

RESEARCH PUBLICATIONS (Sunil Kumar)

(A) International Journals

1. **Sunil Kumar and C.V.S. Kameswara Rao**, "Effect of Sulfates on the Setting Time of Cement and Strength of Concrete", *Cement and Concrete Research*, Pergamon Press, U.S.A., Vol. 24, No. 7, 1994, pp. 1237-1244.
2. **Sunil Kumar and C.V.S. Kameswara Rao**, "Sulfate Attack on Concrete in Simulated Cast-in-Situ and Precast Situations", *Cement and Concrete Research*, Pergamon Press, U.S.A., Vol. 25, No. 1, 1995, pp. 1-8.
3. **Sunil Kumar and C.V.S. Kameswara Rao**, "Strength Loss in Concrete due to Varying Sulfate Exposures", *Cement and Concrete Research*, Pergamon press, U.S.A., Vol. 25, No. 1, 1995, pp. 57-62.
4. **Sunil Kumar and C.V.S. Kameswara Rao**, " Fire Loads in Residential Buildings", *Building and Environment*, Pergamon Press, U.K., Vol. 30, No. 2, 1995, pp. 299-305.
5. **Sunil Kumar, C.V.S.K. Rao, John Bensted and Juliet Munn**, A Discussion on the paper "Effect of Sulfates on the Setting Time of Cement and Strength of Concrete", *Cement and Concrete Research*, Pergamon Press, U.S.A., Vol. 26, No. 4, 1996, pp. 641-643.
6. **Sunil Kumar and C.V.S. Kameswara Rao**, "Fire Loads in Office Buildings", *Journal of Structural Engineering, A.S.C.E.*, Vol. 123, No. 3, 1997, pp. 365-368.
7. **Sunil Kumar**, "Influence of Water Quality on the Strength of Plain and Blended Cement Concretes in Marine Environments", *Cement and Concrete Research*, Pergamon Press, U.S.A, Vol. 30, 2000, pp. 345-350.
8. **Sunil Kumar**, "Flyash-Lime-Phosphogypsum Cementitious Binder: A New Trends in Bricks", *Materials and Structures, RILEM*, Vol. 33, 2000, pp. 59-64.
9. **Sunil Kumar**, "Live Loads in Office Buildings: Lifetime Maximum Load", *Building and Environment*, Pergamon Press, U.K., Vol. 37, 2002, pp. 91-99.
10. **Sunil Kumar**, "Live Loads in Office Buildings: Point-in-Time Load Intensity", *Building and Environment*, Pergamon Press, U.K., Vol. 37, 2002, pp. 79-89.
11. **Sunil Kumar**, "A Perspective Study on Flyash-Lime-Gypsum Bricks and Hollow Blocks for Low Cost Housing Development", *Construction and Building Materials*, Elsevier Sc., U.K., Dec. 2002.
12. **Sunil Kumar**, "Flyash-Lime-Phosphogypsum Hollow Blocks for Walls and Partitions", *Building and Environment*, Pergamon Press, U.K., Vol. 38, 2003, pp. 291-195.
13. **A.K. Sahu, Sunil Kumar and A.K. Sachan**, "Performance of Bricks and Brick Masonry in aggressive Chemical Environment", *International Jour. Of Struct. Engg. And Analysis*, Vol. 1, No. 2, 2015, pp. 1-12.

(B) National Journals

1. **Sunil Kumar**, "Performance of Concrete Exposed to Sulphate Attack," *Civil Engg. & Constrn. Review*, Feb. 1994, pp.20-25.
2. **Sunil Kumar and C.V.S. Kameswara Rao**, "Live Loads in Residential Buildings in Urban and Rural Areas", *The Indian Concrete Journal*, Vol. 68, No. 10, 1994, pp. 541-546.
3. **Sunil Kumar**, "Utilisation of FaL-G Bricks and Hollow Blocks in Buildings", *The Indian Concrete Journal*, Vol. 75, No.7, 2001, pp. 463-467.
4. **Sunil Kumar**, "Live Loads in Residential Buildings – Lifetime Maximum Load", *The Indian Concrete Journal*, Vol. 76, No.4, 2002, pp. 244-250.
5. **Sunil Kumar**, "Live Loads in Residential Buildings – The Result of a Survey", *The Indian Concrete Journal*, Vol. 76, No.3, 2002, pp.157-163.
6. **A.K. Sahu, Sunil Kumar and A.K. Sachan**, "Crushed Stone Dust as Fine Aggregate for Concrete", *The Indian Concrete Journal*, Vol. 77, 2003, No. 1, pp. 845 – 848.
7. **P. Kumar and S. Kumar**, "FaL-G: An Extravagant Ignorance in Low Cost housing", *Jour. of Indian Building Congress*, Vol. 17, No. 01, 2010.
8. **A.K. Sahu, Sunil Kumar and A.K. Sachan**, "Crushed Stone Waste as Fine Aggregate for Concrete" *The Indian concrete Journal*, Vol. 92, 2018, pp. 99-104.

(C) **International Seminars / Conferences**

1. **Sunil Kumar and C.V.S. Kameswara Rao**, "Durability of Materials under Random Exposure Conditions", *Int. Sem. on Civil Engineering Practices in Twenty First Century*, Roorkee, 26-28 Feb., 1996, Proc. Published by New Age India (P) Ltd., New Delhi, Ed. S.K. Kaushik, G.L. Asawa and A.K. Ahuja, Vol. II, pp 751-756.
2. **Sunil Kumar, L.P. Singh and C.V.S. Kameswara Rao**, "Use of FaL-G Bricks in Buildings", *Int. Conf. on New Challenges for Civil Engineers of Developing Countries in the 21st Century*, New Delhi, 29 Feb.- 2 Mar., 1996.
3. **Sunil Kumar**, "Durability of Concrete: Resistance to Sulphate Attack", *Proc. of 5th Int. Conf. on Concrete Technology for Developing Countries*, N.C.B. New Delhi, Nov. 1997, Vol.1, pp. IV-63 – IV-72.
4. **Sunil Kumar**, "Rehabilitation of Fire Damaged Concrete Structures", *Int. Symp. on Innovative world of Concrete*, ICI – IWC – 98, Calcutta, Nov. 1998, pp. 1.107-1.114.
5. **Sunil Kumar**, "Design and Repair Criteria of Concrete Structures against Fire Exposure", *Proc. of 6th Int. Sem. on Cement and Building Materials*, N.C.B. New Delhi, 24-27 Nov., 1998, Vol. 4, pp. XIII-192 – XIII-200.
6. **Sunil Kumar**, "Immobilization of Radioactive Wastes in Portland Based Cement Matrices", *Int. Congress on Creating with Concrete*, Univ. of Dundee, Scotland, U.K., 6-10 Sep., 1999, Proc. Published by Thomas Telford Ltd., London, "Innovation in Concrete Structures Design and Construction", Ed. R.K. Dhir and M.R. Jones, pp.213-222.
7. **Sunil Kumar and B.N. Singh**, "Fly ash – Its Use in Concrete", *ICI – ASIAN Conference on Ecstasy in Concrete*, Bangalore, 20 –22 Nov., 2000.

8. **Sunil Kumar**, “Fire Resistance requirements for Concrete Buildings”, Int. Congress on Challenges of Concrete Construction, Univ. of Dundee, Scotland, U.K., 5-11 Sep., 2002.
9. **Sunil Kumar**, “Influence of Fire on the Mechanical Behaviour of Concrete Specimens”, Int. Congress on Challenges of Concrete Construction, Univ. of Dundee, Scotland, U.K., 5-11 Sep., 2002.
1. **Shreya Jadon and Sunil Kumar**, “Use of Sugarcane Bagasse Ash in Concrete as Sand Replacement for Resistance to Sustained Temperatures”, Int. Conference on Innovative Trends in Civil Engg. For Sustainable Development ITCSD-2019, NIT Warangal, 13-15 Sep. 2019, Proc. Published by B.S. Publ., Hyderabad, pp. 135.
2. **Himanshu Tripathi and Sunil Kumar**, “Performance of Permeable Concrete for Ground Water Recharge in HBTU Campus, Kanpur”, Int. Conference on Innovative Trends in Civil Engg. For Sustainable Development ITCSD-2019, NIT Warangal, 13-15 Sep. 2019, Proc. Published by B.S. Publ., Hyderabad, pp. 290.
3. **Swapnil Tripathi and Sunil Kumar**, “Performance of Cementitious Binders in Stabilization of Chromium Waste in a Landfill”, Int. Conference on Innovative Trends in Civil Engg. For Sustainable Development ITCSD-2019, NIT Warangal, 13-15 Sep. 2019, Proc. Published by B.S. Publ., Hyderabad, pp. 329.
4. **Mohammed Talib and Sunil Kumar**, “Water Quality Index Assessment of Water of Ganga River Basin”, Int. Conf. on Energy and Environmental Technologies for Sustainable Development (Chem-Conflux), MNNIT Allahabad, 14-16 Fe. 2020.

(D) **National Seminars / Conferences**

1. **Sunil Kumar and R.P. Lohtia**, "Durability of Concrete and Cement Products". Proc. of All India Sem. on Durability of Concrete and Cement Products, Nagpur, 22-23 Sept., 1990.
2. **Sunil Kumar**, "Mud for Rural Housing", Proc. of National Seminar on Low Cost Housing for Agro Based Rural Population, Kurukshetra, 22-23 Feb., 1991, pp. A5.1-A 5.14.
3. **Sunil Kumar and C.V.S. Kameswara Rao**, "Live Load and Fire Load Surveys", Proc. of All India Conference on Tall Buildings, Roorkee, 1-3 March, 1993, pp. IV. 11-IV. 17.
4. **Sunil Kumar**, "Durable Concrete in Aggressive Environments", Proc. of Symp. on Structural Engineering and National Development, Kanpur, 27-28 Feb., 1993, pp. 285-296.
5. **Sunil Kumar and C.V.S. Kameswara Rao**, "Improvement of Concrete Durability", All India Seminar on Economics and Management of Concrete Construction and its Maintenance, Allahabad, Published by Wiley Eastern Ltd., 24-25 Feb., 1994, Published by Wiley Eastern Ltd., New Delhi, Ed. Y.P. Gupta, pp. V. 27-V. 32..
6. **Sunil Kumar and C.V.S. Kameswara Rao**, "Economy in Construction by Realistic Live Load Specifications”, All India Seminar on Economics and Management of Concrete Construction and its Maintenance, Allahabad, Published by Wiley Eastern

- Ltd., 24-25 Feb., 1994, Published by Wiley Eastern Ltd., New Delhi, Ed. Y.P. Gupta, pp. II.34. - II. 38.
7. **Sunil Kumar**, "Utilisation of FaL-G Bricks in Low Cost Housing", Proc. of Nat. Sem. on Environmental aspects of Engineering Practices, Jhansi, 17-18 Apr., 1998, pp. 151-157.
 8. **Sunil Kumar**, "Effect of Sea Water on the Behaviour of Cement Paste and Concrete", Proc. of Nat. Sem. on Advances in Cement and Concrete, Jhansi, 10-11 Mar., 2000, Proc. Published by Allied Publishers Pvt. Ltd., New Delhi, pp. 30-37.
 9. **P. Kumar and S. Kumar**, "Application of Polymer Fibres in Cement Concrete", Nat. Sym. on Environmental Challenges for the New Millennium, HBTI Kanpur, 2000.
 10. **A.K. Gupta, A.K. Sachan, A.K. Sahu and Sunil Kumar**, "Stabilization of Black Cotton Soil using Crusher Dust – A Waste Product of Bundelkhand Region", Proc. Indian Geotechnical Conference, 2002, pp. 308-311.
 11. **Sunil Kumar**, "Sulphate Attack in Plain and Blended Cements: A Review", Proc. of Nat. Sem. on Advances in Civil Engineering: Perspectives of Developing Countries, Kanpur, 15 - 16 Feb., 2003, Proc. Published by Allied Publishers Pvt. Ltd., New Delhi, pp. 167 - 177.
 12. **Pradeep Kumar and Sunil Kumar**, "Fly Ash – Lime _ Gypsum (FaL-G) Cementitious Binder – Its Property in Fresh and Hardened State", Proc. of Nat. Sem. on Advances in Civil Engineering: Perspectives of Developing Countries, Kanpur, 15 - 16 Feb., 2003, Proc. Published by Allied Publishers Pvt. Ltd., New Delhi, pp. 205 - 210.
 13. **A.K. Sahu, Sunil Kumar and A.K. Sachan**, "An Experimental Investigation on the Effect of Recycled Aggregate on Concrete Properties", Proc. of Nat. Sem. on Advances in Civil Engineering: Perspectives of Developing Countries, Kanpur, 15 - 16 Feb., 2003, Proc. Published by Allied Publishers Pvt. Ltd., New Delhi, pp. 246 – 250.
 14. **S.K. Madan, Gurlabh Singh and Sunil Kumar**, "An Alternative to Ennore Sand for Testing of Ordinary Portland Cement", Proc. of Nat. Sem. on Advances in Civil Engineering: Perspectives of Developing Countries, Kanpur, 15 - 16 Feb., 2003, Proc. Published by Allied Publishers Pvt. Ltd., New Delhi.
 15. **P. Kumar and S. Kumar**, "I.T. Based Approach for Approval of High Rise Buildings", Nat. Sem. on Real Estate, I.E.(I), U.P. State Centre, Lucknow, 2007.
 16. **Sunil Kumar**, "Sulphate Attack on Concrete: A Review", Proc. of Nat. Conf. on Advances in Constrn. Materials, Methodologies & Management (AC3M-09), 21-22 Jan. 2009, Chaitanya Bharthi Inst. Of Tech., Gandipet, Hyderabad, pp. 105-113.
 17. **A.K. Sahu, Sunil Kumar and A.K. Sachan**, "Utilization of Crushed Stone Waste in Concrete", Proc. of Nat. Conf. on Advances in Constrn. Materials, Methodologies & Management (AC3M-09), 21-22 Jan. 2009, Chaitanya Bharthi Inst. Of Tech., Gandipet, Hyderabad, pp. 273-279.
 18. **Pradeep Kumar and Sunil Kumar**, "FaL-G Bricks: A Sustainable Low Cost Housing Material", Proc. All India Sem. on Advances in Materials & Techniques in Construction, 01-02 Oct. 2010, IIT Kanpur, pp. 84-94.

19. Sunil Kumar and Shreya Jadon, “Development of Concrete for Future Needs”, All India Sem. on Innovations & Challenges in Materials and Construction, 28-29 Oct. 2017, I.E. (I), Kanpur