5.	Analysis of Rectangular Reinforced Concrete Slabs with Opening	Amol Y Banpatra (12K718)		2001-02		
6.	Some Aspects of Plastic Analysis	J. D. Shripati (101711)		2002-0		
7.	Application of C to the design of Plate Girder Bridges	Vandana Mittal(2K2728)		2004-0		
8.	Study of properties of Concrete replacing fine aggregate with bottom ash	Ajay Lamba (705/03)		2004-0		
9.	Experimental Studies on Properties of Self-Compacting Concrete	S. B. Fakroddin(705/04)		2005- 06		
10.	Modeling of Concrete Mix Design	Rajiv Bhatia (707/03)		2008- 09		
11.	Bond Strength of Recycled Concrete	Sarvesh Tripathi (207125)		2008- 09		
	Dynamic Modeling of Shear Walls in Asymmetric Building	Sudipta K. Giri (207126)		2008- 09		
13	ANN Modeling of RCC Framed Multi Storey Buildings with Opening in Shear Wall	Suman Kumar (210035)		2011-12		
14	Investigation on recron fibre based Cement Concrete for Pavements.	Rahul P.Singh (210066)		2011-12		
15	Application of AI to design of beam for shear with and without web reinforcement	Pooja (210031)		2011-12		
16	Investigations on the properties of mortar with Nanosilica of varying particle Size	Sakshi Gupta (211081)		2012-13		
17	Mechanical & Durability properties of SCC using Foundry	Anuj (211021)		2012-13		
18	Prediction of Strength and Abrasion resistance of concrete using Fuzzy Logic Approach	Meenakshi Singh(211071)		2012-13		
19	Soft Computing of Mechanical Property of Concrete Containing Supplementary Materials using MATLAB	Animesh (3120608)		2013-14		
20	Strength Optimization of Blended Cement using Fly ash and Alccofine	D. Leelwan (3120011)		2013-14		
21	Air Entrained Concrete for Pavements	Anil Kumar (3120511)		2013-14		
	Use of Demolished Concrete for Highway Construction	Sunil Kumar3120715		2013-14		
23	Study of properties of SCC using blended cement	Ranbir Singh (3130616)		2014-15		
24	Study of Chloride Resistance of Concrete Containing Blended Cement.	M.Ravi Kumar(3130505)		2014-15		
25	Comparative Analysis of multi storied building for ideal location of shear wall	G. Ganotra (3130708)		2014-15		
26	Use of Jarosite in Rigid Pavements	Vipul Arora (3130703)		2014-15		
27	Experimental Investigations on Properties of SCC incorporating Red Mud	Anand Mishra (3140803)		2015-16		
28	Modeling of Punching Strength of Concrete Slabs	Sachin Kumar (31602301)		2017-18		

29	Dynamic Analysis of Multistoried U-Shaped RCC Frame Building	Shubham Kumar Saini (31702312)		2018-19
30	Optimization of SCC using Response Surface Methodology (RSM)	Yashraj Singh (31702304)		
31	Wind Buffeting Analysis of An Extradosed Cable Stayed Bridge with A Spine Box Girder Deck	Kumar Kislay (31802403)		2019-20
32	Microzonation Analysis of A Pre-Engineered Warehouse Near Water Body/ Coastal area	Wajeeha Khan		2019-20
33	Bacterial concrete properties modelling using artificial intelligence techniques	Animesh Jaiswal (31902320)		
34	Modelling of strength and durability properties of porous concrete	Ankit Verma (31902312)		2020-21
35	Strength parameters modelling of waste foundry sand concrete	Abhishek (31902313)		
36	wining rechnique	Gulshan Kumar Gurjar 32012310		
37	Analysis and Modelling of Shear Walls with openings using Al	Priya Agrawal 32012318		
38	Analysis and Modelling of RCC Framed Structure using Bracing Systems	Shubham Kumar Goyal (32012322)		2021-22
38	Experimental Investigation on Rigid Pavements using Recycled Aggregate and Bagasse Ash	Gaurav Chandna 32012414 (Trans)		
40	Improvement of Engineering Properties of Alluvial Soil using Chir pins	Irfan Ahmed Sadeque 32012207 (Soil)		
41	Prediction of Properties of SCC using Data Mining Techniques	Muhammad Farooq 32112323 Structure		
42	Optimization of Self Compacting Concrete Strength Using DOE Approach	PANKAJ SINGH (Roll No 32112307)		2022-23
43	Finite Element Analysis of Contributing Parameters for the stability of Gangtok Slope	Paridhi Pandey (32112204)		
44	Modelling of Multistorey Buildings with and without RCC Shear Walls using software	Alok Gusain 32212314	Yogesh Aggarwal	
45	Study of Mechanical properties of marble dust concrete using DOE technique	Vineet Kumar 32212320		2023-
46	Comparative study of RCC Buildings on sloping ground with and without infill walls using software	Isha 32212316		24
47	Utilisation of waste polythene in Self Compacting Concrete	Sant Kumar 32212313		

#### **List of Publications in Journals**

International Journals

- 1. A. Gupta, Y. Aggarwal, P. Aggarwal, Deep neural network and ANN ensemble for slope stability prediction, International Scientific Journal published monthly by the World Academy of Materials and Manufacturing Engineering, Volume 116, Issue 1, July 2022, Pages 14-27.
- 2. Aman Garg, Paratibha Aggarwal, Yogesh Aggarwal, M.O.Belarbi, H.D.Chalak, Abdelouahed Tounsi & Reeta Gulia, Machine Learning Models for predicting the Compressive Strength of Concrete Containing Nano Silica, Computers and Concrete, Vol. 30, No. 1 July (2022) 33-42 https://doi.org/10.12989/cac.2022.30.1.033
- 3. Yogesh Aggarwal, Paratibha Aggarwal, Parveen Sihag & Ankit Kumar, Evaluation and Estimation of Compressive Strength of Concrete using hybrid Modeling Technoques, Iranian Journal of Science and Technology, Transactions of Civil Engineering, Springer, https://doi.org/10.1007/s40996-021-00812-7
- 4. Parveen Sihag, Paratibha Aggarwal, Yogesh Aggarwal & Vinod Kumar, Discussion of "Evaluating the Performance of Self Organizing Maps to Estimate Well Watered Canopy Temperature for Calculating Crop Water Stress Index in Indian Mustard (Brassica Junceao: by Navsal Kumar, Vijay Shankar, Rabee Rustum & Adebayo J. Adeloye, Journal of Irrigation & Drainage Engineering, ASCE https://doi.org/10.1061/(ASCE)IR.1943-4774.0001526
- 5. Kiran Devi, Babita Saini,Paratibha Aggarwal, Impact of high temperature on mortar mixes containing additives, Journal of Engineering Research Vol 10 No 1B (2022). DOI: https://doi.org/10.36909/jer.10477
- 6. A Parashar, P Aggarwal, B Saini, Y Aggarwal, S Bishnoi, Study on performance enhancement of self-compacting concrete incorporating waste foundry sand, Construction and Building Materials, Elsevier Publications, 10.08.20, 251, 118875
- 7. Kiran Devi, Babita Saini and Paratibha Aggarwal, Long term performance of concrete using additives, International journal of Microstructure and Materials Properties, Vol-15, No.1, 2020pp-58-84.
- 8. Kiran Devi, Paratibha Aggarwal, Babita Saini, Admixtures Used in Self Compacting Concrete: A Review, Iranian Journal of Science and Technology (Springer), Transactions of Civil Engineering https://doi.org/10.1007/s40996-019-00244-4, Received: 11 March 2018 / Accepted: 28 January 2019Published 09, February 2019 © Shiraz University 2019.
- 9. Kiran Devi, Babita Saini and Paratibha Aggarwal, Utilization of Kota stone slurry powder and accelerators in concrete, Computers and Concrete, Vol. 23, No. 3 (2019) 189-201, DOI: https://doi.org/10.12989/cac.2019.23.3.189
- 10. Y Aggarwal, P. Aggarwal, P. Sihag, M. Pal, A. Kumar Estimation of Punching Shear Capacity of Concrete Slabs Using Data Mining Techniques, International Journal of Engineering IJE TRANSACTIONS A: Basics Vol. 32, No. 7, (July 2019) 908-914
- 11. Kiran Devi, Babita Saini and **Paratibha Aggarwal**, Effect of accelerators with waste material on the properties of cement paste and mortar, **Computers and Concrete**, DOI: <a href="https://doi.org/10.12989/cac.2018.22.2.153">https://doi.org/10.12989/cac.2018.22.2.153</a>, Vol. 22, No. 2 (2018) 153-159
- 12. S Kumar, SN Sachdeva, **Paratibha Aggarwal**, Effect of Sulphate Solution on Recycled Aggregate Concrete, ijert.org International Journal of Engineering Research and Technology (IJERT), Vol 3(7), July-2014, pp. 294-298.
- 13. V Arora, SN Sachdeva, Paratibha Aggarwal, Effect of use of Jarosite on workability and early age strength of concrete, International Journal of Computer & Mathematical Sciences (IJCMS) Vol 4, Special Issue, March 2015, pp 136-144 ISSN 2347-8527, academicscience.co.in
- 14. R.P.Singh, **Paratibha Aggarwal**, Effect of nanosilica on the properties of cement mortar, Cement International, 6/2015, Volume 13, pp 64-70.
- 15. **Paratibha Aggarwal,** Rahul Pratap Singh and Yogesh Aggarwal, Use of nano-silica in cement based materials—A review, Cogent Engineering OA, Taylor and Francis, (2015), 2: 1078018 <a href="http://dx.doi.org/10.1080/23311916.2015.1078018">http://dx.doi.org/10.1080/23311916.2015.1078018</a>, pp 1-11.

- 16. **Paratibha Aggarwal,** Rahul Pratap Singh and Yogesh Aggarwal, Effect of Nano-silica on Properties of Concrete, Concrete Plant International (CPI) April, 2015, 2, pp. 46-49.
- 17. **Paratibha Aggarwal,** Yogesh Aggarwal, Rafat Siddique, Sakshi Gupta, Harshit Garg, Fuzzy Logic Modelling of Compressive Strength of High Strength Concrete (HSC) with Supplementary Cementitious Material, Journal of Sustainable Cement-Based Materials, Taylor & Francis, **ISSN:** 2165-0373 (Print), 2165-0381 (Online) Vol.2 No. 2, June 2013, 128-143.
- **18.** Rafat Siddique, **Paratibha Aggarwal,** Yogesh Aggarwal, Mechanical and durability properties of self-compacting concrete containing fly ash and bottom ash, Journal of Sustainable Cement-Based Materials, Taylor & Francis, Vol.1 No. 3, September 2012, 67-82. **ISSN: 2165-0373** (**Print**), **2165-0381** (**Online**)
- 19. Rafat Siddique, **Paratibha Aggarwal,** Yogesh Aggarwal, Influence of water/powder ratio on strength properties of self-compacting concrete containing coal fly ash and bottom ash, Construction and Building Materials, *Elsevier Publications*, 29, 2012, Pages 73-81, (Impact Factor 1.834) (5-year Impact Factor 2.134) ISSN: 0950-0618 doi: 10.1016/j.conbuildmat.2011.10.035. SCI JOURNAL\*<sup>a</sup>
- 20. Rafat Siddique, Yogesh Aggarwal, Paratibha Aggarwal, El-Hadj Kadri, Rachid Bennacer, Strength, durability, and micro-structural properties of concrete made with used-foundry sand (UFS), Construction and Building Materials, Elsevier Publications, 25, 2011, Pages 1916-1925, (Impact Factor 1.834) (5-year Impact Factor 2.134) ISSN: 0950-0618 doi: 10.1016/j.conbuildmat.2010.11.065. SCI JOURNAL\*a
- 21. Rafat Siddique, **Paratibha Aggarwal**, Yogesh Aggarwal, Prediction of Compressive Strength of Self-Compacting Concrete containing bottom ash using artificial neural network, *Advances in Engineering Software*, *Elsevier Publications*, Volume 42, Issue 10, October 2011, Pages 780-786, (Impact Factor 1.092) (5-year Impact Factor 1.226) ISSN: 0965-9978 doi: 10.1016/j.advengsoft.2011.05.016. SCI JOURNAL\*b
- 22. **Paratibha Aggarwal** & Y Aggarwal, Prediction of Compressive Strength of Self-Compacting Concrete with fuzzy Logic, World Academy of Science, Engineering and Technology, International Journal of Mathematical and Computational Sciences Vol-5, No.5, 2011, pp 774-781
- 23. Yogesh Aggarwal, Rafat Siddique, **Paratibha Aggarwal** and S.M.Gupta A frame work for use of industrial by-products in concrete, CPI-Concrete Plant International, Vol., 6, Dec., 2009 pp 20-22.
- 24. Rafat Siddique, **Paratibha Aggarwal**, Yogesh Aggarwal and S.M.Gupta, Modeling Properties of Self-Compacting Concrete: Support Vector Machines Approach, Computers and Concrete, Techno Press, Vol-5, No.-5, 2008, pp 461-473 **ISSN: 15988198, 1598818X, H Index: 7. SCI JOURNAL\***c
- 25. **Paratibha Aggarwal,** Rafat Siddique, Yogesh Aggarwal and S.M.Gupta, Self Compacting Concrete- Procedure for Mix Design, Leonardo Electronic Journal of Practices and Technologies, Issue 12 (http://lejpt.academicdirect.org/A<sub>12</sub>/) Jan-June, 2008, pp.15-24. **ISSN: 15831078, H Index: 3**
- 26. Rafat Siddique, **Paratibha Aggarwal**, Yogesh Aggarwal and S.M.Gupta, Modelling of the Properties of Self-Compacting Concrete, *CPI-Concrete Plant International*, Vol 6, 2007, pp. 53-59.
- **27. Paratibha Aggarwal,** Yogesh Aggarwal and S.M.Gupta, Effect of Bottom Ash as Replacement of Fine aggregates in Concrete, Asian Journal of Civil Engineering, Iran, Vol-8 No.-1, 2007 pp.39-52. **ISSN:** 1563-0854
- **28.** S.M. Gupta, **Paratibha Aggarwal** and Yogesh Aggarwal, Shrinkage of High Strength Concrete, Asian Journal of Civil Engineering, Iran, Vol-7, No.-2 April, 2006 pp.183-194. **ISSN:** 1563-0854

#### **National Journals**

- 1. Devi, K., Kumar, A., Saini, B., Aggarwal, P., Environmental Assessment of Admixtures and Stone Powder in Cement Concrete, Lecture Notes in Civil Engineering, 2024, 381, pp. 885–892
- 2. Kumar, A., Aggrawal, P., A Novel Application of Waste Polythene in Concrete, Iranian Journal of Science and Technology Transactions of Civil Engineering, 2023, 47(4), pp. 2007–2016
- 3. Devi, K., Kumar, A., Saini, B., Aggarwal, P., Environmental Assessment of Admixtures and Stone Powder in Cement Concrete, Lecture Notes in Civil Engineering Volume 381, Pages 885 8922024 4th International Conference on Structural Engineering and Construction Management, SECON 2023 Angamaly 7 June 2023through 9 June 2023 Code 305809.
- 4. Devi, K., Saini, B., Aggarwal, P., Performance Evaluation of Concrete Using Different Additives, Lecture Notes in Civil Engineering Volume 284, Pages 81 892023 3rd International Conference on Structural Engineering and Construction Management, SECON 2022Angamaly1 June 2022through 3 June 2022Code 285709
- 5. Kumar A, Aggarwal Paratibha & Panchal S, A Novel Application of Flex Waste for Improving the Mechanical Properties of Concrete, Lecture Notes in Civil Engineering Volume 124 LNCE, Pages 485 4912021 National Conference on Advances in Sustainable Construction Materials, ASCM 2020, Virtual, Online, 3 August 2020 4 August 2020, 257919
- 6. Devi K., Saini B., Aggarwal Paratibha, Prediction of Setting Time and Strength of Mortar Using Soft Computing Technique, Lecture Notes in Civil ngineering Volume 78, Pages 95 1022021 International Conference on Smart Materials and Techniques for Sustainable Development, SMTS 2019, Coimbatore, 4 April 2019 5 April 2019, 250149
- 7. Kiran Devi, Babita Saini and **Paratibha Aggarwal**, Strength behaviour of M25 and M45 concrete incorporating accelerators and stone waste, New Building Material and Construction World, April, 2019. ISSN: 0973-0591
- 8. Yogesh Aggarwal, **Paratibha Aggarwal**, Vaibhav Sharma, Comparative Study of Concrete Mix Design using IS and ACI methods with and without Super-plasticizer, New Building Materials and Construction World, Vol-24, Issue No.1., July 2018, pp.186-198. ISSN: 0973-0591
- 9. **Pratibha Aggarwal**, Red muds partial replacement for cement in Self-Compacting Concrete: An experimental study on strength properties ISST Journal of Applied Physics, Vol-7, No.-2, 2016, pp 5-8
- 10. Ranbir S. Khatana, Paratibha Aggarwal and **Yogesh Aggarwal** Utilization of super pozzolanic material in the production of self-compacting concrete, ICJ The Indian Concrete Journal. Feb. 2019, Email: <a href="ici@acclimited.com">ici@acclimited.com</a> info@icjonline.com Web <a href="www.icjonline.com">www.icjonline.com</a>
- 11. Rahul Pratap Singh and **Paratibha Aggarwal, Prediction** of Compressive Strength of Concrete Containing Nano-Silica using Fuzzy Logic, New Building Material and Construction World, February, 2015. Volume 20, Issue 8, pp 168-174. ISSN: 0973-0591
- 12. Sunil Kumar, S.N.Sachdeva and Paratibha Aggarwal, Effect of Sulphate solution on Recycled Aggregate Concrete. International Journal of Engineering Research and Technology (IJERT), ISSN:2278-0181, Vol 3(7), July-2014, pp. 294-298.
- **13. Paratibha Aggarwal,** Yogesh Aggarwal, Kapil Grover and Sabzar A. Bhat, Prediction of slump and Compressive Strength of Concrete Containing Foundry Sand. Research in Civil and Environmental Engineering, Vol 1, 2013 pp149-168. **ISSN: 2345-3109.**
- 14. **Paratibha Aggarwal**, Manufacturing SCC with bottom ash as a replacement of fine aggregates, New Building Material and Construction World, July, 2013. ISSN: 0973-0591
- 15. **Paratibha Aggarwal,** Babita Saini, Sarvesh Tripathi, Study of Bond Strength of Concrete using Recycled Aggregates, New Building Materials and Construction World, Vol-18, No. 4, October 2012, pp. 208-217. ISSN: 0973-0591
- 16. S.M.Gupta, and **Paratibha Aggarwal,** An experimental study of fly ash cement sand mortar and cement concrete, *Journal of Pradushan Nirmulan*, *India*, Vol-3 No.-4 April, 2006 pp.18-21.

17. S.M.Gupta, **Paratibha Aggarwal** and Yogesh Aggarwal, Bottom Ash as Eco-friendly material for concrete, *Journal of Pradushan Nirmulan*, *India*, Vol-3 No.-4 April, 2006 pp.13-17.

# <u>List of Publications in Conferences</u> International Conferences

- 1. Devi, K., Saini, B., Aggarwal, P., Singh, H., Experimental Investigation of Cement Mortar Incorporating Stone Powder and Admixtures, International Conference on Civil, Structural and Transportation Engineering, 2024
- 2. Isha Saini, Yogesh Aggarwal, Paratibha Aggarwal, Comparative study of RCC buildings on sloping ground with and without infill walls, National conference on Planning and architecture for hill region (PAHR) 2024 organized by NIT Hamirpur and Indian Institute of Architects, 15-16 May 2024
- 3. Isha Saini, Yogesh Aggarwal, Paratibha Aggarwal, Optimizing Sustainability In Building Design through Infill Walls
- 4. International conference on Sustainable Research in Energy and Environment (SREE)-2024 NIT Jalandhar, 5-6 April 2024
- 5. Sant Kumar, Yogesh Aggarwal, Paratibha Aggarwal, Utilization of Waste polythene in Self-compacting concrete, International Conference on Sustainable Materials, Environment and Technologies Under Climate Change Scenario (SMET-2024) (Hybrid Mode), National Institute of Technology Kurukshetra, 25th 27th July, 2024
- 6. Vineet Kumar, Yogesh Aggarwal, Paratibha Aggarwal, Exploring Marble dust as a Sustainable Alternative: A comprehensive study of properties, Performance and Environmental impact, international conference on Sustainable Research in Energy and Environment (SREE)-2024 NIT Jalandhar, 5-6 April 2024
- 7. Vineet Kumar, Yogesh Aggarwal, Paratibha Aggarwal, Optimisation of Marble dust concrete using Design of experiment technique, International Conference on Sustainable Materials, Environment and Technologies Under Climate Change Scenario (SMET-2024) (Hybrid Mode), National Institute of Technology Kurukshetra, 25th 27th July, 2024
- 8. Alok Gusain, Paratibha Aggarwal, Yogesh Aggarwal, Analysis of Multistorey Building with and without shear wall with Sustainable design, National conference on Planning and architecture for hill region (PAHR) 2024 organized by NIT Hamirpur and Indian Institute of Architects, 15-16 May 2024
- 9. Alok Gusain, Paratibha Aggarwal, Yogesh Aggarwal, Performance Evaluation of Multistorey Buildings with and without Shear Walls Under Earthquake Loading, International Conference on Sustainable Materials, Environment and Technologies Under Climate Change Scenario (SMET-2024) (Hybrid Mode), National Institute of Technology Kurukshetra, 25th 27th July, 2024
- 10. Pandey, P., Dey, N. & Aggarwal, P. (2023). Rainfall triggered catastrophic landslide in the eastern part of Gangtok, Sikkim. International Conference on Recent Trends in Engineering and Science (RTES-2023), National Institute of Technology Surat, India. [Presented on 2 nd -3 rd May,2023.
- 11. Pankaj Singh & **Paratibha Aggarwal**, "Review of Factorial Design method and Response surface Method for Self-compacting concrete mix design", 3 rd International conference on innovative research in sciences, Technology, Agriculture, Environment, business management and humanities (STAEBM-2023), NIT Srinagar, Jammu and Kashmir, India. 13-14 May 2023
- 12. Muhammad Farooq & **Paratibha Aggarwal**, "Prediction of properties of SCC incorporating waste materials using machine learning techniques: A Review", 3 rd International conference on innovative research in sciences, Technology, Agriculture, Environment, business

- management and humanities (STAEBM-2023), NIT Srinagar, Jammu and Kashmir, India. 13-14 May 2023
- 13. **Shubham Kumar Goyal & Dr.Paratibha Aggarwal** (2022) Modelling of RCC Farmed Structure with Bracing using Random Forest 7 M5P Technique. International Conference on Innovations in Applied Science & Engineering (ICIASE 2022). May, 18-19, 2022, Dr.B.R.Ambedkar NIT, Jalandhar.
- 14. **Priya Aggarwal & Dr. Paratibha Aggarwal** (2022) Modelling of RC Frames with Shear walls & Opening using Ann & M5P Techniques. International Conference on Innovations in Applied Science & Engineering (ICIASE 2022). May, 18-19, 2022, Dr.B.R.Ambedkar NIT, Jalandhar.
- 15. **Gulshan Kumar Gurgar & Dr. Paratibha Aggarwal** (2022) Compressive strength Prediction of SCC using ANN. International Conference on Innovations in Applied Science & Engineering (ICIASE 2022). May, 18-19, 2022, Dr.B.R.Ambedkar NIT, Jalandhar.
- 16. Abhishek and Paratibha Aggarwal, "A Review of Strength and Durability Parameters of Concrete by Partial Replacement of Fine Aggregate with Waste Foundry Sand" International Conference on Recent Advances in Civil Engineering (ICRACE2021), Organized by Department of Civil Engineering, National Institute of Technology, Silchar.17-19 Sept, 2021, Paper id 141.
- 17. Kumar Kislay, Paratibha Aggarwal, Wind Buffeting analysis of an extra dosed cable stayed Bridge with spine box girder deck: A review of studies, International Conference on Recent Advances in Engineering & Science (ICRAES-2020), University Polytechnic, Aligarh Muslim University, Aligarh, Affilatd by Vigyan Prasar, DST Govt. of India from 11-12 January 2020, pp 26 ISBN 978-81-944663-1-4.
- 18. Wajeeha Khan, Paratibha Aggarwal and Zoha Jafar, Criteria for the Design of a steel Building in Coastal Areas: Microzonatin Studies, International Conference on Recent Advances in Engineering & Science (ICRAES-2020), University Polytechnic, Aligarh Muslim University, Aligarh, Affilatd by Vigyan Prasar, DST Govt. of India from 11-12 January 2020, pp 65 ISBN 978-81-944663-1-4.
- 19. Kiran Devi, Babita Saini, and **Paratibha Aggarwal**, Combined Use of Accelerators and Stone Slurry Powder in Cement Mortar, Springer Nature Switzerland AG 2019, H. Singh et al. (Eds.): ICSWMD 2018, LNCE 21, pp. 202–209, 2019., <a href="https://doi.org/10.1007/978-3-030-02707-0">https://doi.org/10.1007/978-3-030-02707-0</a> 25
- 20. Sachin Kumar and **Paratibha Aggarwal**, Modelling of punching strength of concrete slab, International Conference on Advances in Construction Material & Structures, (ACMS-2018) 7-8 March, IIT, Roorkee,
- 21. Sachin Kumar and **Paratibha Aggarwal**, Modelling of punching strength of concrete slab- A rewiew, International Conference on Clean Technologies and Sustainable Development, 23-24 February 2018, NITTTR, Chandigarh.
- 22. Vipul Arora, S.N.Sachdeva and **Paratibha Aggarwal**, Effect of use of Jarosite on Workability and early age strength of concrete, International Conference on Emerging Trends of Engineering Science, Management and its Applications (ICETESMA-15), 1<sup>st</sup> March, 2015, pp.
- 23. Gaurav Ganotra, Yogesh Aggarwal and **Paratibha Aggarwal**, Study of Seismic Parameters in L-Shaped unsymmetrical building for locating the ideal position of shear wall, International conference on recent trends and challenges in Civil Engineering (RTCCE-2014), MNIT, Allahabad, 12-14, December 2014, ISBN: 978-93-80635-16-3, pp 112-116 (51).
- 24. Ranbir S. Khatana, **Paratibha Aggarwal** and Yogesh Aggarwal, Self-Compacting Concrete using Supplementary Cementitious Materials: A review, International conference on recent trends and challenges in Civil Engineering (RTCCE-2014), MNIT, Allahabad, 12-14, December 2014, ISBN: 978-93-80635-16-3, pp 123-127 (53).
- 25. Vipul Arora, S.N.Sachdeva and **Paratibha Aggarwal**, Review of use of Jarosite in various civil engineering applications, International conference on recent trends and challenges in Civil Engineering (RTCCE-2014), MNIT, Allahabad, 12-14, December 2014, ISBN: 978-93-80635-16-3, pp 168-172 (75).
- 26. Paratibha Aggarwal, Yogesh Aggarwal, Harshit Garg, Deepak Leelwan, Strength optimization

- of cement blended by flyash and alcco fine, ICSCI 2014 © ASCE India Section, Oct 17 18, 2014, Hitex, Hyderabad, Telangana, India, pp 39-48
- 27. **Paratibha Aggarwal**, Prediction of Compressive Strength of Self-Compacting Concrete with Fuzzy Logic, World Academy of Science Engineering and Technology (WASET) Paris, France, 24-26, 2011. June, Paris France, pp.1296-1303.
- 28. **Paratibha Aggarwal** and Rafat Siddique, Properties of Self-Compacting Concrete Concaining Class-F Fly-ash, 6<sup>th</sup> International RILEM Symposium SCC 2010, 26-29, September, 2010, Montreal, Canada. Pp. 171-180.
- 29. **Paratibha Aggarwal,** Rafat Siddique, Yogesh Aggarwal and Jamal Khatib, Influence of W/P ratio on strengths of SCC made with coal bottom ash, 6<sup>th</sup> International RILEM Symposium SCC 2010, 26-29, September 2010, Montreal, Canada, pp. 181-192.
- 30. Yogesh Aggarwal, Rafat Siddique, S.M.Gupta and **Paratibha Aggarwal**, Use of Foundry sand & Bottom ash in Concrete, The 25<sup>th</sup> International Conference on Solid Waste Technology and Management, Philadelphia, PA, U.S.A. March 14 17, 2010,
- 31. Yogesh Aggarwal, Rafat Siddique, S.M.Gupta and **Paratibha Aggarwal**, Effect of Foundry Sand as Partial Replacement of Fine Aggregates on Concrete Properties, The 25<sup>th</sup> International Conference on Solid Waste Technology and Management, Philadelphia, PA, U.S.A. March 14 17, 2010,
- 32. Rafat Siddique, **Paratibha Aggarwal**, Jamal Khatib and Yogesh Aggarwal, Strength Properties and Chloride Permeability of Self-Compacting Concrete, 2<sup>nd</sup> International Symposium on Design, Performance and Use of Self-Consolidation Concrete, Beijing, China, 5-8 June 2009, pp 381-390.
- 33. Rafat Siddique, **Paratibha Aggarwal** and Yogesh Aggarwal, Compressive Strength modeling of SCC using Linear Regression and Artificial Neural Network Approach, 2<sup>nd</sup> International Symposium on Design, Performance and Use of Self-Consolidation Concrete, Beijing, China, 5-8 June 2009, pp. 391-398.
- 34. Rafat Siddique, Jamal Khatib, İsa Yüksel and **Paratibha Aggarwal**, Strength properties of high-volume fly ash (HVFA) concrete incorporating steel fibres, International Conference on Excellence in Concrete Construction- through Innovation, Kingston Hill Campus, London, UK, 9-10 September 2008, pp. 149-157.
- 35. S.M.Gupta, **Paratibha Aggarwal**, Yogesh Aggarwal, V.K.Sehgal, Rafat Siddique & S.K.Kaushik, Permeability of High Strength Concrete, International Conference on Excellence in Concrete Construction- through Innovation, Kingston Hill Campus, London, UK, 9-10 September 2008, pp. 159-163.
- 36. Rafat Siddique, Shuaib Ahmad and **Paratibha Aggarwal**, Properties of Self-Compacting Concrete containing coal bottom ash as partial replacement of fine aggregate. Advances in Cement Based Materials and Application to Civil Infrastructure (ACBM-ACI), Lahore, Pakistan, 12-14 Dec, 2007.
- 37. **Paratibha Aggarwal,** Rafat Siddique, Yogesh Aggarwal and S.M.Gupta, Modeling the Properties of Self-Compacting Concrete: An M5 Model Tree Based Approach, 5<sup>th</sup> International RILEM symposium SCC 2007 Ghent, Belgium, 3-5 September 2007, pp. 49-54.
- 38. Rafat Siddique, **Paratibha Aggarwal**, Yogesh Aggarwal and S.M.Gupta, Development, Investigation and Applications of Self-compacting concrete, 5<sup>th</sup> International RILEM symposium SCC 2007 Ghent, Belgium, 3-5 September 2007, pp. 55-59
- 39. S.M.Gupta, **Paratibha Aggarwal** and Yogesh Aggarwal, Effect of Replacement of Aggregates by Demolition Wastes on Concrete Properties, 22<sup>nd</sup> International Conference on Solid Waste Technology and Management, Philadelphia, USA, 18/19/20/21 March 2007, pp. 479-486.
- 40. **Paratibha Aggarwal,** Rafat Siddique, and S.M.Gupta, Demolition Solid Waste: A source of Coarse Aggregates for Concrete, 22<sup>nd</sup> International Conference on Solid Waste Technology and Management, Philadelphia, USA, 18/19/20/21 March 2007, pp. 509-516.

- 41. Yogesh Aggarwal, **Paratibha Aggarwal** and Rafat Siddique, Mechanical Properties of Concrete containing Coal Bottom Ash as Replacement of Fine Aggregates in Concrete, 22<sup>nd</sup> International Conference on Solid Waste Technology and Management, Philadelphia, USA, 18/19/20/21 March 2007, pp. 903-916.
- 42. **Paratibha Aggarwal,** Yogesh Aggarwal, S.M.Gupta and Rafat Siddique, Properties of Self Compacting Concrete- An Overview, *International Conference'Our world in Concrete and Structures'*, OWICS 05, Singapore, 23/24 Aug. 2005 pp. 119-126.

# **National Conferences**

- 1. Pandey, P., Dey, N. & Aggarwal, P. (2023). Numerical modelling of rainfall triggered landslide: A case study in Himalayan region. Ninth Indian Young Geotechnical Engineering Conference (9IYGEC), IGS Aurangabad, Aurangabad, India. [Presented on 21 st -22 nd March, 2023].
- 2. Pankaj Singh & **Paratibha Aggarwal**, "Experimental research and RSM- based modelling were utilized to predict the self-compacting concrete containing waste materials", Second International Conference on Innovations in clean Energy Technologies (ICET-2023), Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh, India. 8-10 April 2023.
- 3. Muhammad Farooq & **Paratibha Aggarwal**, "Prediction of Properties of SCC using Data Mining Techniques", National conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023), National Institute of Technology, Kurukshetra, Haryana, India. 27-28 May 2023
- 4. Gaurav Chandna & Dr.Paratibha Aggarwal (2022) Experimental Investigation on Rigid Pavement using recycled aggregate & bagasse ash. 10<sup>th</sup> National Conference on nano Science & Instrumentation Technology (NCNIT 2022). July 9-10, 2022, Department of Physics NIT, Kurukshetra.
- 5. Shubham Kumar Goyal & Dr.Paratibha Aggarwal (2022) Review Paper on Seismic Behavior of RC Frame Structures with Bracing Systems. 10<sup>th</sup> National Conference on nano Science & Instrumentation Technology (NCNIT 2022). July 9-10, 2022, Department of Physics NIT, Kurukshetra.
- 6. **Priya Aggarwal & Dr.Paratibha Aggarwal** (2022) Modelling of Shear Walls with opening wusing ML Techniques. 10<sup>th</sup> National Conference on nano Science & Instrumentation Technology (NCNIT 2022). July 9-10, 2022, Department of Physics NIT, Kurukshetra.
- 7. **Gulshan Singh Gurjar & Dr.Paratibha Aggarwal** (2022) Application of Machine Learning Techniques in Self Compacting Concrete: A Review. 10<sup>th</sup> National Conference on nano Science & Instrumentation Technology (NCNIT 2022). July 9-10, 2022, Department of Physics NIT, Kurukshetra.
- 8. **Irfan Ahmed Sadeque & Dr.Paratibha Aggarwal** (2022) Effect of Pine Needles on Strength of Soil as reinforcing fibers. 10<sup>th</sup> National Conference on nano Science & Instrumentation Technology (NCNIT 2022). July 9-10, 2022, Department of Physics NIT, Kurukshetra.
- 9. **Irfan Ahmed Sadeque & Dr.Paratibha Aggarwal** (2022) Change in Engineering Prosperities of Soil using Pine Needles. 10<sup>th</sup> National Conference on nano Science & Instrumentation Technology (NCNIT 2022). July 9-10, 2022, Department of Physics NIT, Kurukshetra.
- 10. Yashraj Singh and **Dr. Paratibha Aggarwal** (2018) "Factorial Design Method and Response Surface Method for Self-Compacting Concrete Mix Design Review" National conference on latest innovations in the area of sustainable materials for building/road construction in civil engineering (NCSMBRCE-2018) September 22-23, 2018 Civil Engineering Department, Malaviya National Institute of Technology Jaipur.
- 11. Yashraj Singh, **Dr. Paratibha Aggarwal** and Ankit Sharma (2019) "Optimization of SCC using RSM" National conference on advances in building-road materials and construction engineering (ABRMCE-2019) March 25-26, 2019 Civil Engineering Department, Malaviya National Institute of Technology Jaipur.

- 12. Shubham K. Saini and **Dr. Paratibha Aggarwal** (2018), "Static and Dynamic Seismic Analysis of Multistorey RCC Building", Latest Innovations in the area of Sustainable Materials for Building/Road Construction in Civil Engineering (NCSMBRCE-2018), SEP. 22-23,2018 Civil Engineering Department, Malaviya National Institute of Technology Jaipur.
- 13. Shubham K. Saini and **Dr. Paratibha Aggarwal** (2019), "Dynamic Analysis of Multistoried U-Shaped RCC Frame Building", National Conference on Advancement in Building-Road Materials & Construction Engineering (ABRMCE2019) March 25-26, 2019 Civil Engineering Department, Malaviya National Institute of Technology Jaipur.
- 14. Anand Mishra & **Paratibha Aggarwal**, Red mud as partial replacement for cement in Self-Compacting Concrete: An experimental study on strength parameter. 4<sup>th</sup> National Conference on nano science and Instrumentation technology (NCNIT-2016), National Institute of Technology, Kurukshetra. June 4-5, 2016.
- 15. Anand Mishra & **Paratibha Aggarwal**, Properties of SCC incorporating Red Mud: A review. 1<sup>st</sup> National Conference on recent advances in civil engineering (RACE-2016) Department of Civil Engineering and Applied Mechanics, Sardar Vallabhbhai National Institute of Technology, Surat March 5-6, 2016
- 16. M.Ravi Kumar, Yogesh Aggarwal, **Paratibha Aggarwal**, Experimental Study of Chloride Resistance of Concrete Incorporating Blend Cement, National Conference on Sustainable Infrastructure Development-2015, (NCSID-2015) M, National Institute of Technical Teachers Training & Research Institute, Chandigarh, 26-27 February, 2015, pp.691-699.
- 17. Ranbir S Khatana, **Paratibha Aggarwal**, Yogesh Aggarwal, Effect of Alccofine on Fresh and Hardened Properties of Self Compacting concrete, National Conference on Technological Innovations for Sustainable Infrastructure, TISI-2015, NIT Calicut, 13-14 March, 2015, pp.34-38
- 18. Gaurav Ganotra, Yogesh Aggarwal, **Paratibha Aggarwal**, Comparison of effect of Shear Wall Location withStorey Height in the performance of Multi-Storeyed L-shaped Building, National Conference on Technological Innovations for Sustainable Infrastructure, TISI-2015, NIT Calicut, 13-14 March, 2015, pp.353-357
- 19. M.Ravi Kumar, Yogesh Aggarwal, **Paratibha Aggarwal**, Study of Chloride resistance of concrete containing Blended cement: A Review, National Conference on Technological Innovations for Sustainable Infrastructure, TISI-2015, NIT Calicut, 13-14 March, 2015, pp.284-288.
- 20. Anil Kumar, S.N.Sachdeva and **Paratibha Aggarwal,** Air Entrained Concrete for Pavement, Colloquium on Transportation Systems Engineering and Management, CTR, EED, NIT Calicut, India, May 12-13, 2014. Paper ID 235.
- 21. Sunil Kumar, S.N.Sachdeva and **Paratibha Aggarwal,** Use of Demolished concrete for Pavement Construction, Proc. Of the first Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC, 2014, NITK, Suratkal, India, May 19-20, 2014.
- 22. Rahul Pratap Singh, **Paratibha Aggarwal** and Yogesh Aggarwal, A review of mechanical properties of cementatious compositions incorporating nano materials (Nano Silica), National Conference on Nano material and Instrumentation (NCNI-2014) N.I.T.Kurukshetra, March 9-10, 2014,
- 23. Paratibha Aggarwal, Babita Saini and Animesh, Prediction of Compressive Strength of Concrete Using Fuzzy Logic Approach, Proc. Of the International conference on Advances in Civil Engineering and Chemistry of Innovative Materials (ACECIM 14) at SRM University Chennai. March 13-14, 2014, pp.
- 24. Animesh, **Paratibha Aggarwal** and Babita Saini, Application of fuzzy logic techniques to concrete strength prediction, Proc. Of the National Conference on Innovations in Design and construction of Industrial Structures at NIT, Durgapur. April 3-5, 2014, pp. 935-938.

- 25. Sunil Kumar, S.N.Sachdeva and **Paratibha Aggarwal,** Proc. Of the First Annual Conference on Innovations and Developments in civil Engineering at NIT Karnataka, Surathkal. May 19-20, 2014, pp......
- 26. Paratibha Aggarwal, **Yogesh Aggarwal** and Surekaha Aggarwal, M5 Modeling Approach: Prediction of Strength of Concrete with Industrial By-products, Proc. All India Seminar on Emerging Technology in Civil Engineering, Institution of Engineers, Haryana Centre, August 24-25, 2012, pp. 27-33.
- 27. **Paratibha Aggarwal,** Yogesh Aggarwal and S.M.Gupta, Self-Compacting Concrete Containing Class-F fly ash for hydraulic structures, National Conference on Hydraulics, Water Recourses, Costal and Environmental Engineering. HYDRO 2010 at MMEC, Mullana. December 16-18, 2010. Pp 619-625.
- 28. Yogesh Aggarwal, **Paratibha Aggarwal**, Mahesh Pal and V.K.Sehgal, Prediction of Reinforcement by Machine Learning Tools, 2<sup>nd</sup> National Conference on Advances in Concrete Technology, T.I.E.T., Patiala, 26/27 Feb. 2004, pp. 197-204.
- 29. **Paratibha Aggarwal,** Yogesh Aggarwal and Karuna Mittal, Applications of Support Vector Machines to the Design of Reinforced Concrete Beams, *National Conference on Intelligent Systems and Networks, H.E.C., Jagadhri*, 27/28 Feb. 2004, pp. 14-18.

# Chapters in the Book Published on relevant subjects from reputed international publisher

	Title	Edition	Publisher	Co-author
ВООК	Alternative Cementitious Materials for Self- Compacting Concrete: Woodhead Publishing Series in Civil and Structural Engineering (Book)	1st	Woodhead Publishing Series in Civil and Structural Engineering	Aggarwal, Y., Sihag, P., Mohammed, A.
BOOK CHAPTERS	SCC containing rice husk ash (Book Chapter)	Alternative Cementitious Materials for Self-Compacting Concrete: pp. 153-174	Woodhead Publishing Series in Civil and Structural Engineering	Aggarwal, Y., Sihag, P.
	Nanosilica in self- compacting concrete (Book Chapter)	Alternative Cementitious Materials for Self-Compacting Concrete: pp. 105-118	Woodhead Publishing Series in Civil and Structural Engineering	Garg, A., Aggarwal, Y.

Sr. No.	Title of Chapter	Title of Book	Name of Publications	Year of publication
1	Ankit Kumar, Paratibha Aggarwal & Sandeep Panchal, A Novel Application of Flex Waste for Improving the Mechanical Properties of Concrete, Conference paper,	Lecture Notes in Civil Engineering book series (pp 485-491)	(LNCE, volume 124) Advances in Sustainable Construction Materials	2021
2	Kiran Devi, Babita Saini & Paratibha Aggarwal Prediction of Setting Time and Strength of Mortar Using Soft Computing Technique, Conference paper	Lecture Notes in Civil Engineering book series pp 95–102	(LNCE, volume 78). Smart Technologies for Sustainable Development	2021
3	Strength properties of SCC Book Pages 83-115 Available online 24 January 2020. https://doi.org/10.1016/B978-0-12- 817369-5.00007-6	Self-Compacting Concrete: Materials, Properties and Applications	Publisher Woodhead Publishing Elsevier	01.01.2020
4	Carbonation and corrosion of SCC Book Pages 147-193 Available online 24 January 2020. https://doi.org/10.1016/B978-0-12- 817369-5.00007-6	Self-Compacting Concrete: Materials, Properties and Applications	Publisher Woodhead Publishing Elsevier	01.01.2020
5	Devi K., Saini B., Aggarwal P., Combined use of accelerators and stone slurry powder in cement mortar	Lecture Notes in Civil Engineering Volume 21 LNCE, pp202-209 Book Series. ISSN 23662557, ISBN 978-303002706-3 DOI: 10.1007/978-3-030-02707-	Sustainable Waste Management through Design ICSWMD 2018	2-3 November 2018

		0_25	Ludhiana	
6	Strength Properties and Chloride Permeability of Self-Compacting Concrete	Pro 065, 2 <sup>nd</sup> International Symposium on Design, Performance and Use of Self-Consolidating Concrete, SCC-2009 ISBN-978-2-35158-093-6	RILEM Publications	2009
7	Compressive Strength modeling of SCC using Linear Regression and Artificial Neural Network Approach	Pro 065, 2 <sup>nd</sup> International Symposium on Design, Performance and Use of Self-Consolidating Concrete, SCC-2009 ISBN-978-2-35158-093-6	RILEM Publications	2009
8	Modeling the Properties of Self- Compacting Concrete: An M5 Model Tree Based Approach	Pro 054, Fifth International RILEM symposium on Self Compacting Concrete- SCC 2007 ISBN-978-2-35158-047-9	RILEM Publications	2007
9	Development, Investigation and Applications of Self-compacting concrete	Pro 054, Fifth International RILEM symposium on Self Compacting Concrete- SCC 2007 ISBN-978-2-35158-047-9	RILEM Publications	2007

# Significant outreach Institute out Activity

Name of the activity	Place	Date
·	Teerthanker Mahaveer University,	26-11.21 to
Session Chair and Key Note Speaker	Moradabad	27.11.21
	Teerthanker Mahaveer University,	,
Member Board of Studies	Moradabad	
Expert Lecture: -Application of Al, IOT and		18.10.21 to
Neno Technology in Civil Engineering	Marwadi University, Baroda	22.10.21
Technical Session Chair	International conference on Recent Advances in Civil Engineering (ICRACE- 2021), NIT, Silchar	17.09.21 to 19.09.21
Expert Lecture: -Contemporary Advances in Sustainable and Integrated Infrastructure	Manav Rachna International Institute of Research and Studies, Faridabad	02.08.21 to 06.08.21
Expert Lecture: -Role of Artificial Intelligence and Machine Learning	GGNIMT, Ludhiana	09.01.21
Expert Lecture: -Application Artificial Intelligence to Prediction of Properties of Concrete	ICI & Ultratech ltd. (Virtual Mode)	28.10.20
Support and Guidance, MASSY	Maharaja Aggarsain Siksha Samman Yogna	2014 till Date
External Examiner (Ph.D. Thesis)	Civil Engg. Deptt. MNIT, Jaipur	2017
Member Advisory Committee Student Club for Social Action	N.I.T. Kurukshetra	2017
Expert Lecture: - Analysis and Design of Structures using STAAD PRO	DCRUST Murthal	2015
Coordinator Faculty-in-charge, CON? Q	UTCL-CHD.TS@ADITYABIRLA.COM	2013
Support and Guidance, Shiksha Abhiyan	NIT, Kurukshetra	2011 till Date
Member Technical Committee, IETET-2013	GIMT, Kurukshetra	2013
Editor	Radical Journal of Computer Science and	2012
External Examiner (M.Tech. Thesis)	Information Technology Civil Engg. Deptt. Thapar University	2012
Expert for selection of JEF in DST Project	Civil Engg. Deptt. Thapar University	2012
Fuzzy Logic Applications in Engineering	K.I.T.M., Kurukshetra	2012
External Examiner for Practical	DCRUST, Murthal	2011
Matlab Applications	K.I.T.M., Kurukshetra	2011
Neural Networks Applications in Engineering	K.I.T.M., Kurukshetra	2011
Session Chair International Conference on		
Mathematical and Computational	World Academy of Science Engineering and	2011
Methods in Science ICMCMSE 2011	Technology (WASET) Paris, France	2011
Expert Lecture (Staad Pro), Centre for		
Continuing Education and External  Collaboration	N.I.T. Kurukshetra	2011
Artificial Intelligence and its applications	K.I.T.M., Kurukshetra	2010
Introduction to Programming using C Language	K.I.T.M., Kurukshetra	2009
Understanding Engineering Drawings,	N.I.T. Kurukshetra	
Earthquake Risk Management	Sponsored by MHA Govt. of India	2009
Fire Resistant Design of Buildings,	N.I.T. Kurukshetra	
Earthquake Risk Management	Sponsored by MHA Govt. of India	2009
	Sponsored by Willia dove of Illuid	
Earthen Buildings and Low Strength	N.I.T. Kurukshetra	

# WINTER/SUMMER SCHOOLS ATTENDED

Course	Place	Duration
Virtual Workshop on website Designing	GGNMIT, Ludhiana	03.09.21
9 <sup>th</sup> Professional Development training program Under	110.0 1/a alaina	28.10.20 to 30.10.20
TEQIP 3	IIM Kashipur	
Online Teaching Pedagogy in Higher Education	NIFTEM, Sonipat	11.06.20 to 14.06.20
Nanomaterials: Synthesis and Characterization	N.I.T., Kurukshetra	11.03.2014 to 15.03.14
Formwork for Concrete Structures	I.I.T., Delhi	17.06.2013 to 21.06.2013
Induction Training Programme Through ICT	GZS PTU Campus, Bhatinda	03.06.2013 to 07.06.2013
AUTOCAD	NTTTRI, Chandigarh	27.05.2013 to 31.05.2013
Predictive Mathematical Models in Science and Engineering	N.I.T., Kurukshetra	24.05.2013 to 25.05.2013
Computational Methods in Engineering	N.I.T., Hamirpur	13.05.2013 to 17.05.2013
Seminar on Ethics & Value Education in Science & Technology	N.I.T., Kurukshetra	14.11.2011
Structural Steel Design	N.I.T., Kurukshetra	15.06.2009 to 20.06.200
Earthquake Risk Management	I.I.T., Roorkee	03.11.2008 to 29.11.2008
Instructional Planning and Delivery	N.I.T., Kurukshetra	22.09.2008 to 26.09.200
Advances in Civil Engineering	N.I.T. Kurukshetra	21.01.2008 to 25.01.2008
Server Side Programming	N.I.T. Kurukshetra	03.12.2007 to 07.12.2007
Faculty Development Program on Entrepreneurial Awareness	N.I.T. Kurukshetra	25.06.2007 to 04.07.2007
Digital Signal Processing	N.I.T. Kurukshetra	08-09-06
Programming in C	N.I.T. Kurukshetra	04.10.2004 to 16.10.2004
Genetic Algorithms for Engg. Optimization	I.I.T. Kanpur	07.04.2004 to 09.04.200
Matlab	T.T.T.I Chandigarh	19.01.2004 to 23.01.2004
Earthquake Resistant Design of Structures	I.I.I.T. Hyderabad	05.11.2003 to 09.11.2003
Neural Network and Fuzzy Logic	T.T.T.I., Chandigarh	14.07.2003 to 25.07.2003
A workshop on system modeling and simulation	S.L.I.E.T, Longowal	31.07.2000 to 11.08.2000
Modern Trends for efficient operation of M/C's and energy conservation	C.R.S.C.E., Murthal	17.07.2000 to 23.07.2000
Low-Cost Housing	G.N.D.E.C., Ludhiana	03.07.2000 to 14.07.2000
Induction Training Program	R.E.C., Kurukshetra	May/June 2000 3 Weeks
Performance Appraisal and Development System	R.E.C., Kurukshetra	03.03.1995 to 05.03.1995
	I	

- 1. Paratibha Aggarwal attended "ONLINE TEACHING PEDAGOGY IN HIGHER EDUCATION", 11-14 June 2020, organized by Department of Agriculture and Environmental Sciences, NIFTEM. National Institute of Food Technology Entrepreneurship & Management, Kundli, Sonipat (Haryana)
- 2. Paratibha Aggarwal attended "Professional Development Training Program IX under TEQIP III" (October, 28th October 30th 2020), INDIAN INSTITUTE OF MANAGEMENT KASHIPUR.
- 3. Paratibha Aggarwal attended "Online Advanced Course on "Geopolymer Concrete" (GCON-2021) "28th & 29th January 2021, CSIR-Structural Engineering Research Centre, CSIR Campus, Taramani, Chennai 600 113, India

# Recognitions / Awards / Fellowships

- Life Fellow Member, Indian Geotechnical Society, New Delhi.
- Life Member, Indian Society of Earthquake Technology, Roorkee.
- Life Member, Indian Society of wind Engineering, Roorkee.
- Life Member, Indian Society for Technical Education (ISTE), New Delhi.
- Life Member, Indian Concrete Institute (ICI), Chennai.

Sr.	Society	Type of	Membership
No.		Membership	Number
1	ISTE (Indian Society of Technical Education)	Life Member	LM-28057
2	ICI (Indian Concrete Institute)	Life Member	9025
3	Indian Society of Earthquake Technology,	Life Member	LM-1590
	Roorkee.		
4	Indian Society for wind Engineering	Life Member	LM-563
5	Life Fellow Member, Indian Geotechnical	Life Fellow	
	Society, New Delhi.	Member	

# **Duties at Departmental Level**

- Faculty I/C BOS, DRC, DAC meetings 2021-22
- Faculty I/C Procurement, Stores & DPC 2021-22
- Faculty I/C Industry Interaction, extension lectures, department functions 2021-22
- Sectional Head, Computer Engineering Section Civil Engineering Department.
- Teacher-In-charge for Survey Camp at Rajpur, Dehradun (2001-02)
- Prof-in-charge Concrete Lab 2019-21
- Prof. In charge Civil Department Computer Lab.
- Prof. In charge Library Departmental and Departmental Ambience.
- Prof. In charge Academic, Exams and Results (Departmental).
- Teacher In charge for Survey Camp at Rajpur, Dehradun (2001-02)
- Member, Registration Committee, Training Program on Pradhan Mantri Gram Sadak Yojana (PMGSY), Organized by Civil Engg. Deptt. From 9/12/03 to 11/12/03
- Alternate Faculty I/C Academic, Examination & Result 2019-21
- Faculty-in-charge Curriculum Development & Accreditation of PG Programs 2019-21
- Alternate Faculty I/C Educational tours 2019-21
- Alternate Faculty I/C Library & Departmental Website 2019-21

# Summary Information College Duties etc.

- Dean Student welfare
- Prof-in-charge Alumni cell
- Prof-in-charge Students Clubs 2019-till date
- Chairman Library Committee 2017-2019
- Member DRC (Humanities)
- Member Advisory Committee Estate
- Member, Complaint Committee, "Sexual harassment of women at work places" Committee.2017-till date
- Convener Photography Committee Convocation 2019.
- Observer for CEET Exams
- Member Purchase Committee
- Exams Duties as Asstt. Supdt.

- Stock Verification Duties
- Member, L-TEQIP for Structural Engg. As per No.: CE/1822 dated 20/21-09-04.
- Member, Registration Committee, Training Program on Pradhan Mantri Gram Sadak Yojana (PMGSY), Organized by Civil Engg. Deptt. From 9/12/03 to 11/12/03
- Member, Complaint Committee, "Sexual harassment of women at work places" Committee.
- Member, Library Committee for the year 2007-2011.
- Member, Organizing Committee for Annual Cultural Festivals held in 1995, 96, 97.
- Acted as Judge for group dance during Cultural Festival (2003-04).
- Acted as Judge for Civiera during Literati (2005-06, 2007-2008).
- Anti-Ragging duties in girls' hostel for fresher (1st year).
- Regular contact with students regarding their career planning.
- Counselor for group of girls from 1<sup>st</sup> year to final year
- Prof-in –charge for Student Activity center (2006-07,07-08)
- Convener Registration Committee Convocation 2011.
- Observer for CEET Exams.
- Member Purchase Committee.
- Exams Duties as Asstt. Supdt.
- Stock Verification Duties for Girls Hostels.
- Member, L-TEQIP for Structural Engg. As per No.: CE/1822 dated 20/21-09-04.
- Member, Complaint Committee, "Sexual harassment of women at work places" Committee.
- Member, Organizing Committee for Annual Cultural Festivals held in 1995, 96, 97.
- Acted as Judge for group dance during Cultural Festival (2003-04).
- Acted as Judge for Civiera during Literati (2005-06)
- Prof-in –charge for Student Activity center (2006-07,07-08)
- Anti-Ragging duties in girls' hostel for fresher (1st year).
- Chairman Library Committee
- Prof-in-charge Students Clubs
- Observer for CEET Exams
- Member Purchase Committee
- Exams Duties as Asstt. Supdt.
- Stock Verification Duties for Girls Hostels
- Teacher In charge for Survey Camp at Rajpur, Dehradun (2001-02)
- Member, L-TEQIP for Structural Engg. As per No.: CE/1822 dated 20/21-09-04.
- Member, Registration Committee, Training Program on Pradhan Mantri Gram Sadak Yojana (PMGSY), Organized by Civil Engg. Deptt. From 9/12/03 to 11/12/03
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