Curriculum Vitae

Personal Information

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Journal Publications

1. Deflections of high-content recycled aggregate concrete beams reinforced with GFRP bars and steel fibres
Author(s): Imjai, T., Aosai, P., Garcia, R., Raman, S.N., and Chaudhary, S.
Journal: Engineering Structures
Year: 2024
Volume/Pages: -
Impact Factor: 5.6
Link: https://doi.org/10.1016/j.engstruct.2024.11824

2. Performance of recycled aggregate concrete composite metal decks under elevated temperatures: a comprehensive review
Author(s): Kefyalew, F., Imjai, T., Garcia, R., Son, N.K., and Chaudhary, S.
Journal: Journal of Asian Architecture and Building Engineering
Year: 2024
Volume/Pages: -
Impact Factor: 1.5
Link: https://doi.org/10.1080/13467581.2024.2309347

3. Performance of eccentrically loaded low-strength RC columns confined with posttensioned metal straps: An experimental and numerical investigation
Author(s): Neupane, R. P., Imjai, T., Garcia, R., Chua, Y. S., and Chaudhary, S.
Journal: Structural Concrete
Year: 2024
Volume/Pages: -
Impact Factor: 2.79
Link: https://doi.org/10.1002/suco.202301026

4. Thermal and acoustic performance of masonry walls with phase change materials: A comparison of scaled-down houses in tropical climates
Author(s): Srimuang, K., Imjai, T., Kefyalew, F., Raman, S. N., Garcia, R., and Chaudhary, S.
Journal: Journal of Building Engineering
Year: 2023
Volume/Pages: 108315
Impact Factor: 6.7
Link: https://doi.org/10.1016/j.jobe.2023.108315

5. Durability assessment of mechanochemically activated geopolymer concrete with a

low molarity alkali solution
Author(s): Singh, A., Bhadauria, S. S., Thakare, A. A., Kumar, A., Mudgal, M., and Chaudhary, S.
Journal: Case Studies in Construction Materials
Year: 2023
Volume/Pages: e02715 /20
Impact Factor: 6.5
Link: https://doi.org/10.1016/j.cscm.2023.e02715

6. A case study on examining the fresh-state behavior of self-compacting mortar containing waste powders from various sources
Author(s): Singh, A., Thakare, A. A., and Chaudhary, S.
Journal: Case Studies in Construction Materials
Year: 2023
Volume/Pages: e02684
Impact Factor: 6.5
Link: https://doi.org/10.1016/j.cscm.2023.e02684

7. Evaluation of real time fire performance of eco-efficient fly ash blended self-consolidating concrete including granite waste
Author(s): Jain, A., Gupta, R., Gupta, S., and Chaudhary, S.
Journal: Journal of Building Engineering
Year: 2023
Volume/Pages: 77, 107533
Impact Factor: 6.7
Link: https://doi.org/10.1016/j.jobe.2023.107553

8. Thermo-mechanical treatment as an upcycling strategy for mixed recycled aggregate
Author(s): Gupta, S., Agrwal, H., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2023
Volume/Pages: 398, 132471
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2023.132471

9. Use of recycled aggregate concrete in structural members: a review focused on Southeast Asia
Author(s): Neupane, R. P., Imjai, T., Makul, N., Garcia, R., Kim, B., and Chaudhary, S.
Journal: Journal of Asian Architecture and Building Engineering
Year: 2023
Volume/Pages: -
Impact Factor: 1.5
Link: https://doi.org/10.1080/13467581.2023.2270029

10. Rapid prediction of long-term deflections in steel-concrete composite bridges through a neural network model
Author(s): Kumar, P., Kasar, A. A., and Chaudhary, S.
Journal: International Journal of Steel Structures
Year: 2023
Volume/Pages: -
Impact Factor: 1.1
Link: https://doi.org/10.1007/s13296-023-00766-8

11. Effect of rubber fiber size fraction on static and impact behavior of self-compacting concrete
Author(s): Thakare, A. A., Siddique, S., Singh, A., Gupta, T., and Chaudhary, S.
Journal: Advances in Concrete Construction
Year: 2022
Volume/Pages: 13(6), 433-450
Impact Factor: 2.2
Link: https://doi.org/10.12989/acc.2022.13.6.433

12. Mechanical and microstructural characterization of fly ash blended self-compacting concrete containing granite waste
Author(s): Jain, A., Chaudhary, S., and Gupta, R.
Journal: Construction and Building Materials
Year: 2022
Volume/Pages: 314 (Part A), 125480
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2022.125480

13. Micro and macro-structural properties of waste tyre rubber fibre-reinforced bacterial self-healing mortar
Author(s): Thakare, A. A., Gupta, T., Deevan, R., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2022
Volume/Pages: 322, 126459
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2022.126459

14. Resistance of fly ash blended self-compacting concrete incorporating granite powder against acid and sulphate environments
Author(s): Jain, A., Chaudhary, S., Choudhary, S., and Gupta, R.
Journal: Arabian Journal of Geosciences
Year: 2022
Volume/Pages: 15, 1156
Impact Factor: 2
Link: https://doi.org/10.1007/s12517-022-10424-8

15. Waste tyre recycling: An emerging applications with a focus on permeable pavements
Author(s): Muttil, N., Chaudhary, S., Prasad, E. K., and Singh, S. K.
Journal: Indian Journal of Engineering and Material Sciences
Year: 2022
Volume/Pages: 29(6), 707-713
Impact Factor: 2
Link: https://doi.org/10.56042/ijems.v29i6.70313

16. Effect of limestone calcined clay cement (LC3) on the fire safety of concrete structures
Author(s): Gupta, S., Singh, D., Gupta, T., and Chaudhary, S.
Journal: Computers and Concrete
Year: 2022
Volume/Pages: 27(4), 263-278
Impact Factor: 2.9
Link: https://doi.org/10.12989/cac.2022.29.4.263

17. State of the art review on supplementary cementitious materials in India – II: Characteristics of SCMs, effect on concrete and environmental impact
Author(s): Gupta, S., and Chaudhary, S.
Journal: Journal of Cleaner Production
Year: 2022
Volume/Pages: 357, 131945
Impact Factor: 9.7
Link: https://doi.org/10.1016/j.jclepro.2022.131945

18. Effect of granite industry waste addition on durability properties of fly ash blended self-compacting concrete
Author(s): Jain, A., Choudhary, S., Gupta, R., Chaudhary, S., and Gautam, L.
Journal: Construction and Building Materials
Year: 2022
Volume/Pages: 340, 127727
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2022.127727

19. Comprehensive assessment of ceramic ETP sludge waste as a SCM for the production of concrete
Author(s): Jain, P., Gupta, R., and Chaudhary, S.
Journal: Journal of Building Engineering
Year: 2022
Volume/Pages: 104973
Impact Factor: 6.7
Link: https://doi.org/10.1016/j.jobe.2022.104973

20. Effect of size variation of fibre-shaped waste tyre rubber as fine aggregate on the ductility of self-compacting concrete
Author(s): Thakare, A. A., Singh, A., Gupta, T., and Chaudhary, S.
Journal: Environmental Science and Pollution Research
Year: 2022
Volume/Pages: -
Impact Factor: 2
Link: https://doi.org/10.1007/s11356-022-23488-6

21. A methodology for rapid estimation of deflections in two-way reinforced concrete slabs considering cracking
Author(s): Singh, G.K., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Prac. Periodical on Structural Design and Construction, ASCE
Year: 2021
Volume/Pages: -
Impact Factor: 1.6
Link: https://doi.org/10.1061/(ASCE)SC.1943-5576.0000568

22. Experimental Investigation of Rubberized Functionally Graded Concrete
Author(s): Choudhary, S., Gupta, R., Jain, A., and Chaudhary, S.
Journal: Revue des Composites et des Materiaux Avances
Year: 2021
Volume/Pages: 31 (1), 1-11
Impact Factor: 1
Link: https://doi.org/10.18280/rcma.310101

23. Production of colored bi-layered bricks from stone processing waste: structural and spectroscopic characterization
Author(s): Gupta, V., Pathak, D. K., Kumar, R., Miglani, A., Siddique, S., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2021
Volume/Pages: 278, 122339
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2021.122339

24. Rapid prediction of long-term deflections in steel-concrete composite bridges through a neural network model
Author(s): Kumar, S., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: International Journal of Steel Structures
Year: 2021
Volume/Pages: -
Impact Factor: 1.1
Link: https://doi.org/10.1007/s13296-021-00458-1

25. Investigating mechanical properties and durability of concrete containing recycled rubber ash and fibers
Author(s): Gupta, T., Siddique, S., Sharma, R. K., and Chaudhary, S.
Journal: Journal of Material Cycles and Waste Management
Year: 2021
Volume/Pages: 1-13
Impact Factor: 2.7
Link: https://doi.org/10.1007/s10163-021-01192-w

26. Utilization of non-metalized plastic bag fibers along with fly ash in concrete
Author(s): Jain, A., Sharma, N., Choudhary, N., Gupta, R., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2021
Volume/Pages: 291, 123329
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2021.123329

27. Influence of the precursor, molarity and temperature on the rheology and structural buildup of alkali-activated materials
Author(s): Siddique, S., Gupta, V., Chaudhary, S., Park, S., and Jang, J. G.
Journal: Materials
Year: 2021
Volume/Pages: 14(13), 3590
Impact Factor: 3.1
Link: https://doi.org/10.3390/ma14133590

28. Effect of Fiber Volume Fraction of Waste Originated Tire Fiber and w/c Ratio on Mechanical Properties of Functionally Graded Concrete
Author(s): Choudhary, S., Singh, A., Jain, A., Gupta, R., and Chaudhary, S.
Journal: Iranian Journal of Science and Technology, Transactions of Civil Engineering
Year: 2021
Volume/Pages: -
Impact Factor: 1.7
Link: https://doi.org/10.1007/s40996-021-00778-6

29. Effect of location of load on shear lag behavior of bonded steel-concrete flexural members
Author(s): Bhardwaj, A., Nagpal, A. K., Chaudhary, S., and Matsagar, V.
Journal: Steel and Composite Structures
Year: 2021
Volume/Pages: 41 (1), 123-136
Impact Factor: 4
Link: https://doi.org/10.12989/scs.2021.41.1.123

30. An artificial neural network-based prediction model for utilization of coal ash in production of fired clay bricks: A review
Author(s): Vasic, V. M., Pezo, L., Gupta, V., Chaudhary, S., and Radozevic, Z.
Journal: Science of Sintering
Year: 2021
Volume/Pages: 53, 37-53
Impact Factor: 1.4
Link: https://doi.org/10.2298/SOS2101037V

31. Study on the mineral phase characteristics of various Indian biomass and coal fly ash for its use in masonry construction products
Author(s): Gupta, V., Pathak, D., Siddique, S., Kumar, R., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2020
Volume/Pages: 235, 117413
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2020.117413

32. Evaluation of concrete containing waste plastic shredded fibers: Ductility properties
Author(s): Jain, A., Siddique, S., Gupta, T., Jain, S., Sharma, R. K., and Chaudhary, S.
Journal: Structural Concrete
Year: 2020
Volume/Pages: 1–10
Impact Factor: 3
Link: https://doi.org/10.1002/suco.201900512

33. State of the art review on Supplementary Cementitious Materials in India – I: An overview of legal perspective, governing organizations, and development patterns
Author(s): Gupta, S., and Chaudhary, S.
Journal: Journal of Cleaner Production
Year: 2020
Volume/Pages: 261, 121203
Impact Factor: 9.7
Link: https://doi.org/10.1016/j.jclepro.2020.121203

34. A state of the art review to enhance the industrial scale waste utilization in sustainable unfired bricks
Author(s): Gupta, V., Chai, H. K., Lu, Y., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2020
Volume/Pages: 254, 119220
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2020.119220

35. Effect of aggressive environment on durability of concrete containing fibrous rubber shreds and silica fume
Author(s): Gupta, T., Siddique, S., Sharma, R. K., and Chaudhary, S.
Journal: Structural Concrete
Year: 2020
Volume/Pages: 1-13
Impact Factor: 3
Link: https://doi.org/10.1002/suco.202000043

36. Raman Imaging for Measuring Homogeneity of Dry Binary Blend: Combining Microscopy with Spectroscopy for Technologists
Author(s): Gupta, V., Pathak, D. K., Chaudhary, S., and Kumar, R.
Journal: Analytical Science Advances
Year: 2020
Volume/Pages: -
Impact Factor: 3
Link: https://doi.org/10.1002/ansa.202000029

37. Sustainable development of self compacting concrete by using granite waste and fly ash
Author(s): Jain, A., Gupta, R., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2020
Volume/Pages: 262, 120516
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2020.120516

38. A study on rheological properties of rubber fiber dosed self-compacting mortar
Author(s): Thakare, A. A., Siddique, S., Sarode, S. N., Deewan, R., Gupta, V., Gupta, S., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2020
Volume/Pages: 262, 120745
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2020.120745

39. Bond Behavior in Flexural Members: Numerical Studies
Author(s): Bhardwaj, A., Matsagar, V., Nagpal, A. K., and Chaudhary, S.
Journal: International Journal of Steel Structures
Year: 2020
Volume/Pages: -
Impact Factor: 1.1
Link: https://doi.org/10.1007/s13296-020-00432-3

40. Optimum mixing sequence and moisture content for hydrated lime fly ash bricks
Author(s): Gupta, V., Siddique, S., and Chaudhary, S.
Journal: Journal of Cleaner Production
Year: 2020
Volume/Pages: -
Impact Factor: 9.7
Link: https://doi.org/10.1016/j.jclepro.2020.124859

41. Sustainable development of self-compacting cementitious mixes using waste

originated fibers: A review
Author(s): Thakare, A. A., Singh, A., Gupta, V., Siddique, S., and Chaudhary, S.
Journal: Resources Conservation and Recycling
Year: 2020
Volume/Pages: 105250
Impact Factor: 11.2
Link: https://doi.org/10.1016/j.resconrec.2020.105250

42. Influence of granite waste aggregate on properties of binary blend self-compacting concrete
Author(s): Jain, A., Gupta, R., and Chaudhary, S.
Journal: Advances in Concrete Construction
Year: 2020
Volume/Pages: 10, 127-140
Impact Factor: 2.2
Link: https://doi.org/10.12989/acc.2020.10.2.127

43. Acid resistance of fine bone china ceramic aggregate concrete
Author(s): Siddique, S., Gupta, T., Thakre, A.A., Gupta, V., and Chaudhary, S.
Journal: European Journal of Environmental and Civil Engineering
Year: 2019
Volume/Pages: -
Impact Factor: 2.2
Link: https://doi.org/10.1080/19648189.2019.1572543

44. An efficient and novel strategy for control of cracking, creep and shrinkage effects in steel-concrete composite beams
Author(s): Varshney, L. K., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Structural Engineering and Mechanics
Year: 2019
Volume/Pages: 70(6), 751-763
Impact Factor: 2.2
Link: https://doi.org/10.12989/sem.2019.70.6.751

45. Effect of reinforcement detailing on performance of composite connections with headed studs
Author(s): Kumar, P., and Chaudhary, S.
Journal: Engineering Structures
Year: 2019
Volume/Pages: 179, 476-492
Impact Factor: 5.6
Link: https://doi.org/10.1016/j.engstruct.2018.11.014

46. Development of rubberized geopolymer concrete: Strength and durability studies
Author(s): Luhar, S., Chaudhary, S., and Luhar, I.
Journal: Construction and Building Materials
Year: 2019
Volume/Pages: 204, 740-753
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2019.01.022

47. Sustainable utilisation of ceramic waste in concrete: Exposure to adverse conditions

Author(s): Siddique, S., Chaudhary, S., Shrivastava, S., and Gupta, T.
Journal: Journal of Cleaner Production
Year: 2019
Volume/Pages: 210, 246-255
Impact Factor: 9.7
Link: https://doi.org/10.1016/j.jclepro.2018.11.174

48. Behaviour of waste rubber powder and hybrid rubber concrete in aggressive environment
Author(s): Gupta, T., Kothari, S., Siddique, S., Sharma, R.K., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2019
Volume/Pages: 217, 283-291
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2019.05.021

49. Performance of self-compacting concrete comprising granite cutting waste as fine aggregate
Author(s): Jain, A., Gupta, R., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2019
Volume/Pages: 221, 539-552
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2019.06.021

50. Prediction of mechanical properties of rubberised concrete exposed to elevated temperature using ANN
Author(s): Gupta, T., Patel, K.A., Siddique, S., Sharma, R.K., and Chaudhary, S.
Journal: Measurement
Year: 2019
Volume/Pages: 147, 106870
Impact Factor: 5.2
Link: https://doi.org/10.1016/j.measurement.2019.106870

51. Influence of stone processing dust on mechanical, durability and sustainability of concrete
Author(s): Gupta, T., Kothari, S., Siddique, S., Sharma, R.K., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2019
Volume/Pages: 223, 918-927
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2019.07.034

52. Fresh, Strength, Durability and Microstructural Properties of Shredded Waste Plastic Concrete
Author(s): Jain, A., Siddique S., Gupta, T., Jain, S., Sharma, R. K. and Chaudhary, S.
Journal: Iranian Journal of Science and Technology, Transactions of Civil Engineering
Year: 2018
Volume/Pages: -
Impact Factor: 1.7
Link: https://doi.org/10.1007/s40996-018-0178-0

53. Effect of bond layer thickness on behaviour of steel-concrete composite

connections
Author(s): Kumar, P., Patnaik A., and Chaudhary, S.
Journal: Engineering Structures
Year: 2018
Volume/Pages: 177, 268-282
Impact Factor: 5.6
Link: https://doi.org/10.1016/j.engstruct.2018.06.014

54. Utilization of shredded waste plastic bags to improve impact and abrasion resistance of concrete
Author(s): Jain, A., Siddique S., Gupta, T., Sharma, R. K. and Chaudhary, S.
Journal: Environment Development and Sustainability
Year: 2018
Volume/Pages: -
Impact Factor: 4.7
Link: https://doi.org/10.1007/s10668-018-0204-1

55. Thermal resistance of fly ash based rubberized geopolymer concrete
Author(s): Luhar, S., Chaudhary, S., and Luhar, I.
Journal: Journal of Building Engineering
Year: 2018
Volume/Pages: 19, 420-428
Impact Factor: 6.7
Link: https://doi.org/10.1016/j.jobe.2018.05.014

56. Strength and impact resistance properties of concrete containing fine bone china ceramic aggregate
Author(s): Siddique, S., Shrivastava, S., Chaudhary, S., and Gupta, T.
Journal: Construction and Building Materials
Year: 2018
Volume/Pages: 169, 289-298
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2018.02.045

57. Assessment of mechanical and durability properties of concrete containing PET waste
Author(s): Saxena, R., Gupta, T., Sharma, R. K., Chaudhary, S., and Jain A.
Journal: Scientia Iranica
Year: 2018
Volume/Pages: 27(1), 1-9
Impact Factor: 1.4
Link: https://doi.org/10.24200/sci.2018.20334

58. Durability properties of bone china ceramic fine aggregate concrete
Author(s): Siddique, S., Shrivastava, S., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2018
Volume/Pages: 173, 323-331
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2018.04.021

59. Influence of fine ceramic aggregates on the residual properties of concrete subjected to elevated temperature

Author(s): Rajawat, D., Siddique, S., Shrivastava, S., Chaudhary, S., and Gupta, T.
Journal: Fire and Materials
Year: 2018
Volume/Pages: 42(7), 834-842
Impact Factor: 2
Link: https://doi.org/10.1002/fam.2530

60. Impact resistance and energy absorption capacity of concrete containing plastic waste
Author(s): Saxena, R., Siddique, S., Gupta, T., Sharma, R. K., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2018
Volume/Pages: 176, 415-421
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2018.05.022

61. Lateral force microscopic examination of calcium silicate hydrate in rubber ash concrete
Author(s): Gupta, T., Siddique S., Sharma R.K., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2018
Volume/Pages: 179, 461-467
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2018.05.022

62. Influence of ceramic waste as fine aggregate in concrete: Pozzolanic, XRD, FT-IR and NMR investigations
Author(s): Siddique, S., Shrivastava, S., and Chaudhary, S.
Journal: Journal of Materials in Civil Engineering, ASCE
Year: 2018
Volume/Pages: 30(9), 04018227
Impact Factor: 3.1
Link: https://doi.org/10.1061/(ASCE)MT.1943-5533.0002270

63. Evaluating resistance of fine bone china ceramic aggregate concrete to sulphate attack
Author(s): Siddique, S., Shrivastava, S., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2018
Volume/Pages: 186, 826-832
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2018.08.086

64. Closed form expressions for long-term deflections in high-rise composite frames
Author(s): Pendharkar, U., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: International Journal of Steel Structures
Year: 2017
Volume/Pages: 17(1), 31-42
Impact Factor: 1.1
Link: https://doi.org/10.1007/s13296-017-0011-5

65. An automated computationally efficient two stage procedure for service load analysis of RC flexural members considering concrete cracking

Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Engineering with Computers
Year: 2017
Volume/Pages: 33(3), 669-688
Impact Factor: 8.7
Link: https://doi.org/10.1007/s00366-016-0450-5

66. Service load analysis of composite frames using cracked span length frame element
Author(s): Ramnavas, M. P., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Engineering Structures
Year: 2017
Volume/Pages: 132, 733-744
Impact Factor: 5.6
Link: https://doi.org/10.1016/j.engstruct.2016.12.022

67. Influence of ceramic waste on the fresh properties and compressive strength of concrete
Author(s): Siddique, S., Chaudhary, S., and Shrivastava, S.
Journal: European Journal of Environmental and Civil Engineering
Year: 2017
Volume/Pages: -
Impact Factor: 2.2
Link: https://doi.org/10.1080/19648189.2016.127598

68. Neural network based approach for rapid prediction of deflections in RC beams considering cracking
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Computers and Concrete
Year: 2017
Volume/Pages: 19(3), 293-303
Impact Factor: 2.9
Link: https://doi.org/10.12989/cac.2017.19.3.293

69. Effect of elevated temperature and cooling regimes on mechanical and durability properties of rubberized concrete
Author(s): Gupta, T., Siddique, S., Sharma, R. K., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2017
Volume/Pages: 137, 35-45
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2017.01.045

70. Response assessment under dynamic loading and microstructural investigations of rubberized concrete
Author(s): Gupta, T., Tiwari, A., Siddique, S., Sharma, R. K., and Chaudhary, S.
Journal: Journal of Materials in Civil Engineering, ASCE
Year: 2017
Volume/Pages: 29(8), 04017062
Impact Factor: 3.1
Link: https://doi.org/10.1061/(ASCE)MT.1943-5533.0002271

71. A review on application of structural adhesives in concrete and steel–concrete

composite and factors influencing the performance of composite connections
Author(s): Kumar, P., Chaudhary, S., and Patnaik, A.
Journal: International Journal of Adhesion and Adhesives
Year: 2017
Volume/Pages: 77, 1-14
Impact Factor: 3.2
Link: https://doi.org/10.1016/j.ijadhadh.2017.06.001

72. Explicit expressions for inelastic design quantities in composite frames considering effects of nearby columns and floors
Author(s): Ramnavas, M. P., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Structural Engineering and Mechanics
Year: 2017
Volume/Pages: 64, 437-447
Impact Factor: 2.2
Link: https://doi.org/10.12989/sem.2017.64.4.437

73. Lateral force microscopic examination of interfacial transition zone in ceramic concrete
Author(s): Siddique, S., Shrivastava, S., and Chaudhary, S.
Journal: Construction and Building Materials
Year: 2017
Volume/Pages: 155, 688-725
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2017.08.045

74. An element incorporating cracking for reinforced concrete skeletal structures at service load
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Advances in Structural Engineering
Year: 2016
Volume/Pages: -
Impact Factor: 2.1
Link: https://doi.org/10.1177/1369433216673642

75. Rapid prediction of inelastic bending moments in RC beams considering cracking
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Computers and Concrete
Year: 2016
Volume/Pages: 18(6), 1113-1134
Impact Factor: 2.9
Link: https://doi.org/10.12989/cac.2016.18.6.1113

76. Rapid prediction of moments in high-rise composite frames considering cracking and time-effects
Author(s): Pendharkar, U., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Periodica Polytechnica Civil Engineering
Year: 2016
Volume/Pages: -
Impact Factor: 2
Link: https://doi.org/10.3311/PPci.8210

77. Mechanical and durability properties of waste rubber fiber concrete with and

without silica fume
Author(s): Gupta, T., Sharma, R. K., and Chaudhary, S.
Journal: Journal of Cleaner Production
Year: 2016
Volume/Pages: 112, 702-711
Impact Factor: 9.7
Link: https://doi.org/10.1016/j.jclepro.2016.07.086

78. A tension stiffening model for analysis of RC flexural members under service load
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Computers and Concrete
Year: 2016
Volume/Pages: 17(1), 29-51
Impact Factor: 2.9
Link: https://doi.org/10.12989/cac.2016.17.1.29

79. Performance based evaluation of ISF slag as a substitute of natural sand in concrete
Author(s): Tripathi, B., and Chaudhary, S.
Journal: Journal of Cleaner Production
Year: 2016
Volume/Pages: 112, 673-683
Impact Factor: 9.7
Link: https://doi.org/10.1016/j.jclepro.2016.07.085

80. Influence of waste tyre fibers on strength, abrasion resistance and carbonation of concrete
Author(s): Gupta, T., Sharma, R. K., and Chaudhary, S.
Journal: Scientia Iranica
Year: 2015
Volume/Pages: 22(4), 1481-1489
Impact Factor: 1.4
Link: https://doi.org/10.24200/sci.2015.20334

81. Assessment of mechanical and durability properties of concrete containing waste rubber tire as fine aggregate
Author(s): Gupta, T., Chaudhary, S., and Sharma, R. K.
Journal: Construction and Building Materials
Year: 2015
Volume/Pages: 73, 562-574
Impact Factor: 7.4
Link: https://doi.org/10.1016/j.conbuildmat.2014.10.022

82. Rapid prediction of long-term deflections in composite frames
Author(s): Pendharkar, U., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Steel and Composite Structures
Year: 2015
Volume/Pages: 18, 547-563
Impact Factor: 4
Link: https://doi.org/10.12989/scs.2015.18.3.547

83. Cracked span length beam element for service load analysis of steel concrete composite bridges

Author(s): Ramnavas, M. P., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Computers & Structures
Year: 2015
Volume/Pages: 157, 201-208
Impact Factor: 4.4
Link: https://doi.org/10.1016/j.compstruc.2015.05.001

84. Rapid prediction of deflections in multi-span continuous composite bridges using neural networks
Author(s): Gupta, R. K., Kumar, S., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: International Journal of Steel Structures
Year: 2015
Volume/Pages: 15(4), 893-909
Impact Factor: 1.1
Link: https://doi.org/10.1007/s13296-015-0044-5

85. Impact resistance of concrete containing waste rubber fiber and silica fume
Author(s): Gupta, T., Sharma, R. K., and Chaudhary, S.
Journal: International Journal of Impact Engineering
Year: 2015
Volume/Pages: 83, 76-87
Impact Factor: 5.1
Link: https://doi.org/10.1016/j.ijimpeng.2015.03.002

86. Explicit expression for effective moment of inertia of RC beams
Author(s): Patel, K. A., Bhardwaj, A., Chaudhary, S., and Nagpal, A. K.
Journal: Latin American Journal of Solids and Structures
Year: 2014
Volume/Pages: 12, 542-560
Impact Factor: 1.4
Link: https://doi.org/10.1590/1679-78251512

87. Neural networks for deflections in continuous composite beams considering concrete cracking
Author(s): Chaudhary, S., Pendharkar, U., Patel, K. A., and Nagpal, A. K.
Journal: Iranian Journal of Science and Technology Transactions in Civil Engineering
Year: 2014
Volume/Pages: 38(C1+), 205-221
Impact Factor: 1.7
Link: https://doi.org/10.1007/s40996-014-0018-5

88. Analytical-numerical procedure for cracking effect in RC beams
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Engineering Computations
Year: 2014
Volume/Pages: 31(5), 986-1010
Impact Factor: 1.5
Link: https://doi.org/10.1108/EC-10-2012-0170

89. Effects of tendon on static and dynamic behavior of CFTA girder
Author(s): Vu, T. D., Lee, S. Y., Chaudhary, S., and Kim, D.
Journal: Steel and Composite Structures
Year: 2013

Volume/Pages: 15(5), 567-583
Impact Factor: 4
Link: https://doi.org/10.12989/scs.2013.15.5.567

90. Control of time-dependent effects in steel-concrete composite frames
Author(s): Varshney, L. K., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: International Journal of Steel Structures
Year: 2013
Volume/Pages: 13(4), 589-606
Impact Factor: 1.1
Link: https://doi.org/10.1007/s13296-013-0040-5

91. Strength and abrasion characteristics of ISF slag concrete at different w/c and sand replacements
Author(s): Tripathi, B., Misra, A., and Chaudhary, S.
Journal: Journal of Materials in Civil Engineering, ASCE
Year: 2013
Volume/Pages: 25(11), 1611-1688
Impact Factor: 3.1
Link: https://doi.org/10.1061/(ASCE)MT.1943-5533.0000630

92. Structural model updating of steel box girder bridge using modal flexibility based deflections
Author(s): Cui, J., Kim, D., Koo, K. Y., and Chaudhary, S.
Journal: Baltic Journal of Road and Bridge Engineering
Year: 2012
Volume/Pages: 7(4), 253-260
Impact Factor: 0.6
Link: https://doi.org/10.3846/1822-427X.2012.7.253-260

93. Neural networks for prediction of deflection in composite bridges
Author(s): Tadesse, Z., Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Journal: Journal of Constructional Steel Research
Year: 2012
Volume/Pages: 68(1), 138-149
Impact Factor: 4
Link: https://doi.org/10.1016/j.jcsr.2011.09.002

94. A probabilistic capacity spectrum strategy for the reliability analysis of bridge pile shafts considering soil structure interaction
Author(s): Kim, D., Chaudhary, S., Nocete, C. F., Wang, F., and Lee, D. H.
Journal: Latin American Journal of Solids and Structures
Year: 2011
Volume/Pages: 8(3), 291-303
Impact Factor: 1.4
Link: https://doi.org/10.1590/S1679-78252011000300005

95. Prediction of moments in composite frames considering cracking and time effects using neural network models
Author(s): Pendharkar, U., Chaudhary, S., and Nagpal, A. K.
Journal: Structural Engineering and Mechanics
Year: 2011
Volume/Pages: 39(2), 267-285

Impact Factor: 2.2
Link: https://doi.org/10.12989/sem.2011.39.2.267

96. A simplified model for nonlinear seismic response analysis of equipment cabinets in nuclear power plants
Author(s): Cho, S. G., Kim, D., and Chaudhary, S.
Journal: Nuclear Engineering and Design
Year: 2011
Volume/Pages: 241(8), 2750-2757
Impact Factor: 1.9
Link: https://doi.org/10.1016/j.nucengdes.2011.04.001

97. Neural networks for inelastic mid-span deflections in continuous composite beams
Author(s): Pendharkar, U., Chaudhary, S., and Nagpal, A. K.
Journal: Structural Engineering and Mechanics
Year: 2010
Volume/Pages: 36(2), 165-179
Impact Factor: 2.2
Link: https://doi.org/10.12989/sem.2010.36.2.165

98. Control of creep and shrinkage effects in steel concrete composite bridges with precast decks
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Journal: Journal of Bridge Engineering, ASCE
Year: 2009
Volume/Pages: 14(5), 336-345
Impact Factor: 3.1
Link: https://doi.org/10.1061/(ASCE)1084-0702(2009)14:5(336)

99. Service load behavior of low rise composite frames considering creep, shrinkage and cracking
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Journal: Latin American Journal of Solids and Structures
Year: 2008
Volume/Pages: 5(4), 237-258
Impact Factor: 1.4
Link: https://doi.org/10.1590/S1679-78252008.000400004

100. Neural network for bending moment in continuous composite beams considering cracking and time effects in concrete
Author(s): Pendharkar, U., Chaudhary, S., and Nagpal, A. K.
Journal: Engineering Structures
Year: 2007
Volume/Pages: 29(9), 2069-2079
Impact Factor: 5.6
Link: https://doi.org/10.1016/j.engstruct.2007.01.014

101. Bending moment prediction for continuous composite beams by neural networks
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Journal: Advances in Structural Engineering
Year: 2007
Volume/Pages: 10(4), 439-454
Impact Factor: 2.1

Link: https://doi.org/10.1260/136943307783012123

102. A hybrid procedure for cracking, creep, shrinkage and thermal gradient in continuous composite bridges
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Journal: Latin American Journal of Solids and Structures
Year: 2007
Volume/Pages: 4(3), 203-227
Impact Factor: 1.4
Link: https://doi.org/10.1590/S1679-78252007.000300003

103. An analytical-numerical procedure for cracking and time-dependent effects in continuous composite beams under service load
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Journal: Steel and Composite Structures
Year: 2007
Volume/Pages: 7(3), 219-240
Impact Factor: 4
Link: https://doi.org/10.12989/scs.2007.7.3.219

104. Hybrid procedure for cracking and time-dependent effects in composite frames at service load
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Journal: Journal of Structural Engineering, ASCE
Year: 2007
Volume/Pages: 133(2), 166-175
Impact Factor: 3.7
Link: https://doi.org/10.1061/(ASCE)0733-9445(2007)133:2(166)

Books

1. Testing & Evaluation of Civil Engineering Materials
Author(s): Chaudhary, S., Patel, K. A.
Year: 2023
ISBN: 9780128189610

2. Recent Advances in Structural Engineering and Construction Management - Select Proceedings of ICSMC 2021
Author(s): Hau, K. K., Gupta, A. K., Chaudhary, S., Gupta, T. (Editors)
Year: 2022
ISBN: 9789811940392

3. New Materials in Civil Engineering
Author(s): Samui, P., Kim, D., Iyer, N., and Chaudhary, S. (Editors)
Year: 2020
ISBN: 9780128189610

4. Lecture Notes in Civil Engineering: Advances in Sustainable Construction Materials - Select Proceedings of ASCM 2019
Author(s): Pancharathi, R.K., Sangoju, B., and Chaudhary, S. (Editors)
Year: 2020
ISBN: 9789811533631

5. Current Challenges in Structural Engineering
Author(s): Chaudhary, S., and Tripathi, B. (Editors)
Year: 2013
ISBN: 97898382880738

6. Sustainable Concrete Infrastructure Development
Author(s): Misra, A., and Chaudhary, S. (Editors)
Year: 2009
ISBN: 9788190872317

7. Recent trends in Geotechnical and Structural Engineering
Author(s): Chaudhary, S., Tiwari, S. K., and Chaudhary, M. (Editors)
Year: 2007
ISBN:

Book Chapters

1. Conventional and Emerging Materials Used in FRP-Concrete Composites for Earthquake Resistance
Author(s): Gupta, S., and Chaudhary, S.
Book: RC Structures Strengthened with FRP for Earthquake Resistance
Year: 2024
ISBN: 978-981-97-0101-8
Page: 193-205

2. Sustainable Construction
Author(s): Chaudhary, S.
Book: Technology of Home Knowledge Series – MASTERCLASS, created by Association of Infrastructure Industry (India) and JK Cement Limited
Year: 2022
ISBN:
Page:

3. Large Scale Waste Utilisation in Sustainable Composite Materials for Structural Applications
Author(s): Gupta, S., and Chaudhary, S.
Book: Emerging Trends of Advanced Composite Materials in Structural Applications
Year: 2021
ISBN: 9789811616884, 9811616884
Page: 169–177

4. Effect of Different Hydrophobic Treatments on Properties of Recycled Aggregate Concrete
Author(s): Mandolia, R., Siddique, S., and Chaudhary, S.
Book: Lecture Notes in Civil Engineering
Year: 2020
ISBN: 9789811533631
Page: 121–130

5. Use of Fly Ash for the Development of Sustainable Construction Materials
Author(s): Gupta, S., and Chaudhary, S.
Book: New Materials in Civil Engineering

Year: 2020
ISBN: ““sƒ #ƒ “ sS2Â #ƒ “ sS
Page: 677–689

Conference Proceedings

1. Upcycling Waste Tyre Rubber as Innovative Slip and Fall Event Reducing (SAFER) Concrete Flooring
Author(s): Gupta, S., Patra, S. K., and Chaudhary, S.
Conference: Proc., Recent Advances in Waste Minimization & Utilization-2024 (RAWMU 2024)
Date: April 23-24, 2024
Place: Jalandhar, India
Year: 2024

2. AI-driven Urban Planning: Enhancing Infrastructure and Livability
Author(s): Akash, R.S.K., Singh, S.K., and Chaudhary, S.
Conference: Proc. International Conference on Applied Mathematics and Mechanics (ICAMM 2023)
Date: October 18-20, 2023
Place: Indore, India
Year: 2023

3. Understanding the significance of quality control on the life cycle of concrete structures under corrosion
Author(s): Gupta, S., and Chaudhary, S.
Conference: Proc., 10th Asia-Pacific Young Researchers and Graduates Symposium (YRGS 2023)
Date: December 06-08, 2023
Place: Perth, Australia
Year: 2023

4. Recirculation strategy for end of life concrete structures as low carbon construction materials
Author(s): Gupta, S., and Chaudhary, S.
Conference: Proc., International Symposium on Life Cycle Maintenance of Concrete Infrastructure
Date: September 25-26, 2023
Place: Hong Kong, China
Year: 2023

5. Advancing 3D printing of concrete using heat-cured geopolymer
Author(s): Gupta, S, Sharma, A., Lazorenko, G., and Chaudhary, S.
Conference: Proc., Materials Science, Form-Building Technologies and Equipment 2023 (ICMSTE 2023)
Date: May 16-19, 2023
Place: Yalta, Russia
Year: 2023

6. A novel mathematical model for temporal effect of buildup and breakdown on cement rheology
Author(s): Gupta, S., Lal, D.N., Sharma, A., and Chaudhary, S.

Conference: Proc. International Conference on Applied Mathematics and Mechanics (ICAMM 2023)
Date: October 18-20, 2023
Place: Indore, India
Year: 2023

7. Resource sustainability and the bubble of carbon neutrality in cement manufacturing industry
Author(s): Gupta, S, and Chaudhary, S.
Conference: Proc., International Conference on Resource Sustainability (icRS 2023)
Date: August 07-08, 2023
Place: Guildford, United Kingdom
Year: 2023

8. A literature review on the effect of using ceramic waste as supplementary cementitious material in cement composites on workability and compressive strength
Author(s): Jain, P., Gupta, R., and Chaudhary, S.
Conference: Materials Today: Proceedings
Date:
Place:
Year: 2022

9. A step-by-step method for time-dependent analysis of composite beams
Author(s): Patel, K.A., Shewarega, A., Chaudhary, S., and Nagpal, A. K.
Conference: Proc., 12th Structural Engineering Convention (SEC 2022)
Date: December 19-22, 2022
Place: Jaipur, ASPS Conference Proceedings
Year: 2022

10. Analysis of steel fiber reinforced concrete wall panels under compression, flexural and impact loading
Author(s): Choudhary, S., Jain, A., Bhavsar, H., Chaudhary, S., and Choudhary, R.
Conference: Materials Today: Proceedings
Date:
Place:
Year: 2021

11. Abrasion resistance and sorptivity characteristics of SCC containing granite waste
Author(s): Jain, A., Choudhary, R., Gupta, R., Chaudhary, S.
Conference: Materials Today: Proceedings
Date:
Place:
Year: 2020

12. Valorization of waste rubber tyre fiber in functionally graded concrete
Author(s): Choudhary, S., Chaudhary, S., Jain, A., Gupta, R.
Conference: Materials Today: Proceedings
Date:
Place:
Year: 2020

13. Application of Raman Spectroscopy for Characterization of Natural Stone Sludge Waste

Author(s): Gupta, V., Pathak, D. K., Kumar, R., Chaudhary, S.
Conference: Materials Today: Proceedings
Date:
Place:
Year: 2020

14. Assessment of effect of rubber tyre fiber on functionally graded concrete
Author(s): Choudhary, S., Chaudhary, S., Jain, A., Gupta, R.
Conference: Materials Today: Proceedings
Date:
Place:
Year: 2020

15. Segregation studies on light weight aggregate concrete
Author(s): Gandhi, S., Gupta, S., and Chaudhary, S.
Conference: Proc., Ninth Asia-Pacific Young Researchers & Graduates Symposium
Date: December 19-20, 2019
Place: Shanghai, China
Year: 2019

16. Characterization of different types of fly ash collected from various sources in Central India
Author(s): Gupta, V., Siddique, S., Chaudhary, S.
Conference: Materials Today: Proceedings ICMPC 2019
Date:
Place:
Year: 2019

17. Porosity based design - An improved design approach for pervious concrete
Author(s): Agrawal, H., Modhe, S., Gupta, S., and Chaudhary, S.
Conference: Proc., Ninth Asia-Pacific Young Researchers & Graduates Symposium
Date: December 19-20, 2019
Place: Shanghai, China
Year: 2019

18. Assessment of fresh and hardened properties of concrete containing polythene bag
Author(s): Gupta, T., Chouhan, D. S., Jain, A., Sharma, R. K., Chaudhary, S., and Jain, S.
Conference: Proc., Advances in Concrete, Structural and Geotechnical Engineering
Date:
Place: New Delhi, India
Year: 2018

19. Utilisation of PET plastic waste as fine aggregate in concrete
Author(s): Saxena, R., Siddique, S., Gupta, T., Sharma, R.K., and Chaudhary, S.
Conference: Proc., National Conference on Advances in Sustainable Construction Materials
Date: March 15-16, 2018
Place: Warangal, India
Year: 2018

20. Residual mechanical properties of rubber fiber concrete exposed to elevated temperature
Author(s): Gupta, T., Siddique, S., Sharma, R.K., and Chaudhary, S.

Conference: Proc., National Conference on Advances in Sustainable Construction Materials
Date: March 15-16, 2018
Place: Warangal, India
Year: 2018

21. Behaviour of adhesive bonded and mechanically connected steel concrete composite under impact loading
Author(s): Kumar, P., Chaudhary, S. and Gupta, R.
Conference: Procedia Engineering
Date:
Place:
Year: 2017

22. Research, education and training as part of an action plan to start up a recycling policy in Jaipur, India
Author(s): Tripathi, B., Boehme, L., Chandra, T., and Chaudhary, S.
Conference: Proc., Central Europe towards Sustainable Building 2016
Date: June 22-24, 2016
Place: Prague, Czech Republic
Year: 2016

23. Effect of elevated temperatures on rubberized geopolymer mortar
Author(s): Banu, S., and Chaudhary, S.
Conference: Proc., International Conference on Recent Innovations in Engineering and Technology
Date: November 05-06, 2016
Place: Gunupur, India
Year: 2016

24. Effect of different parameters on the compressive strength of rubberized geopolymer concrete
Author(s): Banu, S., Dave, U., and Chaudhary, S.
Conference: Multi-disciplinary Sustainable Engineering: Current and Future Trends: Proc., 5th Nirma University International Conference on Engineering
Date: November 26-28, 2016
Place: Ahmedabad, India
Year: 2016

25. Effect of different type of curing on fly ash and slag based geopolymer concrete
Author(s): Banu, S., Dave, U., and Chaudhary, S.
Conference: Proc., International Conference on Recent Innovations in Engineering and Technology
Date: November 05-06, 2016
Place: Gunupur, India
Year: 2016

26. Strength and carbonation study on fly ash based geopolymer mortar
Author(s): Banu, S., Choudhary, S., and Chaudhary, S.
Conference: Proc., 7th International Conference of Asian Concrete Federation on Sustainable Concrete for now and the future
Date: Oct. 30-Nov. 02, 2016
Place: Hanoi, Vietnam
Year: 2016

27. A comparative study of fly ash bricks made with blend of clay brick waste and stone dust
Author(s): Haldia, A., Siddique, S., Shrivastava, S., and Chaudhary, S.
Conference: Proc., Advances in Construction Technology and Management
Date: February 19-20, 2015
Place: Nagpur, India
Year: 2015

28. Influence of waste rubber tyre particles in concrete pavement
Author(s): Gupta, T., Chaudhary, S., and Sharma, R. K.
Conference: Proc., Seventh Asia-Pacific Young Researchers & Graduates Symposium
Date: August 20-21, 2015
Place: Kuala Lumpur, Malaysia
Year: 2015

29. Durability and dimensional stability of concrete containing zinc slag as sand
Author(s): Tripathi, B., Chandra, T., & Chaudhary, S.
Conference: ACI Special Publication
Date:
Place:
Year: 2015

30. An analytical-numerical procedure incorporating cracking in RC Frames at service load
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Conference: Proc., Sixth Asia-Pacific Young Researchers & Graduates Symposium
Date: July 31-Aug 01, 2014
Place: Thailand
Year: 2014

31. Rapid prediction of long term deflection in high rise composite frames using neural networks
Author(s): Chaudhary, S., Pendharkar, U., Patel, K. A., and Nagpal, A. K.
Conference: Proc., Sixth Asia-Pacific Young Researchers & Graduates Symposium
Date: July 31-Aug 01, 2014
Place: Thailand
Year: 2014

32. Flexural strength, compressive strength and workability of waste rubber concrete
Author(s): Gupta, T., Tripathi, B., Sharma, R. K., and Chaudhary, S.
Conference: Proc., Fifth Asia-Pacific Young Researchers & Graduates Symposium
Date: October 15-16, 2013
Place: Jaipur
Year: 2013

33. Experimental investigations for shear bond strength of steel and concrete bonded by epoxy
Author(s): Kumar, P. and Chaudhary, S.
Conference: Proc., Fifth Asia-Pacific Young Researchers & Graduates Symposium
Date: October 15-16, 2013
Place: Jaipur
Year: 2013

34. Suitability of ISF Slag as fine aggregate in concrete
Author(s): Tripathi, B. and Chaudhary, S.
Conference: Proc., Fifth Asia-Pacific Young Researchers & Graduates Symposium
Date: October 15-16, 2013
Place: Jaipur
Year: 2013

35. An element incorporating cracking in reinforced concrete beams at service load
Author(s): Patel, K. A., Chaudhary, S., and Nagpal, A. K.
Conference: Proc., Fifth Asia-Pacific Young Researchers & Graduates Symposium
Date: October 15-16, 2013
Place: Jaipur
Year: 2013

36. Corrosion performance of high volume slag concrete at different W/C
Author(s): Tripathi, B., and Chaudhary, S.
Conference: Proc., Twelfth International Conference on Recent Advances in Concrete Technology and Sustainability Issues
Date: Oct. 30-Nov. 02, 2012
Place: Prague
Year: 2012

37. Durability of concrete containing ISF slag as partial replacement of sand
Author(s): Tripathi, B., Misra, A., and Chaudhary, S.
Conference: H., Justnes, and S., Jacobsen, ed., Proc., International Congress on Durability of Concrete
Date: June 18-21, 2012
Place: Norway
Year: 2012

38. An efficient finite-element model for flexible composite structures
Author(s): Gupta, R. K ., Patel, K. A., Chaudhary, S. and Nagpal, A. K.
Conference: Proc., Fourth Asia-Pacific Young Researchers & Graduates Symposium
Date: December 04-05, 2012
Place: Hong Kong
Year: 2012

39. Experimental assessment of drying shrinkage of ISF slag concrete
Author(s): Tripathi, B. and Chaudhary, S.
Conference: Proc., Fourth Asia-Pacific Young Researchers & Graduates Symposium
Date: December 04-05, 2012
Place: Hong Kong
Year: 2012

40. Cost optimization of composite beams using genetic algorithm and artificial neural network
Author(s): Alankar, K. and Chaudhary, S.
Conference: Proc., 2012 International Conference on Computer Technology and Science
Date: August 18-19, 2012
Place: New Delhi
Year: 2012

41. Permeability of concrete containing pyrometallurgical slag as partial replacement

of sand
Author(s): Tripathi, B., Misra, A., and Chaudhary, S.
Conference: D.H., Bager, and J., Silfwerbrand, ed., Concrete Structures for Sustainable Community
Date: fib Symposium Stockholm 2012, June 14-21, Stockholm, Sweden
Place:
Year: 2012

42. Spherical elastomeric bearing for noise and vibration reduction in railway bridges
Author(s): Kim, D., Park, J., Chaudhary, S., and Miah, M. S.
Conference: Proc., Asia-Pacific Young Researchers & Graduates Symposium 2011
Date: March 25-26, 2011
Place: Taipei, Taiwan
Year: 2011

43. A study on the nonlinear characteristics of electrical equipment cabinets under strong seismic motion
Author(s): Cho, S. G., Li, Y. Il, Kim, D., Chaudhary, S., and Yoo, J. S.
Conference: Transactions, SMiRT 21
Date: November 06-11, 2011
Place: New Delhi, India
Year: 2011

44. Dynamic behaviour of steel-concrete composite floors
Author(s): Chaudhary, S., Patel, K. A., Kim, D., Cho, S. G., and Ali, A.
Conference: Proc., 27th Conference of Korea Institute of Structural Maintenance Inspection and Korea Infrastructure Safety Corporation (Spring 2011)
Date: May 20, 2011
Place: Seoul, Korea
Year: 2011

45. Seismic behaviour of steel-concrete composite floors in thermal power plants
Author(s): Chaudhary, S., Kim, D., Cho, S. G., Joe, Y. H., and Patel, K. A.
Conference: Proc., Earthquake Engineering Society of Korea 2011
Date: March 18, 2011
Place: Seoul, Korea
Year: 2011

46. Service load behaviour of epoxy bonded steel-concrete composite bridges
Author(s): Patel, K. A., Kim, D., Chaudhary, I. P., and Chaudhary, S.
Conference: Proc., Asia-Pacific Young Researchers & Graduates Symposium 2011
Date: March 25-26, 2011
Place: Taipei, Taiwan
Year: 2011

47. Dynamic behaviour of steel-concrete composite shear wall
Author(s): Chaudhary, S., Ali, A. Patel, K. A., Kim, D., and Cho, S. G.
Conference: Proc., The 2011 World Congress on Advances in Structural Engineering and Mechanics
Date: September 18-22, 2011
Place: Seoul, Korea
Year: 2011

48. Seismic analysis of steel-concrete composite walls of nuclear power plant structures
Author(s): Chaudhary, S., Ali, A., Kim, D., and Cho, S. G.
Conference: Transactions, SMiRT 21
Date: November 06-11, 2011
Place: New Delhi, India
Year: 2011

49. Strengthening of Steel-concrete composite beams
Author(s): Kumari, S., and Chaudhary, S.
Conference: Proc. International conference on Innovative World of Structural Engineering (ICIWSE-2010)
Date: December 25-27, 2010
Place: Aurangabad, India
Year: 2010

50. Finite element study of a bonded steel and concrete composite beam
Author(s): Kumari, S., Patel, K. A., and Chaudhary, S.
Conference: Proc., International Conference on Innovative World of Structural Engineering (ICIWSE-2010)
Date: December 25-27, 2010
Place: Aurangabad, India
Year: 2010

51. Effect of flexibility of shear connectors on service load behavior of steel-concrete composite structures
Author(s): Chaudhary, S., and Kumari, S.
Conference: Proc., Int. Conf. Advances in Mechanical and Building Sciences in the 3rd Millenium
Date: December 14-16, 2009
Place: Vellore, India
Year: 2009

52. Non-Linear behaviour of steel-concrete composite frames
Author(s): Patel, K. A., Kumari, S., and Chaudhary, S.
Conference: Proc. Sustainable Concrete Infrastructure Development (SCID-2009)
Date: May 19-20, 2009
Place: Jaipur, India
Year: 2009

53. Simplified technique for the design of steel concrete composite beams using artificial neural networks
Author(s): Chaudhary, S., and Nagpal, A. K.
Conference: Proc., the First International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering
Date: September 01-04, 2009
Place: Funchal, Madeira, Portugal
Year: 2009

54. Neural network-based structural monitoring and damage detection
Author(s): Chaudhary, S., and Kumari, S.
Conference: Proc., Civil Engg. Conference- Innovation without limits
Date: Sept. 18-19, 2009

Place: Hamirpur, India
Year: 2009

55. Analysis and behaviour of composite structures at service load
Author(s): Chaudhary, S., and Nagpal, A. K.
Conference: Proc., Int. Conf. Advances in Concrete, Structural and Geotechnical Engineering
Date: October 25-27, 2009
Place: Pilani, India
Year: 2009

56. Mortarless masonry system for accelerated construction
Author(s): Naqvi, S. A. A., Bajpai, S., and Chaudhary, S.
Conference: Proc. Recent Trends in Geotechnical and Structural Engineering (RTGSE-2007)
Date: December 22-23, 2007
Place: Jaipur, India
Year: 2007

57. Mortarless Masonry: An Overview
Author(s): Naqvi, S. A. A., and Chaudhary, S.
Conference: Proc. International Conference on Recent Developments in Structural Engineering (RDSE-2007)
Date: August 30-September 01, 2007
Place: Manipal, India
Year: 2007

58. Neural network model for short term inelastic moments at interior supports of continuous composite beams
Author(s): Pendharkar, U., Chaudhary, S., and Nagpal, A. K.
Conference: Proc. National Seminar on Soft Computing Methodology-07
Date: March 19-20, 2007
Place: UEC Ujjain, India
Year: 2007

59. Time-dependent behavior of continuous composite beams
Author(s): Chaudhary, S., Pendharkar, U., and Nagpal, A. K.
Conference: Proc., Third Int. Conf. Steel and Composite Structures
Date: July 30-August 01, 2007
Place: Manchester, UK
Year: 2007

60. Sensitivity analysis for predicting parameters for ANN for bending moment in continuous composite beams considering concrete cracking
Author(s): Pendharkar, U., Chaudhary, S., and Nagpal, A. K.
Conference: Proc., Recent Advances in Computational Mechanics and Simulation
Date: December 08-10, 2006
Place: IIT Guwahati, India
Year: 2006

61. Composite steel-concrete construction
Author(s): Bharti, S. D., and Chaudhary, S.
Conference: Proc., National Seminar on Recent Trends in Civil Engineering
Date: Feb. 22-23, 2002
Place: MBM Engg. College, Jodhpur, India

Year: 2002

62. Effect of grouting and reinforcement on hollow block masonry
Author(s): Chaudhary, S., and Gupta, R. C.
Conference: Proc., National Seminar on Recent Trends in Civil Engineering
Date: Feb. 22-23, 2002
Place: MBM Engg. College, Jodhpur, India
Year: 2002

Patents

1. Cow dung-based lightweight construction materials and method
Author(s): Gupta, S., and Chaudhary, S.
Year: 2024
Application Number: 202421010279
Grant Number: -
Grant Date: -
Description: The present invention provides a composition and process where cow dung is used as a natural foaming agent for manufacturing of lightweight concrete, bricks and blocks.

2. Composition for preparation of Paver Block utilizing rubber waste
Author(s): Authors: Gupta, T., Sharma, R. K., Chaudhary, S., and Siddique, S
Year: 2020
Application Number: 202011018399 A
Grant Number: 385236
Grant Date: Dec. 27, 2021
Description: The present invention relates to a method of preparation of paver block utilizing rubber waste. The object of the proposed invention is to utilize waste tyre material and replacing the fine aggregate by waste tyre rubber ash (in powder form) and rubber fibers (in shredded form). The composition for preparation of sustainable rubcrete paver blocks comprises of cement (15.83%, 365 kg), fine aggregate (26.50%, 611 kg), coarse aggregate (48.79%, 1125 kg), waste rubber ash (1.69%, 39 kg), waste rubber fibers (1.34%, 31 kg), water (5.55%, 128 kg) and super plasticizer (0.30%, 7 kg) for production of one cubic meter concrete. Proposed paver blocks have unique feature of high energy absorption capacity, better abrasion resistance, and less water absorption. Following invention is described in detail with the help of Figure 1 of sheet 1 showing schematic presentation with dimensions of the proposed sustainable paver block.

3. Method of Preparation of Conplas Paver Block Utilizing waste Polythene
Author(s): Gupta, T., Chaudhary, S., Sharma, R. K., and Jain, S.
Year: 2020
Application Number: 202011002264
Grant Number: 396218
Grant Date: May 5, 2022
Description: The present invention relates to a method of preparation of paver block utilizing waste polythene bags. The object of the proposed invention is to utilize sustainable waste material and analogously minimizing the consumption of fine aggregate by replacing it with waste polythene bags in shredded form. The composition for preparation of sustainable conplas paver blocks comprises of cement (17.15%, 416.67 kg), fine aggregate (26.79%, 650.95kg), coarse aggregate (48.15%, 1170kg), waste polythene bags (1.71%, 41.55kg) and water (6.19%, 150.5kg) for production of one cubic meter concrete. Conplas paver blocks have unique feature of high impact resistance and energy absorption capacity.

Following invention is described in detail with the help of Figure 1 of sheet 1 showing schematic presentation with dimensions of the sustainable conplas paver block.

Research Projects

1. Inspiring the researchers of tomorrow in sustainable concrete construction
Year: 2024-2025
Funded By: SPARC and UKIERI
Collaborator(s): University of Plymouth, UK and NIT Warangal, India
Project Type: Sponsored Research Project
Role: As Principal Investigator

2. Technology Dissemination of Compressed Colored Composite for a wide range of products to support sustainable rural infrastructure
Year: 2023-2025
Funded By: DST, GoI
Collaborator(s): TIET Patiala, India
Project Type: Sponsored Research Project
Role: As Principal Investigator

3. PARVAT (Prevention of accidents in hilly routes by virtue of automated technology)
Year: 2023-2024
Funded By: DRISHTI-CPS, IIT Indore
Collaborator(s): Student PI: Himanshu Khati, Benjamin Basumatary
Project Type: Sponsored Research Project
Role: As a Guide

4. Innovative and sustainable fibre-reinforced recycled aggregate concretes for structural applications
Year: 2023-2024
Funded By: INSA, DST, GOI
Collaborator(s): ISRF: Dr. Thanongsak Imjai
Project Type: Sponsored Research Project
Role: As Scientist Mentor

5. GOBAiR - a novel cow dung based foaming agent for developing sustainable light weight construction materials
Year: 2023-2024
Funded By: IIT Indore
Collaborator(s): TRF: Dr. Sanchit Gupta
Project Type: Sponsored Research Project
Role: As Scientist Mentor

6. Sustainable solution for limestone shortage in cement manufacturing through Ca-rich bio ash
Year: 2022-2024
Funded By: DST, GOI
Collaborator(s): NPDF: Dr. Ashita Singh
Project Type: Sponsored Research Project
Role: As Scientist Mentor

7. Carbon-neutral technologies for recycling large-tonnage waste from fuel energy

with the production of functional geopolymer materials
Year: 2022-2024
Funded By: Government of the Russian Federation
Collaborator(s): Platov South-Russian State Polytechnic University (NPI), Russia
Project Type: Sponsored Research Project
Role: As Principal Investigator

8. A digital twin based real time traffic regulation system for risk management and failure prevention in bridges
Year: 2022-2023
Funded By: DRISHTI-CPS, IIT Indore
Collaborator(s): Student PI: Ayush
Project Type: Sponsored Research Project
Role: As a Guide

9. Real time quality control tool for fresh state concrete using a hydrostatic digital twin model
Year: 2022-2023
Funded By: DRISHTI-CPS, IIT Indore
Collaborator(s): Student PI: Parth Dwivedi
Project Type: Sponsored Research Project
Role: As a Guide

10. PA cyber physical system for low energy HVAC solutions based on natural thermal cycles and adaptive thermal comfort for smart cities
Year: 2022-2023
Funded By: DRISHTI-CPS, IIT Indore
Collaborator(s): Student PI: Sumer Thakur
Project Type: Sponsored Research Project
Role: As a Guide

11. A comprehensive rheology based thixotropic fluid flow model for improved control on 3D printing of concrete
Year: 2021-2024
Funded By: SERB, DST, GOI
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Principal Investigator

12. Waste characterization and possible gainful utilization of induction melting furnace dust
Year: 2021-2022
Funded By: Jaideep Ispat & Alloys Pvt. Ltd., Moira Sariya, India
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Co-Principal Investigator

13. Safeguarding heritage structures using seismic metamaterials
Year: 2019-2021
Funded By: SPARC, MHRD
Collaborator(s): UNIVERSITÉ AIX-MARSEILLE, France and IMPERIAL COLLEGE LONDON, UK
Project Type: Sponsored Research Project

Role: As Principal Investigator

14. Utilization of Bamboo Strip as reinforcement in concrete
Year: 2019-2020
Funded By: TEQIP, MHRD
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Co-Principal Investigator

15. Investigation of cracks in concrete PSC Girder on Bridge no 10 in RAU to TIHI new Broad Gauge line section
Year: 2019
Funded By: Western Railway
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

16. Natural-coloured functionally graded rubberised geopolymer system: A cement-less solution for optimised concrete paver manufacturing
Year: 2018-2020
Funded By: DST, GOI
Collaborator(s): University of Edinburgh, UK
Project Type: Sponsored Research Project
Role: As Principal Investigator

17. Investigations for structural safety of Mughal Museum being made by Precast Technique and subsequent technical suggestions
Year: 2018-2019
Funded By: U.P Rajkiya Nirman Nigam Ltd.
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

18. Third Party Quality Assurance for Infrastructure of New Campus of IIM Udaipur
Year: 2018
Funded By: CPWD
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

19. Sustainable and economical functionally graded rubberized concrete pavements
Year: 2017-2021
Funded By: DST, GOI
Collaborator(s): University of Carthage, Tunisia
Project Type: Sponsored Research Project
Role: As Principal Investigator

20. Vetting of Design and Drawing of 90 meter Arch, 252 meter suspension bridge & 90 meter truss bridge at Rajim, Raipur (C.G.)
Year: 2017
Funded By: AQUATIC Pump Industries, Indore (India)
Collaborator(s): -
Project Type: Consultancy Project

Role: As Principal Investigator

21. Utilization of plastic waste in concrete: Feasibility studies
Year: 2016-2019
Funded By: DST, GOI
Collaborator(s): MNIT Jaipur
Project Type: Sponsored Research Project
Role: As Principal Investigator

22. Waste utilisation in concrete as aggregate: Asian perspective
Year: 2016-2019
Funded By: Asian Concrete Federation
Collaborator(s): Researchers from China, Hong Kong and Thailand
Project Type: Sponsored Research Project
Role: As Principal Investigator

23. Durability studies on geopolymer concrete containing waste rubber fibre as partial replacement of sand
Year: 2015-2017
Funded By: DST, GOI
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Scientist Mentor

24. Experimental investigations of bond characteristics of steel-concrete composite interface connected by adhesive bonding
Year: 2015-2016
Funded By: Institution of Engineers (India)
Collaborator(s): Student PI: Pankaj Kumar
Project Type: Sponsored Research Project
Role: As a Guide

25. Proof checking of structural design and drawing of bridge at Gambhiri river and ROB at Hindaun Bypass
Year: 2014-2016
Funded By: RSRDC Ltd., Jaipur
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

26. Proof Checking of Structural Design/Drawings for C/o 500 Bedded Boys Hostel and 210 Bedded Girls Hostel with provision for future vertical extension on III floor
Year: 2014-2015
Funded By: CPWD, Jaipur
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

27. Proof Checking of Structural Design of Multistoried residential apartment located at Sun-City, Jaipur-Bikaner Highway, Jaipur
Year: 2014
Funded By: Apeksha Infrastructures Pvt. Ltd., Jaipur
Collaborator(s): -

Project Type: Consultancy Project
Role: As Principal Investigator

28. Experimental and analytical studies for the short term and long term behavior of epoxy bonded steel-concrete composite bridges
Year: 2012-2015
Funded By: DST, GOI
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Principal Investigator

29. Technical evaluation/quality assessment of PQC mix for cement content
Year: 2012-2013
Funded By: Airport Authority of India, Jaipur
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

30. Proof checking of structural design and drawing of three ROB's at Makrana, Kishangarh and Ajmer in Rajasthan
Year: 2012-2013
Funded By: Multimedia Consultants Pvt. Ltd., Ahmadabad, India
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

31. Proof checking design of substructure of seventeen major railway bridges in the Swarupganj-Abu Road section of Ajmer division of north western railway
Year: 2011-2012
Funded By: Rail Vikas Nigam Limited
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

32. Durability of concrete containing zinc slag as partial replacement of sand
Year: 2010-2013
Funded By: DST, GOI
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Scientist Mentor

33. Development of a highly efficient procedure and GUI equipped software for the service load analysis of composite structures
Year: 2008-2011
Funded By: DST, GOI
Collaborator(s): -
Project Type: Sponsored Research Project
Role: As Principal Investigator

34. Performance evaluation of interlocking brick/block masonry
Year: 2007-2008
Funded By: Institution of Engineers (India)
Collaborator(s): Student PI: Ahmed Naqvi

Project Type: Sponsored Research Project
Role: As a Guide

35. Knowledge incubation for technical education under Technical Education Quality Improvement Program of MHRD
Year: -
Funded By: MHRD
Collaborator(s): -
Project Type: Institute Level Project
Role: -

36. Proof Checking of Various designs and drawings of Rajasthan Rural Water Supply and Mitigation Project
Year: -
Funded By: Larsen & Toubro Limited. Ltd., Chennai
Collaborator(s): -
Project Type: Consultancy Project
Role: As Principal Investigator

Supervised Dissertations

1. To be declared
Name: Manish
Year: Ongoing
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

2. To be declared
Name: Krishna
Year: Ongoing
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

3. To be declared
Name: Noman
Year: Ongoing
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

4. Optimization of Sustainable Construction Materials for Industrial Applications
Name: Sanchit Gupta
Year: 2024
Co-Supervisors: -
Degree: PhD Thesis Awarded

5. Utilization of fine micron size waste of vitrified porcelain stoneware tiles for sustainable and durable concrete
Name: Pooja Jain
Year: 2023
Co-Supervisors: Dr. Rajesh Gupta
Degree: PhD Thesis Awarded

6. Raman Spectroscopic Study of Building Construction Materials
Name: Chetan Shakti Pandey
Year: 2022
Co-Supervisors: Dr. Rajesh Kumar
Degree: MTech and MSc Awarded/Ongoing

7. Performance assessment of rubberised self-compacting concrete
Name: Akshay Thakare
Year: 2022
Co-Supervisors: -
Degree: PhD Thesis Awarded

8. Strength, durability, ductility and microstructure investigation of functionally graded concrete containing rubber fiber as replacement of fine aggregate
Name: Sumit Choudhary
Year: 2022
Co-Supervisors: Dr. Rajesh Gupta
Degree: PhD Thesis Awarded

9. Finite element simulations of Nanoindentation on FCC single crystals
Name: Eli Pradeep
Year: 2022
Co-Supervisors: Dr. Indrasen Singh
Degree: MTech and MSc Awarded/Ongoing

10. Structural health monitoring of Railway Bridge
Name: Bagle Sushil Sukalal
Year: 2022
Co-Supervisors: Dr. Pavan Kumar Kankar
Degree: MTech and MSc Awarded/Ongoing

11. Sustainable production of self-compacting concrete utilizing fly ash and granite waste
Name: Abhishek Jain
Year: 2021
Co-Supervisors: Dr. Rajesh Gupta
Degree: PhD Thesis Awarded

12. Industrial scale waste utilisation in unfired bricks
Name: Vivek Gutpa
Year: 2021
Co-Supervisors: -
Degree: PhD Thesis Awarded

13. Assessment of Corrosion Behaviour of Stainless Steel Reinforced Bar in Concrete
Name: Anurag Singh Chauhan
Year: 2021
Co-Supervisors: Dr. Vinod Kumar
Degree: MTech and MSc Awarded/Ongoing

14. Investigations into behaviour of adhesive bonded steel-concrete composite flexural members
Name: Ankit Bhardwaj

Year: 2020
Co-Supervisors: Prof. V. Matasagar; Prof. A. K. Nagpal
Degree: PhD Thesis Awarded

15. Performance evaluation of mechanically connected and adhesive bonded steel-concrete composite connections
Name: Pankaj Kumar
Year: 2018
Co-Supervisors: Dr. Amar Kumar Patnaik
Degree: PhD Thesis Awarded

16. Utilisation of bone china ceramic waste as fine aggregate in sustainable concrete
Name: Salman Siddique
Year: 2018
Co-Supervisors: Dr. S. Shrivastava
Degree: PhD Thesis Awarded

17. Effect of different hydrophobic treatments on properties of recycled aggregate concrete
Name: Ram Swaroop Mandolia
Year: 2017
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

18. Feasibility of use of sludge from settling tank of bisalpur water treatment plant as partial replacement of fine aggregate in concrete
Name: Inderjeet Singh Choudhary
Year: 2017
Co-Supervisors: Prof. A. B. Gupta
Degree: MTech and MSc Awarded/Ongoing

19. Feasibility of use of silt from storm water drain as partial replacement of fine aggregate in concrete
Name: Rijuta Gupta
Year: 2017
Co-Supervisors: Prof. A. B. Gupta
Degree: MTech and MSc Awarded/Ongoing

20. Numerical analysis of steel-concrete composite girder under cyclic loading
Name: Ashutosh Gupta
Year: 2017
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

21. Performance evaluation of rubberised geopolymer concrete and flyash based geopolymer mortar
Name: Salmabanu Luhar
Year: 2017
Co-Supervisors: -
Degree: PhD Thesis Awarded

22. Effect of position of singly reinforcement layer in steel-concrete composite section
Name: Rahul Karwasra

Year: 2016
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

23. Effect of position of double reinforcement layer on composite sections
Name: Jayesh Kr. Teli
Year: 2016
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

24. Strength and durability studies of alkali-activated fly ash based geopolymer mortar
Name: Suman Choudhary
Year: 2016
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

25. Development of computationally efficient techniques for instantaneous and time-dependent analysis of reinforced concrete beams and frames at service load
Name: Kashyap A. Patel
Year: 2016
Co-Supervisors: Prof. A. K. Nagpal
Degree: PhD Thesis Awarded

26. Strength, durability, ductility and fire performance of concrete containing waste rubber tyre ash and rubber fibers as partial replacement of fine aggregates
Name: Trilok Gupta
Year: 2016
Co-Supervisors: Prof. R. K. Sharma
Degree: PhD Thesis Awarded

27. Development of computational techniques for service load analysis of steel-concrete composite structures
Name: M. P. Ramnavas
Year: 2016
Co-Supervisors: Prof. A. K. Nagpal
Degree: PhD Thesis Awarded

28. Effect of reinforcement detailing on shear connection in steel-concrete composite structures
Name: Nawal Kr. Dwivedi
Year: 2015
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

29. Effect of concrete strength on behaviour of mechanical connection in steel concrete composite
Name: Pradeep Kumar
Year: 2015
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

30. Flood risk assessment using MATLAB fuzzy logic model
Name: Sunil Kr. Pradhan

Year: 2015
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

31. Cost optimisation of flexibly connected composite beams
Name: Minhaj Majeed
Year: 2014
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

32. Optimisation of simply supported composite beams using genetic algorithm technique
Name: Rupesh Ramesh Gawas
Year: 2013
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

33. Experimental investigations for shear bond strength of steel and concrete bonded by epoxy
Name: Pankaj Kumar
Year: 2013
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

34. Study on behaviour of recycled coarse concrete aggregates in addition with cast iron/mild steel powder in concrete
Name: Ashish Garg
Year: 2013
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

35. Experimental and numerical studies for the behaviour of interlocking block masonry
Name: S.A.A. Naqvi
Year: 2013
Co-Supervisors: -
Degree: PhD Thesis Awarded

36. Effect of skewness on three span reinforced concrete t girder bridges
Name: Bhawnesh Kuldeep
Year: 2013
Co-Supervisors: Prof. R. Nagar
Degree: MTech and MSc Awarded/Ongoing

37. Durability of concrete containing ISF slag as partial replacement of sand
Name: Bhavna Tripathi
Year: 2012
Co-Supervisors: -
Degree: PhD Thesis Awarded

38. Finite element analysis of traditional and interlocking masonry
Name: Vimal Kumar
Year: 2012

Co-Supervisors: Prof. R. Nagar
Degree: MTech and MSc Awarded/Ongoing

39. Comparative study of space structural forms under gravity and lateral loads
Name: Durgesh Nandini Bairwa
Year: 2012
Co-Supervisors: Prof. R. Nagar
Degree: MTech and MSc Awarded/Ongoing

40. Prediction of ultimate shear strength of reinforced concrete beams using artificial neural networks
Name: Gaurav Saraswat
Year: 2010
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

41. 3-d finite element study of bonded and mechanically connected steel-concrete composite beams by 3-dimensional finite element modelling
Name: Indra P. Choudhary
Year: 2010
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

42. Nonlinear behaviour of steel-concrete composite frames
Name: Kashyap Patel
Year: 2009
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

43. Development of hybrid analytical numerical procedure for service load analysis of composite frames and beams using step-by-step method for modeling of time dependent effects of creep and shrinkage phenomena
Name: Addisu Shewarega
Year: 2009
Co-Supervisors: Prof. A. K. Nagpal
Degree: MTech and MSc Awarded/Ongoing

44. Development of neural networks for prediction of deflection of composite frame considering non-linearities-flexibility of shear connection, cracking of concrete and yielding of steel
Name: Ashish Yadav
Year: 2009
Co-Supervisors: Prof. A. K. Nagpal
Degree: MTech and MSc Awarded/Ongoing

45. Development of neural networks for prediction of deflection of composite bridges considering non-linearities-flexibility of shear connection, cracking of concrete and yielding of steel
Name: Kasi Viswanath
Year: 2009
Co-Supervisors: Prof. A. K. Nagpal
Degree: MTech and MSc Awarded/Ongoing

46. Behaviour of tall composite building frames considering cracking of concrete, creep and shrinkage subjected to service load
Name: Sunil Kumar
Year: 2009
Co-Supervisors: Prof. A. K. Nagpal
Degree: MTech and MSc Awarded/Ongoing

47. Behaviour of graphite/epoxy laminates subjected to low velocity transverse impact
Name: Suchindra Silayach
Year: 2009
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

48. Control of cracking, creep and shrinkage effects in steel concrete composite frames
Name: Lalit Kr. Varshney
Year: 2009
Co-Supervisors: Prof. A. K. Nagpal
Degree: MTech and MSc Awarded/Ongoing

49. Behaviour of steel concrete composite frames
Name: Amit Kr. Garg
Year: 2008
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

50. Computer aided design of footings
Name: Deepak Gaur
Year: 2005
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

51. Castellated beam- analysis and design
Name: Neeraj Gupta
Year: 2005
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

52. Reinforced block masonry
Name: Pawan Singhania
Year: 2005
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

53. Cost comparison of multistoreyed buildings in earthquake zones
Name: Kapil Sarawagi
Year: 2005
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

54. Computer aided design of composite tee beam bridge
Name: Pramiti Tiwari
Year: 2001

Co-Supervisors: Dr. M. K. Shrimali
Degree: MTech and MSc Awarded/Ongoing

55. Study of various methods of concrete mix design
Name: Rajesh Poonia
Year: 2001
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

56. Study of soil classification systems
Name: Sudhir Verma
Year: 2001
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

57. Risk and safety margins in structural design
Name: Ajay Saxena
Year: 2000
Co-Supervisors: -
Degree: MTech and MSc Awarded/Ongoing

58. Naturally colored composites and their application as building products
Name: Akash Paradkar
Year: -
Co-Supervisors: -
Degree: PhD Thesis in progress

59. Investigating Structural performance of Innovative Engineered Bamboo-Timber Composite TRAIL BRIDGES for Prosperity to Rural Ethiopia
Name: Habtamu Melesse
Year: -
Co-Supervisors: Prof. Krishnaraj Ramaswamy
Degree: PhD Thesis in progress

60. Development of sustainable construction materials through recycling of solar wastes
Name: Gaurav Sharma
Year: -
Co-Supervisors: -
Degree: PhD Thesis in progress

61. Service life estimation of concrete under corrosion
Name: Kameshwar Nim
Year: -
Co-Supervisors: -
Degree: PhD Thesis in progress

62. Comprehensive rheology based thixotropic fluid flow model for cement-based composites
Name: Astha Sharma
Year: -
Co-Supervisors: -
Degree: PhD Thesis in progress