

CV OF DR. PRAMOD KUMAR SINGH (Nov. - 2012)

- 1. Name:** Dr. Pramod Kumar Singh
- 2. Date of birth:** 15th Sept' 1948
- 3. Present post & address:** Professor,
Department of Civil Engineering,
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4. Educational Qualification:

Degree	Institution	Year of award	Division
1. Admission Examination	B.H.U.	1963	First
2. Pre-University Course	B.H.U.	1964	First
3. B.Sc. (Civil & Municipal Engineering)	Institute of Technology (B.H.U.)	1969	First
4. M.Sc. (Structural Engineering)	Institute of Technology (B.H.U.)		First
5. Ph.D. (Static Analysis and Optimization of Cable-Stayed Bridges)	Institute of Technology (B.H.U.)	1991	—

5. Field Experience (Sept.' 1972 – March' 1984)

Posts held: Assistant Engineer in U.P. Irrigation and Assistant Manager (Executive Engineer) in National Hydroelectric Power Corporation, India.

Important projects handled:

- Design of prestressed concrete super structure of Gomti Aqueduct (biggest in Asia) carrying Sharada Sahayak feeder canal over Gomti River near Lucknow (Chinhat) with M/s H.C.C. Ltd., India.
- Construction of 500 MW Salal Hydro-Electric Project in J & K, India.

6. Academic Experience (April' 1984 – continued):

- a. 3.4.1984 to 8.7.1990:** Lecturer (Structures) in the Department of Civil Engineering, Institute of Technology (B.H.U.), India.
- b. 9.7.1990 to 14.5.2004:** Reader in the Department of Civil Engineering, Institute of Technology (B.H.U.), India.
- c. 15.5.2004 to continued:** Professor in the Department of Civil Engineering , Institute of Technology (B.H.U.), India.
U.G. and P.G. teaching in Structural Engineering and Research work.

Additional Assignment:

1. During 2004-05 dual charge of Superintending Engineer, Banaras Hindu University was held for about one year. Apart from other university works, construction of Rs.50 Million Science Block Building in Mahila Maha Vidyalay, B.H.U., India was carried out.
2. Head, Department of Civil Engineering, (Jan.2010- Dec. 2012)

7. Membership of Learned Bodies:

- a. Life Fellow- The Institution of Engineers (India)
and Reviewer of the Journal of The Institution of Engineers (India), Civil Engineering Division.
- b. Life Member- Indian Concrete Institute.
- c. Life Member- Indian Society for Technical Education.
- d. Life Member- Indian Society of Wind Engineering.

8. Research Projects handled:

- i) (2009-14) II-Phase- INR 7.5 Million University Grants Commission – Special Assistance Program Project on 'Earthquake Resistant Four Storey Confined Brick Masonry Apartment Type Building Design and Construction' is being handled as Coordinator in the Department of Civil Engineering, Institute of Technology (B.H.U.), Varanasi, India.
- ii) (2004-09) I-Phase- INR 5.0 Million University Grants Commission – Special Assistance Program Project on 'Earthquake Resistant Design, Construction, Retrofitting and Rehabilitation of Buildings' was handled as Coordinator in the Department of Civil Engineering, Institute of Technology (B.H.U.), Varanasi, India.

- iii) (1998-99) Department of Science and Technology, Government of India, project on 'Design of Well Cap, Pier and Well Steining at the Junction using Strut and Tie Model' was handled as Principal Investigator.
- iv) (1991) Department of Science and Technology, Government of India, project on 'Analysis of Cable Stayed Bridges' was handled as Co-Principal Investigator.
- v) (1989) Uttar Pradesh Science and Technology project on 'Promotion of Flyash as Cement Ingredient in Mirzapur District' was handled as Co-Investigator.

9. International Conference Sessions Chaired:

i. Chaired following session in ISEC-5 Conference at Las Vegas, U.S.A.
Session 2.2 : Dynamic impact and earthquake engineering
Day : Wednesday September 23, 2009

ii. Chaired one session in the International Conference on 'Innovations in Structural Engineering and Construction' held at Melbourne, Australia in 2007.

10. National Seminars/ Workshops Organized by Prof. Pramod Kumar Singh as Convener:

1. Recent Developments in Design and Construction Techniques of Brick Masonry Buildings, 3-4 March, 2012.
2. National Workshop on 'Design and Construction of Confined Brick Masonry', Feb. 03-04, 2007, I.T.-B.H.U., Varanasi, India.
3. All India Seminar on 'Earthquake Resistant Design, Construction, Retrofitting and Rehabilitation of Buildings', 18-19 Feb' 2006, I.T.-B.H.U., Varanasi, India.
4. All India Seminar on 'Innovations in Design and Construction of Concrete Structures' 2-3 Oct' 2004, I.T.-B.H.U., Varanasi, India.
5. National Seminar on 'Recent Advances in Civil Engineering', 14-16 Oct. 2011, Department of Civil Engineering, I.T., B.H.U., Varanasi, India.

11. Awards & Medals received by Dr. P. K. Singh:

- i. Received **The Brij Mohan Lal Memorial Award, 2004** of The Institution of Engineers. (I) for the paper titled '*Chamfering and Reinforcement Detailing in Reinforced Concrete Corner Subjected to Opening Moment*' at the Indian Engineering Congress held at Mumbai.

- ii. Received **Bharat Jyoti Award and Certificate of Excellence** from **India International Friendship Society**, New Delhi, 2001.
- iii. Received **E.P. Nicolaides Medal, 2000** for the paper titled '*Lateral Reinforcement in Prestressed Concrete Poles*', by the Institution of Engineers (India) at the Indian Engineering Congress held at New Delhi.
- iv. Received **Musaddilal Memorial Award, 1998** for presenting paper titled '*Composite Construction for Medium Rise Buildings*' in the 78th annual technical session of U.P. State Centre, Lucknow.
- v. Received **Musaddilal Memorial Award, 1997** for presenting paper titled '*Lateral Reinforcement in Prestressed Concrete Poles*' in the 77th annual technical session of U.P. State Centre, Lucknow.

12. Ph.D. and M.Tech. Dissertations guided:

Ph.D. guided – two in progress.

List of M.Tech. Dissertations guided by Dr. Pramod Kumar Singh:

1. (2011) Analysis of skew bridges using computational methods.
2. (2011) Prestress in composite bridge.
3. (2011) Analysis of confined brick masonry using ANSYS.
4. (2011) Nonlinear finite element analysis of bonded post-tensioned concrete beams.
5. (2009) Dynamic behavior of brick masonry building prepared as per IS 4326-1993.
6. (2008) Comparative dynamic response of confined brick masonry buildings.
7. (2007) Cost comparison of RC frame and confined brick masonry four storey apartment buildings in the Gangetic plain.
8. (2006) Torsional resistance of confined brick masonry.
9. (2005) Use of Ganga sand in cement mortar.
10. (2004) Bowstring girder and network arch bridges.
11. (2003) Effect of openings on behavior of in filled frames with and without continuous lintel band.
12. (2002) Chamfering and reinforcement detailing in reinforced concrete corners subjected to opening moment.
13. (2001) Analysis and design of steel truss using STAAD-III software.
14. (2001) Strut and tie model design of pier and well steining.

15. (2000) Behavior of brick in filled reinforced concrete frame subjected to static loading.
16. (1999) Strut and tie model design of pier, well cap and well steining junction.
17. (1998) Design of pier, well cap and well steining junction subjected to axial load.
18. (1997) Cost optimization in cable stayed bridges.
19. (1997) Simply supported deep beams subjected to midspan loading.
20. (1996) Detailing of reinforcement at L-type joint subjected to opening moment using strut and tie model.
21. (1991) Nonlinear analysis of cable stayed bridges.
22. (1990) Dynamic behavior of cable stayed bridge due to cable failure.
23. (1987) A computer analysis and experimental investigation into the use of ferrocement shell panels for roofing.
24. (1986) Grid analysis of RCC T-beam bridges.

13. Publications of Dr. Pramod Kumar Singh in International & National Refereed Journals and Conference Proceedings.

International Journals:

1. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "Steel – Concrete Composite Bridges", International Journal of Engineering Research and Development, Nov-2012 (accepted for publication)..
2. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "External Post-Tensioning of Steel – Concrete Composite Bridges", International Journal of Engineering Research & Technology, Nov-2012 (accepted for publication).
3. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "Live Load Deflection Criteria for Steel-Concrete Composite Bridges", International Journal of Modern Engineering Research, Nov-2012 (accepted for publication).
4. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "High Performance Steel for Steel-Concrete Composite Girder Bridge", International Journal of Emerging Technology & Advanced Engineering, Volume 2, Issue 11, November-2012.
5. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "Shrinkage Effect and Transverse Cracking in Steel-Concrete Composite Bridge Deck", International Journal of Emerging Technology & Advanced Engineering, Volume 2, Issue 11, November-2012.
6. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "Comparative Study of Economical Design Aspect of Steel-Concrete Composite Bridge with MS, HPS and Hybrid Steel", International Journal of Engineering Research and Development, Volume 4, Issue 6, October-2012, PP. 62-68.
7. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "Comparative study of prestressed steel – concrete composite bridge of different span length and girder spacing", International Journal of Modern Engineering Research, Vol.2, Issue.5, Sep-Oct. 2012 pp-3917-3922.

8. Vikash Khatri, P. R. Maiti and Pramod Kumar Singh, "Economical Design of Steel-Concrete Composite Bridge with MS and HPS", International Journal of Engineering Research & Technology, Vol. 1 Issue 7, September – 2012
9. Vikash Khatri, P. K. Singh and P. R. Maiti, "Comparative Study for Different Girder Spacing of Short Span Steel-Concrete Composite Bridge with MS and HPS", International Journal of Emerging Technology & Advanced Engineering, Volume 2, Issue 9, September-2012.
10. Singh, P.K., Khatri, V., Maiti, P.R., and Kar, A., 'Study on effect of skew angle in skew bridges', Int.J. of Engineering Research and Development, e-ISSN: 2278-067X Research/ ISSN:2250-3005, Vol. 2, No.12 , Aug. 2012.
11. Singh, P.K., Khatri, V., Maiti, P.R., and Kar, A., 'Analysis of Skew bridges using computational methods', Int.J. of Computational Research/ ISSN:2250-3005, Vol. 2, No.3 , May-June 2012.
12. Singh, P.K. and Khatri, V., 'A new concept of prestressed steel – concrete composite bridge', J. of ING of IABSE - The Bridge & Structural Engineer, Vol. 41, No. , Jan. 2012.
13. Singh, P.K. and Mallick, P.K., 'Optimum cost solution for cable-stayed bridges', J. of ING of IABSE - The Bridge & Structural Engineer, Vol. 32, No. 1, March 2002.
14. Singh, P.K., 'Non-linear Analysis and Shear Effect in Cable-Stayed Bridges', International Journal of Structures, Roorkee, July-Dec. 1998.
15. Singh, P.K., discussion on ' Cable Stayed Bridges - Parametric Study', Journal of Bridge Engineering, American Society of Civil Engineers, Aug. 1998.
16. Singh, P.K. Discussion on 'Joint Reinforcement : Strut-and-Tie Model', Concrete International, American Concrete Institute, Jan., 1998.
17. Singh, P.K. and Chaturvedi, H.S., 'Joint Reinforcement: Strut-and-Tie Model', Concrete International, American Concrete Institute, Aug.1997.
18. Singh, P.K. and Agrawal, T.P., 'Cable Post-Tension in Cable-Stayed Bridges', International Journal of Structures, Roorkee, July 1990.
19. This paper is abstracted in the J. of Applied Mechanics Review of American Society of Mechanical Engineers.
20. Agrawal, T.P., and Singh, P.K., 'Analysis of Cable-Stayed Bridges for Equal Cable Stress', The Bridge and Structural Engineer, J. of ING of IABSE, Sept. 1986.
21. Agrawal, T.P. and Singh, P.K., 'Middle Panel in Three Span Cable-stayed Bridges', International Journal of Structures, Roorkee, June 1986.

International Conferences:

22. Singh P. K. and Khatri Vikash, "Prestressed steel Concrete Composite Bridge"
Australia and South East Asia Structural Engineering and Construction
Conference (ASEA-SEC) 28 Nov-02 Dec 2012.

23. Kumar, B., Singh. P. K. and Rakesh V S 'A Review on utilization of Fly ash in the construction industry, International conference on Green Power Generation: Vision 2020, Institute of Engineers, India. 2010
24. Singh, P.K., 'Torsional Resistance of Confined Brick Masonry', Proc. Int. Conf. on '5th International Structural Engineering and Construction Conference', 21-27 Sept. 2009, Las Vegas, Nevada, USA.
25. Singh, P.K., 'Fatigue in Concrete decks of cable stayed bridges', Proc. Int. Conf. on 'Innovations in Structural Engineering and Construction', 2008, Taylor & Francis Group, London.
26. Singh, P.K., 'Some Strut and Tie Models for Design of Structural Concrete', Proceedings, 1st California Conference in Recent Advances in Engineering Mechanics, USA, 12-14 Jan' 2006.
27. Singh, P.K., 'Use of Fine Sand in Cement Concrete and Mortar' Proceedings 9th NCB International Seminar on Cement and Building Materials 8-11 November 2005, Ashok Hotel, New Delhi, India.
28. Singh, P.K., 'Design of Well Cap, Pier and Well Steining at the Junction Using Strut-and-Tie Model', Sixth International Conference on Piling and Deep foundations, Sponsored by Deep Foundations Institute (USA), Bombay, Jan. 1996.
29. Singh, P.K., Mishra A.K. and Nautiyal, B.D., 'Strength of Reinforced Brick Masonry Slabs', International Seminar on Rehabilitation, Renovation, and Repair of Structures, supported by American Concrete Institute (USA), Vishakhapatnam, 1994.

National Journals:

30. Singh, P.K., Singh, and Khatri, V., 'Overview and new technology of prestressing steel- concrete composite bridge', i-manager's J. of Civil Engineering/ ISSN-2231-1068, Vo2. No.1, dec-Jan. 2012.
31. Singh, P.K., Singh, V, and Yadav, S., 'Effect of Opening on Behaviour of the Infilled Frames with and without Continuous Lintel Band', J. of The Institution of Engineers (India), Vol. 87, August 2006.
32. Singh, P.K. and Singh, S.K., 'Long Term Fatigue Performance of Some RC Deck Slabs', J. of ING of IABSE – The Bridge & Structural Engineer, Vol.35 No.1, March- May 2005.
33. Dhar, V.N. and Singh P.K., 'Chamfering and Reinforcement Detailing in Reinforced Concrete Corner subjected to Opening Moment', J. of The Institution of Engineers (India), Vol. 84, Feb. 2004.

- This paper was awarded 'The Brij Mohan Lal Memorial Award-2004' at the 19th Indian Engineering Congress held at Mumbai.
34. Singh, P.K., 'Strut-and-Tie Model for Design of Pier and Well Steining Junction', Highway Research Bulletin – 66, Indian Roads Congress, June-2002, pp. 67-80.
 - This paper was discussed in the 63rd Annual Session of the Indian Roads Congress, held at Guahati in Jan. 2003.
 35. Singh, P.K. and Mallick, P.K., 'Optimum Cost Solution for Cable-Stayed Bridges', J. of ING of IABSE - The Bridge & Structural Engineer, Vol. 32, No. 1, March 2002.
 36. Singh, P.K., 'Reinforced Concrete Frame and Brick Masonry Infill Type Composite Construction for Residential Buildings up to Four Storeys Founded on Compressible Soils', J. of The Institution of Engineers (India), Vol.82, Dec.2001.
 37. Singh, P.K. Saxena, S., and Roy, B.N. 'Behaviour of Brick Masonry Infilled Reinforced Concrete Frame Subjected to Static Loading' J. of The Institution of Engineers (India) , Vol 82, June 2001.
 38. Singh, P.K., and Verma, R. J., 'The Pier, Well Cap and Well Steining Junction Subjected to Axial Load', J. of Indian Roads Congress, November, 1999.
 - This paper was included in the General Report on Road Research Work Done in India during the year 2000-2001, and it was discussed in the 62nd Annual Session of the Indian Roads Congress.
 39. Singh, P.K., 'Lateral Reinforcement in Prestressed Concrete Poles', J. of The Institution of Engineers (India), May 1998.
 - This paper was awarded best paper award in the 77th A.G.M. of U.P. State Center of The Institution of Engineers (India).
 - The EP Nicholadies Medal-2000 was also given on this paper for being best reinforced / prestressed concrete paper of the year.
 40. Singh, P.K., 'Cable Area Distribution in Cable-Stayed Bridges', J. of Structural Engineering, India, Jan. 1998.
 41. Singh, P.K. and Agrawal, T.P., 'Prestress in Cable-Stayed Bridges', J. of The Institution of Engineers (India), Nov. 1997.
 42. Singh, P.K., and Agrawal, T.P., 'Cable-Stayed Bridges - A Review', J. of The Institution of Engineers (India), Nov. 1992.
 43. Singh, P.K., 'Experimental Investigation into an Optimum Precast Ferrocement Roofing Shell Panel', Indian Concrete Journal, Sept. 1989.
 44. Agrawal, T.P., Singh, P.K., and Rao, M.L.K, 'Effect of Slag and Fly ash on Properties of Concrete' J. of The Institution of Engineers (India), March 1987.
 45. Agrawal, T.P., and Singh, P.K., 'Fly ash as Cement Ingredient', J. of Structural Engineering, India, Oct. 1986.

National Conferences:

46. Singh. P. K. and Brind Kumar “Remedial measures for restoration of distress in part parallel taxiway and apron- a case study of All Bahadur Shahtri airport at Babatpur, Varanasi” 14-16 Oct., RACE-2011, Dept. of Civil Engg., I.T., B.H.U.
47. Vikash khatri, P. K. Singh & P. R. Maiti, “Comparative behaviour of two story brick masonry building models of confined, unconfined model as per code” Proceedings of Recent Advances in Civil Engineering, RACE-2011, pp-602-609.
48. Singh P. K., “Cost effective building materials and construction technologies: problems and prospects.” BMTPC, Ministry of Housing & Urban Poverty Alleviation , Government of India, August, 2010
49. Singh, P.K., ‘Suitability of Confined Brick Masonry’, Proc. Design and Construction of Confined Brick Masonry Buildings, Dept. of Civil Engg., I.T., B.H.U., Feb. 03-04, 2007.
50. Singh, P.K., ‘Behavior of Confined Brick Masonry and Infilled R.C. Frame’, Proc. Design and Construction of Confined Brick Masonry Buildings, Dept. of Civil Engg., I.T., B.H.U., Feb. 03-04, 2007.
51. Singh, P.K., ‘Socio-Economic Impact’, Proc. Design and Construction of Confined Brick Masonry Buildings, Dept. of Civil Engg., I.T., B.H.U., Feb. 03-04, 2007.
52. Singh, P.K., and Yadav, S., ‘Earthquake Resistant Confined Brick Masonry Construction in Gangetic Plain’, Proceedings All India Seminar on ‘Earthquake Resistant Design, Construction, Retrofitting and Rehabilitation of Buildings’, Feb. 18-19’ 2006, I.T.-B.H.U., Varanasi.
53. Singh, P.K., ‘Network Arch Bridges’, Proceedings All India Seminar on ‘Innovations in Design and Construction of Concrete Structures’ 2-3 Oct’ 2004, I.T.-B.H.U., Varanasi.
54. Singh, P.K., ‘Composite Frame and Wall Construction for Medium Rise Buildings’, Proc. Recent Advances in Masonry Construction, University of Roorkee, Sept., 1998.
55. Singh, P.K., ‘Composite Construction for Medium Rise Buildings’, Proc. 78th AGM of IEI (I) - UP State Centre, Nov. 1998.
 • This paper was awarded best Civil Engineering paper for the year 1998 by the U.P. State Center.
56. Agrawal, T.P., and Singh, P.K., ‘Equal Cable Stress in Cable-Stayed Bridges’, Symposium on Recent Trends in Structural Analysis and Design, Bangalore, March 1987.
57. Singh, P.K., and Agrawal, T.P., ‘Effect of Various Middle Panel Arrangements on Behaviour of Cable-Stayed Bridges’, Symposium on Modern Trends in Analysis, Design and Construction of Structures, Warangal, 1986.

Books Published:

Singh P. K., “Matrix Analysis of Structures”, 2013, CENGAGE Learning India Pvt. Ltd., ISBN -13: 978-81-315-1858-8.

Proceedings Published:

1. Singh P. K. & Maiti, P R, “Proceedings of the workshop on “Earthquake Resistant Design and Construction of Confined Brick Masonry Buildings” (WERDCCBMB) 13-14 February, 2010.
2. Singh P. K. & Maiti, P R, “Proceedings of the Workshop on Recent Developments in Design and Construction Techniques of Brick Masonry Buildings”, 3-4 March 2012. ISBN: 978-81-921121-1-4.

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