

CURRICULUM VITAE

Name : DR. VIRENDRA KUMAR

Father's Name: Late Taro Prasad

Present Position: Associate Professor

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Father's Name : Late Taro Prasad

Present Address :Associate Professor,
Civil Engineering Department,
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Educational Qualifications:

S. No.	Degree	Board / Institute / University	Year	Percentage
1.	Ph.D.	I.I.T. Roorkee.	2013	-
2.	M.E.(Structural Engg.)	R.E.C. Rourkela (Sambalpur Uni.)	1995	1 st Div. (74.15%)
3.	B.Sc.,Engg. (Civil)	R.I.T. Jamshedpur (Ranchi Uni.)	1993	1 st Div. With Dist. (74.53%)

Ph.D. Thesis Topic: Fire Performance of Earthquake Damaged Reinforced Concrete Structures.

M.Tech. Thesis Topic: Studies on Some Properties of High Volume Fly Ash Concrete.

Research Interest:

- Fire resistance of reinforced concrete structures
- Structural dynamics
- Earthquake resistant structures
- Concrete technology
- Development of new cementitious materials
- Utilization of waste material
- Durability of structures
- Structural health monitoring of structures
- Retrofitting & Strengthening of RCC Structures

RESEARCH AWARDS/FELLOWSHIPS RECEIVED:

- i) S.J.Jindal Scholarship in B.Sc. Engg. (Civil Engg.), at N.I.T. Jamshedpur
- ii) GATE Scholarship in ME, N.I.T. Rourkela
- iii) Q.I.P. Scholarship in Ph.D., I.I.T. Roorkee

**RESEARCH PUBLICATIONS (With Full Details):
INTERNATIONAL REFREED SCI/SCOUPUS JOURNALS:**

I. International Journals:11

(i) SCI: 5

1. “Mechanical Behaviour of Non-Silicate based Alkali-Activated Ground Granulated Blast Furnace Slag”, **Virendra Kumar**, Amit kumar,, Brajkishor Prasad,” Construction and Building Materials, Vol 198(2019), pp.494-500, <https://doi.org/10.1016/J.conbuildma.2018.11.282>, Elsevier Pub.,
2. “Full-scale fire test on an earthquake-damaged reinforced concrete frame”, Praveen Kamath , Umesh Kumar Sharma ,**Virendra Kumar**, Pradeep Bhargava , Asif Usmani, Bhupinder Singh , Yogendra Singh , JoseTorero Martin Gilli Pankaj Pankaj, Fire Safety Journal, V. 73, pg. 1-19 (2015)
3. “Testing of Full-scale RC Frame under Simulated Fire Following Earthquake” Umesh Kumar Sharma, **Virendra Kumar**, Praveen Kamath, Bhupinder Singh, Pradeep Bhargava1, Yogendra Singh1, Asif Usmani, Jose Torero, Martin Gillie and Pankaj Pankaj, Journal of Structural Fire Engineering, V. 5, No. 3, pg. 215-228 (2014)
4. “Effect of temperature on mechanical properties of pre-damaged steel reinforcing bars”. **Virendra Kumar**, Umesh Kumar Sharma, Bhupinder Singh, Pradeep Bhargava, Construction and Building Materials, V. 46, pg. 19-27 (2013).
5. “Full-scale testing of a damaged reinforced concrete frame in fire”, Umesh Kumar Sharma, Pradeep Bhargava, Bhupinder Singh, Yogendra Singh, **Virendra Kumar**, Praveen Kamath,, , Asif Usmani, Jose Torero, Martin Gillie, Pankaj Pankaj, Ian May& Jian Zhang, Ice Proceedings: Structures and buildings, V. 165 Issue-SB7,pg. 335-346, July 2012.

(ii) Scopus: 6

1. “Effect of Temperature on Stress-Strain Behaviour of Pre-damaged Confined Concrete ”,**Kumar, Virendra**, Journal of Structural Fire engineering, DOI:10.1108/JSFE-03-2019-0019, (**Accepted 15 May, 2019**).
2. “Damage Evaluation of a Full-Scale RC Frame Exposed to Multiple Extreme Loads”, **Kumar, Virendra**, Journal of Structural Fire Engineering, DOI:10.1108/JSFE-10-2018-0028, (**Accepted 8 January, 2019**).
3. “Utilization of ferrochrome slag in Concrete as a Replacement to Fine Aggregate”, **Virendra Kumar**, Dileep Barnwal, ISBN 978-81-904760-9-6, 2017.
4. “Seismic response reduction of RC framed structure using soft storey at top as tuned mass damper”, **Virendra Kumar**, M.S Yuvaraj, International journal of science and innovative Engg. & technology 2, 2017, ISBN 978-81-904760-9-6.
5. “A Review on Green inhibitors of reinforcement concrete corrosion” Monalisa kundu, Shailesh kumar Prasad, **Virendra Kumar**, International journal of emerging research in management & technology 5, 2278-9359, pg. 42-46.
6. “Corrosion protection of steel reinforcement in simulated concrete pore solution in the presence of inhibitors”, Monalisa kundu, Shailesh kumar Prasad, **Virendra Kumar**.

II. National Journals: 01

1. “Design methodology and Performance of Structural Steel in Structure”, **Virendra, Kumar**, Journal INSDAG’s Steel in Construction, vol. 6, No. 2, July 2005, pp. 99-102.

PAPER SUBMITTED IN SCI JOURNALS:

INTERNATIONAL CONFERENCES: 45

1. Influence of High Temperature on Non-Silicate Based Activated Blast Furnace Slag, Dr. **Virendra Kumar**, Amit Kumar & Dr. B.K. Prasad, 5th International Conference on Innovation for Sustainable Infrastructure” CIGOS-2019, University of Transport Technology, Veitnam, October 31-November 1, 2019 (accepted), to be publish as Book Chapter entitled “Lecture Notes in Civil Engineering” by Springer and indexed in Scopus
2. Influence of Linz Donawitz slag aggregates on strength development of concrete, Dr. B.K. Prasad, Dr. **Virendra Kumar** & Prince Singh, 5th International Conference on Innovation for Sustainable Infrastructure” CIGOS-2019, University of Transport Technology, Veitnam, October 31-November 1, 2018 (accepted), to be publish as Book Chapter entitled “Lecture Notes in Civil Engineering” by Springer and indexed in Scopus
3. Effect of Elevated Temperature on Alkali Activated Slag Cement Concrete, Dr. **Virendra Kumar** & Rajesh Kumar Paswan, 5th International Conference on Innovation for Sustainable Infrastructure” CIGOS-2019, University of Transport Technology, Veitnam, October 31-November 1, 2019, (accepted) to be publish as Book Chapter entitled “Lecture Notes in Civil Engineering” by Springer and indexed in Scopus
4. Behavior of Non-Silicate Based Activated Blast Furnace Slag at Elevated Temperature, Dr. **Virendra Kumar**, Amit Kumar & Dr. B.K. Prasad, 6th International Conference on Applications of Structural Fire Engineering, ASFE’2019, Nanyang Technological University, Singapore, 2019, indexed in Scopus.
5. Modeling of reinforced concrete tunnel structure in fire, B Choubey, Dr. **Virendra Kumar**, Dr. S C Dutta, 6th International Conference on Applications of Structural Fire Engineering, ASFE’2019, Nanyang Technological University, Singapore, 13-14 June 2019, indexed in Scopus.
6. Utilisation of Linz Donawitz slag as aggregates in construction industry, Dr. B.K. Prasad, Dr. **Virendra Kumar** & Prince Singh, 6th UKIERI Concrete Congress on Concrete: The Global Builder” UKIERI-2019, Dr. B.R.Ambedkar National Institute of Technology Jalandhar, India, 5-8 March 2019, International.
7. Utilisation of steel slag as cementitious material in construction industry, Dr. **Virendra Kumar** & Rajesh Kumar Paswan, 6th UKIERI Concrete Congress on Concrete: The Global Builder” UKIERI-2019, Dr. B.R.Ambedkar National Institute of Technology Jalandhar, 5-8 March 2019, International.
8. Experimental Investigation on Compressive Strength of LD Slag Aggregate Concrete, **Virendra Kumar**, Brajkishor Prasad, Sourav Chakraborty², Prince Singh³, Y. Rama Murthy⁴, Gajanan Kapure⁴, International Conference on Sustainable Construction and Building Material, 18-22 June 2018, Published as Book Chapter entitled “Lecture notes in Civil Engineering, vol 25, Springer –Nature.
9. “Testing of full-scale RC Frame under simulated fire following Earthquake”, Umesh Kumar Sharma, **Virendra Kumar**, Bhupinder Singh, Pradeep Bhargava, Yogendra Singh, Praveen Kamath, Asif Usmani, Jose Torero, Martin Gillie, Pankaj Pankaj, 7th International Conference on Structures in Fire June 6-8, 2012, DOI:10.3929/ethz-a-007050197”
10. “Utilization of ferrochrome slag as fine aggregate”, **V. Kumar**, B.K Prasad, and D Barnwal , 15th NCB International seminar on cement, concrete and building materials, 05-08 December 2017 pg.164
11. “Performance of ground granulated blast furnace slag as binder with non silicate based activator”, **V. Kumar**, B.K Prasad, A.Kumar, and N. Ramkumar, 15th NCB International seminar on cement, concrete and building materials, 05-08 December 2017, pg. 126
12. “Strength assessment of concrete with silica fume”, **Virendra Kumar**, 14th NCB international seminar on cement and building material, Vol. 2, pg 416-418, 01-04 December 2015, NewDelhi.
13. “Modelling and influence of infill walls on multistorey reinforce concrete structures”, **Virendra Kumar**, Veeresh, 2015

14. "Behaviour of Full-Scale Reinforced Concrete Frame Under Simulated Post-Earthquake Fire, **V. Kumar**, U.K. Sharma, B. Singh, P. Bhargava, Y. Singh & P. Kamath, 15th (WCEE) world conference on earthquake engineering 2012, Pg.1062.
15. "An Overview of organic corrosion inhibitors for steel in concrete", Mamata Bal, **Virendra Kumar**, M.M. Prasad, V. 3-in-1, National conference 'GEPSID' held at Ludhiana(Punjab), October 11-12,2014.
16. "Development of flash over in a compartment fire for full scale testing of concrete frames" **Virendra Kumar**, Umesh K. Sharma Bhupinder Singh Yogendra. Singh Pradeep Bhargava
17. "Utilization of ferrochrome slag in Concrete as a Replacement to Fine Aggregate" **Virendra Kumar**, Dileep Barnwal, International Conference on Contemporary Engineering and Technology. 2017 March 31 - 1 April 2017, ISBN 978-81-904760-9-6
18. "Moment Curvature Relationship for fire damaged Reinforced Concrete Section" DMS Pani Prasad, **V. Kumar**, U.K Sharma and Bhargava, 6th International conference on Structures in Fire, ISBN 978-1-60595-027-3
19. "Modelling and influence of infill walls on multistorey reinforce concrete structures", **Virendra Kumar**, Veeresh B., Recent innovation in earthquake resistant techniques, pg. 121-129, 9-10 November,2015, RVS Cclge of Engineering, Jamshedpur.
20. "Corrosion inhibitors for rebar in concrete" **Virendra Kumar**, Shailesh kumar Prasad, Monalisa Kundu, pg. 281, International UKIERI concrete congress, 2-5 November, NIT Jalandhar, India.
21. "Performance of high rise reinforce concrete structure with and without infill wall" **Virendra Kumar**, Veeresh, International UKIERI concrete congress, 2-5 November, NIT Jalandhar, India.
22. "Residual behaviour of pre-damaged steel rebars exposed to elevated temperatures", **Virendra Kumar**, Umesh Kumar Sharma, Bhupinder Singh, Pradeep Bhargava, Innovation in concrete construction, 5-8 march ,2013, Paper ID: UCC522
23. "Residual Post-Fire Behaviour of Pre-Damaged Confined Concrete" **V. Kumar**, U. K. Sharma, B. Singh, P. Bhargava, 15th (WCEE) world conference on earthquake engineering 2012, Paper no-3981
24. **Virendra Kumar** & Bimlesh kumar "Behaviour of Standard Concrete with Different Types of Coarse Aggregates" ICI-Innovative World of Concrete "08, 4th International Conference & Exhibition + Silver Jubilee Celebrations" India Expo Centre, New Delhi, India, 11-14 December 2008.
25. **Virendra Kumar** & Suresh Kumar "Influence of Silica Fume on Strength Development of Standard Concrete" ICI-Innovative World of Concrete "08, 4th International Conference & Exhibition + Silver Jubilee Celebrations" India Expo Centre, New Delhi, India, 11-14 December 2008.
26. **Virendra Kumar** & Jitendra kumar "Experimental Investigation on Strength of Fly Ash Silica Fume Concrete" ICI-Innovative World of Concrete "08, 4th International Conference & Exhibition + Silver Jubilee Celebrations" India Expo Centre, New Delhi, India, 11-14 December 2008.
27. **Virendra Kumar** – "Influence of High Volume Fly Ash in Concrete" Proc. in International Coal Ash Technology Conf. on "AshTech 2006, Birmingham, West Midlands, U K , 14-17 May 2006.
28. **Virendra Kumar** - "Compressive Strength of Steel Fiber Reinforced Concrete" Proc. of International Conference of 10th East Asia Pacific Conference on Structural Engineering & Construction (EASEC-10), School of Civil Engineering, Asian Institute of Technology (AIT), Bangkok, Thailand, 3-5 August, 2006.
29. **Virendra Kumar** – "High Volume Fly Ash Utilisation in Concrete" Proc. in International Congress on "Fly Ash India 2005" at Fly Ash Utilisation (FAUP), TIFAC, DST., New Delhi, India, 4-7 December 2005, pp. VI33.1 to VI33.11.
30. **Kumar, Virendra** and Prasad, M.M. - "Detailing of Reinforced Concrete Structural Members" Proc. of International Conference on "Concrete and Reinforced Concrete – Development Trends" Moscow, 5-9 September 2005.
31. **Kumar, Virendra** and Prasad, M .M.- "Static Flexural Strength of Steel Fiber Concrete" Proc. of International Conference on "Concrete and Reinforced Concrete – Development Trends" Moscow, 5-9 September 2005.

32. **Kumar Virendra**, Sinha, A.K. and Prasad, M .M. - “Static Modulus of Elasticity of Steel Fiber Reinforced Concrete” Proc. of 6th International Congress on “Global Construction: Ultimate Concrete Opportunities” Dundee, Scotland, U.K., 5-7 July 2005 Thomas Telford Pub. London, ISBN: 0-7277-3401-6, pp. 527-536.
33. **Kumar, Virendra**, Sinha, A.K. and Prasad, M.M. - “Fly ash Bricks - An Alternative Construction Materials”, Proc. of 1st International conference and Exhibition on “Building Materials and Construction Technologies”, Pragati Maidan, New Delhi, India, 12-15 Feb. 2004, pp. 99-105.
34. **Kumar, Virendra**, Sinha, A.K. Prasad, M.M. - “Flexural and Split Tensile Strength of Steel Fiber Reinforced Concrete”, Proc. Of International Conference on “Fiber Composites, High Performance Concretes and Smart Materials” & Workshops on “High- Volume Flyash Concrete”, ICFRC, Chennai, India, Allied Publishers Pvt. Ltd., 8-10 Jan. 2004, Vol.-I, pp.177-188,.
35. **Kumar, Virendra** and Prasad, M.M. - “Effect of Flyash and Silica Fume on Flexural and Split- Tensile Strength of Concrete Mix”, Proc. of International conference on “Emerging Technology (ICET 2003)”, K.I.I.T., Bhubneshwar, Orissa, India, 19-21 Dec. 2003, pp. 86.
36. **Kumar Virendra**, Kumar Sanjay and Prasad, M.M. - “Effect of Coating on Compressive Strength of Concrete”, Proc. of International conference on “Emerging Technology (ICET 2003)”, K.I.I.T., Bhubneshwar, Orissa, India, 19-21 Dec. 2003, pp. 84-85.
37. **Kumar, Virendra**, Sinha, A.K. Prasad, M.M. - “Studies on Steel Fiber Reinforced Concrete for Compressive Strength”, Proc. of 8th NCB International Seminar on “Cement and Building Materials”, NCB, New Delhi, India, Rakmo Press (P) Ltd, 18-21Nov. 2003, Vol.-4, pp. XI 74-81.
38. **Kumar, Virendra** and Prasad, M.M. - “Effect of Flyash and Silica Fume on Compressive Strength of Concrete” Proc. of International Symposia on “Innovative World of Concrete”, Indian Concrete Institute, Pune, India, 19-21 Sept. 2003.
39. **Kumar, Virendra** and Prasad, M.M. - “Flexural and Split-Tensile Strength of Flyash-Silica Fume Concrete”, Proc. of International Conference on “Recent Trends in Concrete Technology and Structures (INCONTEST 2003)”, Dept. of Civil Engg., Kumaraguru College of Technology, Coimbatore, India, 10-12 Sept. 2003, Vol. –II, pp. 217-223.
40. **Kumar, Virendra** and Prasad, M.M. – “Effect of Flyash and Silica Fume on Static Modulus of Elasticity in Concrete Mix” Proc. of International Symposia on “Celebrating Concrete : People and Practice”, University of Dundee, Scotland, U.K., 3-4 Sept. 2003, Thomas Telford Pub., London, ISBN: 0-7277-3246-3, pp. 203-211.
41. **Kumar, Virendra** and Prasad, M.M. – “Static Modulus of Elasticity of Flyash-Silica Fume Concrete” Proc. of International Workshop and Conf. on “Construction Management and Materials (CONMAT-2003)” Dept. of Civil Engg., I.I.T., Kharagpur, India, Phoenix Publishing House Pvt. Ltd., New Delhi, 9-11 Jan. 2003, pp. 549-558.
42. Jha, Shailesh; **Kumar, Virendra** and Prasad, M.M.- “Construction Process – An Integrated Approach” Proc. of International Workshop and Conf. on “Construction Management and Materials (CONMAT-2003)” Dept. of Civil Engg., I.I.T., Kharagpur, India, Phoenix Publishing House Pvt. Ltd., New Delhi, 9-11 Jan. 2003, pp. 192-197.
43. **Kumar, Virendra**; Prasad, M.M., and Jain. K.K. - “An Investigation on Surface Drying Shrinkage of High Volume Flyash Concrete” Proc. of 6th International Conf. on “Concrete Technology for Developing Countries”, Jordan, Amman, 21-23 Oct. 2002.
44. Prasad, M.M.; **Kumar, Virendra Kumar**, Sanjay Kumar - “Earthquake and Disaster Management – An Overview” Proc. of International Conf. and Exhibition on “Remote Sensing GIS, and GPS in Human Settlement Planning”, Dept. of Architecture and Planning, N.I.T., Bhopal M.P., India, 16-19 Jan. 2002.
45. **Kumar, Virendra**; Prasad, M.M. and Jain. K.K. - “Ultrasonic Pulse Velocity for High Volume Flyash Concrete” Proc. of International Conf. on “Advances in Civil Engg.”, I.I.T. Kharagpur, India, Allied Publisher Ltd, New Delhi, Jan. 3-5, 2002, pp 1444-1450 vol.-II

III. NATIONAL CONFERENCES/SEMINARS: 38

1. "Protective coating of Zn-Al Alloy on TMT rebar for concrete application" ,Monalisa Kundu, S.K Prasad, **Virendra Kumar**, V.3-in-1, pg. 40 National conference'GEPSID' heldat Ludhiana(Punjab), October 11-12,2014.
2. "Performance of Reinforced Concrete Buildings by pushover analysis", **Virendra Kumar**, Gopinath, Veeresh B, Somnath, V. 3-in 1 Volume, pg 44, National conference'GEPSID' heldat Ludhiana(Punjab), October 11-12,2014.
3. "An Overview of organic corrosion inhibitors for steel in concrete", Mamata Bal, **Virendra Kumar**, M.M. Prasad, V. 3-in Volume 3, pg.47, National conference'GEPSID' heldat Ludhiana(Punjab), October 11-12,2014.
4. **Virendra Kumar** & S.R. Pandit- "Experimental Investigation on Strength Development of Volume Fly Ash Concrete With Silica Fume" in the Proc. of National Conference "Element of Green Cities in Indian Context (Green Summit 2008)" at Agra, India, 01-02 March 2008.
5. Kumar Sanjay, **Kumar, Virendra**, and Prasad, M.M. - "Some Mechanical Properties of Recron 3S Fibre Concrete", Proc. of National conference on "Advances in Concrete Technology (ACT 2004)", T.I.E.T., Patiala, India, 26-27 Feb. 2004.
6. **Kumar, Virendra**, Sinha, A.K. and Prasad, M.M. - "High Volume Utilisation of Fly ash in Bricks", Proc. of National conference on "Advances in Concrete Technology (ACT 2004)", T.I.E.T., Patiala, India, 26-27 Feb. 2004.
7. **Kumar, Virendra** and Prasad, M.M. - "Strength Assessment of High Volume Fly Ash Concrete", Proc. of seminar on "Recent Trends in Building Materials (RTBM-04)", Regional Research Laboratory, Bhopal, M.P., India, 26-27 Feb., 2004.
8. **Kumar, Virendra** and Prasad, M.M. - "Strength and Stability of Steel Column", Proc. of All India Seminar on "Structural Steel for Construction Industry (SSCI-2004)", N.I.T., Rourkela, India, Aarbee Printers, 24-25 Jan. 2004, pp.192-200.
9. **Kumar, Virendra** and Prasad, M.M. - "Effect of Sulphate Environment on Compressive Strength of Concrete", Proc. of National conference on "Materials and Structures (MAST)", N.I.T., Warangal, India, 23-24 Jan. 2004.
10. **Kumar, Virendra**, and. Prasad, M.M. - "Industrial Waste in Road Construction – An Overview", Proc. of National Conference on "Modern Cement Concrete and Bituminous Roads", G.T.A.M., Visakhapatnam, India, 18-20 Dec. 2003.
11. **Kumar, Virendra** and Prasad, M.M. - "Low-Rise Reinforced Concrete Buildings in Earthquake Conditions", Proc. of 2nd conference on "Disaster Management Case Histories", B.I.T., Pilani, Rajasthan, India, 14-16 Nov. 2003.
12. **Kumar, Virendra**, Sinha, A.K. Prasad, M.M. and Jha Shailesh - "Construction Industry and Carnot Cycle – An Analogous Approach", Proc. Of 6st National conference on "Global Challenges in Project – Design and Construction Management", India Habitat Centre, New Delhi, India, 11-12 Nov. 2003, pp. 63-71, Session-I.
13. **Kumar, Virendra**; Prasad, M.M. and Jain K.K. – " Performance of High Volume Flyash Concrete" Proc. in Nat. Sem. on" Smart Materials, Intelligent Structures & Systems in Civil Engineering", ACCE, Bangalore, India, 19-21st June 2003.
14. Sinha, A.K.; **Kumar, Virendra** and Prasad, M.M. – "Recent Techniques in Transportation System" Proc. of Nat. Conf. on "ACEDFC" H.B.T.I., Kanpur, India, 15-16 Feb 2003.
15. Kumar, Sanjay; **Kumar, Virendra** and Prasad, M.M. – "Earthquake Resistant Building – An Overview" Proc. of Nat. Conf. on "Emerging Trends in Concrete Construction (NC-ETCC)" Dept. of Civil Engg., Chaitanya Bharthi Institute of Technology, Hyderabad, India, 22-24 Jan 2003.
16. Prasad, M.M., **Kumar Virendra** and Sinha A.K. – "Industrial Waste, Energy, Environment and Management in Infrastructure Development", Proc. of Global Summit on Infrastructure Development of Jharkhand, N.I.T., Jamshedpur, India, 11-12 Jan. 2003, pp. 68-75.
17. Kumar, Sanjay; **Kumar, Virendra** and Prasad, M.M. – "Management in Construction – A Perfect Approach" Proc. of Nat. Sem. on "Infrastructure Development Retrospect & Prospects" The Institution

of Engineers (I), Bihar State Centre, Patna, XVII Indian Engineering Congress, Digital Printers, Patna, India, 19-22 Dec. 2002, pp. 189-193.

18. **Virendra Kumar**; A.K. Sinha and Dr. M.M. Prasad – “Role of Structural Engineer in Infrastructure Development” Proc. of Nat. Sem. in “Infrastructure Development Retrospect and Prospects”. The Institution of Engineers (I), Patna, India, XVII Indian Engineering Congress, Digital Printers, Patna, (India) 19-22 Dec 2002, pp. 35-43 .
19. Kumar, Sanjay; Prasad, M.M. and **Kumar, Virendra** – “Material Characteristics of High Performance Concrete – An Overview” Proc. of Nat. Sem. on “Advances in Concrete and Concrete Structures”. The Institution of Engineers (I), Local Centre, Belgaum, Karnataka, India, 25-26 Oct. 2002, pp. 23-27.
20. Kumar, Sanjay; **Kumar, Virendra** and Prasad M.M. - “Industrial Waste – A Cost Effective and Environmental Friendly Building Material” Proc. of “Civil Engineering Strategies in the Making of India – A Global Giant (CESMIGG)” Dept. of Civil Engg., Crescent Engg. College, Chennai, India, 3-4 Oct. 2002, pp.73-77
21. A.K. Sinha, **Virendra Kumar** and Dr. M.M. Prasad – “Necessity of Road Transport for Infrastructure and Economic Development in India” Proc. of Nat. Sem. on “Civil Engineering Strategies in the Making of India – A Global Giant (CESMIGG)” Dept. of Civil Engg., Crescent Engg. College, Chennai, India, 3-4 Oct. 2002, pp. 1-4.
22. Sanjay Kumar; **Virendra Kumar** and M.M. Prasad – “Feasibility of Concrete Pavement in Jharkhand” Proc. of All India Seminar on “Development of Road Infrastructure in Jharkhand” The Institution of Engineers (I), Dhanbad Local Centre, India, 29-30 June 2002, pp. 161-167.
23. Prasad, M.M; **Kumar, Virendra** and Sinha, A.K. – “Utilisation of Steel Industry Waste by-product” Proc. of All India Seminar on “Development of Road Infrastructure in Jharkhand” The Institution of Engineers (I), Dhanbad Local Centre, India, 29-30 June 2002, pp. 278-284.
24. **Kumar, Virendra**; Sinha, A.K. and Prasad, M.M. - “Behaviour of Low Cost Building under Earthquake Conditions” Proc. of Nat. Sem. on “Recent Challenges in Civil Engg. (RCCE-2002)” Association of Consulting Civil Engineers (India), Hyderabad Centre, 21-22 June 2002, pp. 5-10, vol. II.
25. Kumar, Sanjay; **Kumar, Virendra** and Prasad, M.M. - “Low Cost Prefabricated Building Elements” Proc. of All India Sem. on “Mechanisation and Prefabrication in Building”. The Institution of Engineers (I), Indore Local Centre and S.G.S.I.T. and Sc. Indore, M.P., India, April 2002.
26. **Kumar, Virendra**; Kumar, Sanjay and Prasad M.M. - “Study of Flexural and Split Tensile Strength of Flyash-Silica Fume Concrete” Proc. of Nat. Conf. on “Advances in Construction Material” Dept of Civil Engg., N.I.T., Hamirpur, India, 8-9 April 2002.
27. **Kumar, Virendra**; Prasad, M.M. and Kumar, Sanjay – “Effect of Wind Load on Multistoreyed Residential Buildings” Proc. of Nat. Sem. on “Wind Engineering (NCWE-02)”, Dept. of Civil Engg., I.I.T., Roorkee, India, Phoenix Publishing House Pvt. Ltd., New Delhi, 4-6 April 2002, pp. 215-227.
28. Sinha, A.K.; **Kumar, Virendra** and Prasad, M.M. – “Utilisation of Flyash in Road Construction” Proc. of National Seminar on “Recent Trends in Civil Engg.” Dept. of Civil Engg., MBM College, Jodhpur, India, 22-23 Feb. 2002.
29. **Kumar, Virendra** and Prasad, M.M. – “Behaviour of Composite Beams of Steel and Concrete in Building” Proc. of All India Seminar on “Modern Trends in Steel Structures” Association of Consulting Civil Engineers, Nagpur Centre and the Institution of Engineers (I), India, 8-9 Feb 2002.
30. A.K. Sinha, **Virendra Kumar** and Dr. M.M. Prasad – “Finance and Management of Road Network” Proc. of National Seminar on “Financing, Design, Construction and Operation of Highways” Dept. of Civil Engg. Govt. College of Engg. Aurangabad, India, 7-8 Feb 2002, pp. 175.
31. **Kumar, Virendra** and Prasad, M.M.- “Behaviour of Reinforced Concrete Building During Earthquake” Proc. of Nat. Workshop on “Advances in Structural Engg.”, Dept. of Civil Engg., Venkateswara University, Tirupati, India, 21-22 Dec. 2001, pp. 249-256.
32. Kumar, Sanjay; **Kumar, Virendra** and Prasad, M.M. - “Corrosion of Reinforced Concrete and its protection” Proc. of Nat. Sem. on “Corrosion and its Protection”, N.M.L., Jamshedpur, India, 11-12 Dec. 2001, pp 51-56.

33. Prasad, M.M; Sinha, A.K. and **Kumar, Virendra** - "Socio-Economic Development and Rural Road Construction Technology" Proc. of Sem. on "Rural Development for a Health Rural-Urban Interface", I.I.T. Kharagpur, India, XVI Indian Engineering Congress, 1- 4 Dec. 2001, pp. 76-81
34. Kumar, Sanjay; **Kumar, Virendra** and Prasad, M.M. - "Flyash Concrete-A Good Building Material" Proc. of Nat. Conf. on "Utilisation of Flyash in New Millennium", Andhra Univ., Visakhapatnam, 23 Oct. 2001 pp. 103-107.
35. **Kumar, Virendra**; Kumar, Sanjay and Prasad, M.M. - "Flyash-Silica Fume Concrete-A New Construction Material" Proc. of Sem. on "Concrete in the Service for Adaptability and Durability", MNREC,, Allahabad, 7 Sept. 2001 pp. III 36-42
36. **Kumar, Virendra**; Sinha, B.P. and Prasad, M.M. - "A New Technique for Widening of Old Arch Bridge" Proc. of Sem. on "Fast Track Construction of Bridges and Structures", Patna, India, 2-3 Feb. 2001.
37. **Kumar, Virendra**; Khan, A.K. and Sinha, A.K. - "An Experimental Investigation of Flyash Concrete" Proc. of Nat. Sem. on "Advances in Cement and Concrete (ACC-2000)", Bundelkhand Institute of Engg. & Technology, Jhansi, India 10-11 March, 2000.
38. **Kumar, Virendra** and Jain, K.K. – "Utilisation of Flyash – A Challenge of Concrete Technology", Proc. of Nat. Symp. on "Recent Trends in Concrete Technology", K.I.T., Coimbatore, India May 7-8, 1999, pp. 125-148.

RESEARCH PROJECTS/Consultancy Projects:

a)Research Projects

- Research Project on Comprehensive Study on Effect of High Temperature on Concrete Structure Related to the Lining of Curved Structure such as Tunnel sponsored by DRDO Delhi 20.7.2017 to 20 7 2019, (8.2 Lacs)

b)Consultancy Projects

- Feasibility Study for Use of Ferrochrome Slag in Construction/Road sponsored by R & D Division, Tata Steel Ltd. Jamshedpur, Aug. 2016 to Nov. 2017, (13.39 Lacs)
- Feasibility studies on LD Salg as Coarse, Fine Aggregates and Cementitious Materials in Construction sponsored by R & D Division, Tata Steel Ltd. Jamshedpur, Dec. 2017 to Dec. 2018, (26.51 Lacs)
- Mix Design of Concrete M10, M15, M20 & M25 for construction of Jhalasay Yojana in Sararikela-Kharsawan District, M/s Executive Engg., Jalpath Pramandal, Chaibasa, Jharkhand
- Mix Design of Concrete M15 & M25, M/s Punj Liroyd Ltd, Koderma
- Mix Design of Concrete, M/s Assistant Engg NIT, Project Sub-Division III, CPWD JSR
- Mix Design of Concrete, M/s N.B.C.C.Ltd
- NDT Testing for RCC Foundation of Pellet Plant, Head Mechanical, Maintenance, Pellet Plant, Tata Steel Ltd.
- Proof Checking of the Design for three spans open web girder bridges in Koderma-Barkakana Section, M/s Modi Project Ltd, Ranchi
- Proof Checking of Bridge No. 21 at Bardarha, District-Champa, Chhatisgarh, M/s D.B.Power Ltd, Raigarh, Chhatisgarh
- NDT Testing of Ball Mill#1 RCC foundation in Pellet Plant at Tata Steel Ltd., M/s Kishore Behra, Head of Maintenance, Pellet Plant, Tata Steel Ltd
- Proof checking of the Design & Drawing of Box Bridge no 73 at KM 350.910 on DEO Nala in Between KNPS-MNKA Block section of Third line between RKSNDPS, M/s Managing Director Emak Consulting Pvt. Ltd, Ranchi

- Proof checking of the Design & Drawing of Pier”P12” & P “P13” of span 1x30M of ROB at Km 416/13-15 in sector 9-STI Chowk in lieu of LC No. 211 between Rourkela –Panposh stations, M/s Managing Director Emak Consulting Pvt. Ltd, Ranchi
- Proof checking of ROB at Ranchi, M/s Jharkhand Infrastructure Implementation Co. Ltd. Ranchi.
- Proof checking of Rail Bridge at KM 8.796 in between Matakhar Sarasa Jamalpur station in connection with new Rail line Project, M/S Shamvwi Consultant, 314, Jagat, Patna
- Review of Design & Drawing of 180 M long Barricating Wall of height 17.5 above the RCC Column, M/s J. Majumdar & Associates, Kolkata
- Proof checking of ROB no 209 at ch 91/330 in connection with Koderma – Giridih new rail line project, M/S Emak Consulting Engineers Pvt Ltd., Ranchi
- Proof checking of ROB at Ranchi, M/s Project Director, JUIDCO Ltd
- Proof checking of Railway Bridge, M/S Emak Consulting Engineers Pvt Ltd., Ranchi
- Improvement works of Chaibasa-Kandra-Chowka Road in Jharkhand for Core conducting of Structures, M/s GKC Project Ltd, HITEC City, Hyderabad
- Vetting of Design and drawing of WWTP for Tata Steel Jamshedpur , M/s Bhagwat Engineering, New Kalimati, JSR
- Consulting for proof-checking of design of 2-Lane via-duct and reinforced earth work at chakradharpur, Jharkhand, M/s Mr. Surana, Triveni Enterprises, 3/6, H.S.Tower, Bistupur, Jamshedpur
- Proof checking of the design & drawing of Bridges works of Bhimsen Jhansi (206 Kms) route of Jhansi Division of NCR in UP, M/s Skylark, Designer & Engineers Pvt.
- Proof checking of Railway Bridges, M/S Emak Consulting Engineers Pvt Ltd., Ranchi
- Proof checking of Rail substructure(Pier & abutment), M/S Shamvwi Consultant, 314, Jagat, Patna
- Proof checking of HPCL Building at Barauni, M/s Ram Kripal Singh Construction Pvt., Ranchi
- NDT Testing of Ball Mill#1 RCC foundation in Pellet Plant at Tata Steel Ltd., Head of Maintenance, Pellet Plant, Tata Steel Ltd
- Proof checking of ROB, M/S Emak Consulting Engineers Pvt Ltd., Ranchi
- Proof checking of Railway substructure(Pier & abutment), M/S Shamvwi Consultant, 314, Jagat, Patna
- NDT Testing of Ball Mill#1 RCC foundation in Pellet Plant at Tata Steel Ltd., Head of Maintenance, Pellet Plant, Tata Steel Ltd
- Mix Design of Concrete M10, M15, M20, M25 & M30 for construction of Gajiaya Barrage, M/s L & T Construction
- Mix Design of Concrete for construction works, M/s N.B.C.C. Ltd
- NDT for assessment of the strength of the strength of floor slab & intake well for khunti well for khunti water supply scheme , D.K.Singh, Project Director (Technical), JUIDCO Ltd, Ranchi
- Mix Design of Concrete M25 & M30 for GLMC project of Barrage Division , S.K.Sahu, Sew Infrastructure Ltd., Jharkhand
- Proof checking of the Design & drawing of i)construction of a bridge on approach road Of NTPC Prroject, Sudhir Kumar, Director, M/s Sparsh Engineering Company(P) Ltd.
- Assessment of R & D Building condition through NDT & Scanning of RCC roof slab at Tata steel, Jamshedpur, Chief, R & D Scientific Services , R & D Building, Tata Steel, Jamshedpur
- NDT of Board Head Quarter Building Ranchi, Jharkhand, Chief Engineer, State Housing Board, Jharkhand, Ranchi.
- Concrete Core Testing for Tata Project Ltd., Capstone Consultants Pvt. Ltd, Mumbai

- NDT for Switchyard RCC Road at 220 KV at 400/220KV Chaibasa Sub station Jharkhand, Mr. D. Pandey, Sr. Electrical Engineer, 400/220KV Chaibasa Sub station, Jharkhand
- Ranchi Urban Water Supply Scheme under JNNURM-Estimate of reinforcement through scanning work of RCC beams and columns, M/s L & T Ltd, Water & Effluent Treatment, Ranchi.
- Proof checking of the Design & Drawing of 20 nos Major Bridge (Br. No 26,29,31,32,40, 63, 64,,66,92,97,100,104,123,140,146,165,166,167,168,169) in connect in with the proposed doubling of existing railway line between Kiul-Gaya 124.304 km long of East Central Railway, M/S Emak Consulting Engineers Pvt Ltd., Ranchi
- Proof checking of the Design & Drawing of 162 nos Minor Bridges in connection with the proposed doubling of existing railway line between Kiul-Gaya 124.304 km long of East Central Railway, M/S Emak Consulting Engineers Pvt Ltd., Ranchi
- Vetting of Foundation design, D.K.Singh, Project Director (Technical), JUIDCO Ltd, Ranchi
- IVA Work for Chhota Govindpur & Baghbera Piped Water Supply Schemes (MVS) Executive Engineer-cum-Member Secretary Neer Nirmal Pariyojana, D.W. & S. Division Jamshedpur, DPMU, East Singhbhum.

CONFERENCE/WORKSHOP ORGANIZED:

- Course Coordinator, Sponsored by TEQIP-II, Short Term course on “Recent Advances in Civil Engineering (RACE-2017), NIT Jamshedpur, March 2 – March 4, 2017, Number of participants – 81.
- GIAN Course Coordinator, Sponsored by MHRD, GIAN course on “Analysis and Design of Structures in Fire(ADSF-2017), NIT Jamshedpur, October 9 – October 13, 2017, Number of participants – 58.
- Course Coordinator, Sponsored by TEQIP-III, National Workshop on “REVISED NBC-2016, Earthquake Indian Standards and Tall Buildings (REIST 2019), NIT Jamshedpur, 24-29th June, 2019, Number of participants – 38.

Ph. D. Supervised (With Full Details): 6 (on Going)

MEMBER OF EDITORIAL BOARD OF THE JOURNALS: Nil

TEACHING EXPERIENCE:

Position Held	Institution	From	To	Nature of Job
Associate Professor	N.I.T. Jamshedpur	28-03-2011	continuing	Teaching and Research
Lecturer(Selection Grade)	N.I.T. Jamshedpur	28-03-2008	27-03-2011	Teaching and Research
Lecturer (Senior Scale)	N.I.T. Jamshedpur	28-03-2003	27-03-2008	Teaching and Research
Lecturer	N.I.T. Jamshedpur	27-03-1998	27-03-2003	Teaching and Research

AWARDS, HONOURS & RECOGNITIONS:

- Best Paper Award in UKIERI Concrete Congress, 2-5 Nov. 2015, at N.I.T. Jalandhar, Panjab, India.

REVIEWER OF INTERNATIONAL JOURNALS AND BOOKS:

- Journal of Building Engineering, Elsevier Publication

- Journal of The Institution of Engineers (India): Series A

MEMBER OF PROFESSIONAL ACADEMIC BODIES:

- The Institution of Engineers (India): Fellow (F-119675-4)
- The Institution of Engineers (India): Chartered Engineer (India) (F-119675)
- Indian Concrete Institute: Life Member-7974
- Institute for Steel Development & Growth: Individual Life Member-IINDVM-L-027
- Indian Council of Chemists: Life Fellow-LF/1723

INVITED TALKS/SEMINARS GIVEN:

- Delivered two expert lecture in 6-day National Workshop on “REVISED NBC-2016, Earthquake Indian Standards and Tall Buildings (REIST 2019), NIT Jamshedpur, 24-29th June, 2019.
- Delivered two expert lecture and three tutorials in 5-day GIAN Course on ADSF-2017, 5-day International GIAN Course on” Analysis and Design of Structures in Fire(ADSF-2017), 9-13 Oct., 2017, Deptt. of Civil Engg., NIT Jamshedpur, Sponsored by MHRD, New Delhi.
- Delivered an expert lecture on “Fire Performance of Earthquake Damaged Reinforced Concrete Structures” on 8th December 2017, FDP on “Earthquake Resistant Design of Structures”, 8-12 December, 2017, Deptt. Of Civil Engg., Greater Noida Institute of Technology, Greater Noida, 8.12.2017-12.12.2017, Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Delivered two expert lectures on the topic “Concrete Design Mixing” and Material Testing, Target Group: Engineering Assistant & AEE of Civil and Electrical Engg. from different project of LIC of India, ECZ (Bihar, Jharkhand & Orissa), 13.02.2015, Zonal Training Centre, Jamshedpur.
- Lecture on the Topic in the workshop on Parallel Flange Sections in Workshop on “Parallel Flange Beams: An offering from JSPL” on 8th October, 2014 at Ramada Hostel, Bistupur, Jamshedpur
- Seminar/Lecture on “Effect of Fire Following Earthquake on Reinforced Concrete Structures” as a part GIAN Course July 11-22, 2016 at GIAN Course on “Structural Behaviour and Design in Extreme Thermal Conditions including Fire Effects
- Lecture delivered in One Day Workshop on the theme "Basics of Building Materials And Construction" in One Day Workshop on the theme "Basics of Building Materials And Construction" on 26th August, 2015, The Institution of Engineers, Jamshedpur Local Centre, Jamshedpur.
- Invited Lecture on ‘Use of Flyash in Concrete’ on 16th January 2014 in Annual Conference on “Efficient Utilisation of Coal based Thermal Power Plant Ash in West Bengal during 16-17 January 2014 at West Bengal Pollution Control Board, Kolkata-98.

Any Other Information:

i) Visits Abroad (Foreign Universities):

- Nanyang Technological University (NTU), Singapore during 13-14th June 2019 to attend and present research paper in 6th international conference on Applications of Structural Fire Engineering, ASFE’2019.
- ETH, Zurich University, Switzerland during 6-8 June 2012 to attend and present research paper in 7th International Conference on Structures in Fire-SIF’ 2012.
- NCREE Laboratory at Taiwan (ROC) during 20-24 October, 2008 to attend International Training Program for Seismic Design of Structures 2008 hosted by National Center for Research on Earthquake Engineering sponsored by National Science Council.
- University of Dundee, Scotland, U.K. during 5-7 July 2005 to attend and present research paper in 6th International Congress at University.

ii) STC/Training Programme attended:

- Training Programme on “Advances in Concrete Technology covering use of Admixture, Self Compacting, Concrete and High Performance Concrete”, 23 – 25 May 2017
- Nation workshop on “ NBC 2016 & Recently Revised Seismic Codes – Impact on Structural Design, Construction & Safety of Buildings”, 27 – 28 June 2017, New Delhi
- Short Term GIAN course on “ Structural Behaviour and Design in Extreme Thermal Conditions Including Fire Effects”, 11 – 22 July 2016, IIT Hyderabad
- Training Programme on “Understanding Earthquake Behaviour of Buildings”, 21 -26 May 2016, VNIT Nagpur
- Training Programme on “Behaviour Buildings Characterization and Testing ”, 1-5 June 2015, MNIT Jaipur
- Short Term course on “International Training Program for Seismic Design of Structures 2008”, October 20-24, 2008, Tiawan, Republic of China.
- Short Term course on “Applied Numerical Methods”, 07.7.2008- 11.7.2008, I.I.T., Roorkee
- Training Programme on ABAQUS Software, 19-23 May 2008, New Delhi
- Short Term course on “Seismic Reliability and Life Assessment of Structures”, 12 Mar 2007, I.I.T. Kharagpur,
- Short Term course on “Programming and Data Structures”, 02 Jan - 08 Jan 2007, N.I.T., Jamshedpur
- Short Term course on “Numerical Methods”, 26 Dec - 31 Dec 2006, N.I.T., Jamshedpur
- Short Term course on “Structural Dynamics-Applications to Earthquake Engineering”, 03 July - 14 July 2006, I.I.T., Bombay
- Short Term course on “Seismic Design of Reinforced Concrete Buildings”, 16 May - 21 May 2005, I.I.T., Roorkee,
- Short Course on “Seismic Design of Bridges”, 22 Nov - 26 Nov 2004, I.I.T., Kanpur
- Short Course on “Seismic Design of steel Structures”, 27 Sept.2004 - 01Oct. 2004, I.I.T., Kanpur
- Short Term Training Course “Seismic Retrofit of Multistoreyed Reinforced Concrete Buildings”, 28 June - 3 July 2004, I.I.T. Madras
- Short Term Training Course “Seismic Resistance of Masonry Structures” , 21 June - 26 June 2004, I.I.T. Madras
- Short Term Training Course “Structural Dynamics & Seismic Design”, 14 June - 19 June 2004, I.I.T. Madras
- Short Course on “Seismic Design of Reinforced Concrete Buildings”, 28May to 1 June, 2001, I.I.T., Kanpur
- Short Term course on “Teacher’s Role in Engineering Education”, 25 Dec - 13 Jan 2001, R.I.T. Jamshedpur
- Short Term course on “Recent Advantage in Chemical, Electrochemical and Nuclear Energy System”, 21 Oct - 31 Oct 1999, PES College of Engg. Mandya, Karnataka
- Short Term course on “Recent Advantage in Industrial Management”, 28 Dec - 8 Jan 1999, N.I.T., Jalandhar

Courses Lectured:

(a) U.G. Level: Structural Analysis-I, Structural Analysis-II, Design of Concrete Structure-I, Design of Concrete Structure-II, Design of Prestressed Concrete, Structural Dynamics & Earthquake Resistant Design, Design of Steel Structure

(b) P.G. Level: Prestressed Concrete Design , Multi Storeyed Building, N.M.C.T. ,. Elasticity & Elastic Stability, Plastic Analysis & Limit State Design of Steel Structures, Structural Dynamics, Bridge Engineering, Advanced Reinforced Concrete Design.