### **CURRICULUM VITAE**

Name VIRENDRA SINGH, Ph.D.

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Present Address Professor, Department of Civil Engg,

IIT,( Banaras Hindu University), Varanasi 221005

Mobile No: 09336454320; Email: vs462002@yahoo.co.in

**Date of Birth** January 05, 1946

**Positions held** 

July 2011-Feb, 2012 **Dean**, Faculty of Engineering and Technology, Mewar University,

Chittorgarh

2009-2011, January **Dean,** Faculty of Engineering & Technology, BHU, Varanasi.

1979-1980 Royal Society Bursary awarded by Royal Society London, U.K.

Only Indian from Civil Engg. field to receive this award.

1993-1994 **Visiting Scientist,** City University, London, U.K.

May 2006 **Director & Dean,** Institute of Engineering and Technology,

Avadh University, Faizabad (UP), on deputation from BHU.

1991-1994 Chairman & Head, Dept. of Civil Engg, IT, BHU, Varanasi

1987- 2011, January **Professor of Civil Engg,** Department of Civil Engg,

IT, BHU, Varanasi

1979-1987 **Reader in Civil Engg,** Institute of Technology,

Banaras Hindu University Varanasi

1970-1979 Lecturer in Civil Engg, IT, BHU, Varanasi

1970 **Assistant Engineer,** Local Self Govt, Engineering Dept. U.P., India

Education

1979-1980 **Post Doctoral Fellow** (Civil Engg,) University of Southampton and City

University, London, U.K. Funded by Royal Society, London, U.K.

1977 **Ph.D. in Civil Engg,** Banaras Hindu University, *Topic: Stresses in soils* 

due to axially loaded friction and end bearing piles.

1970 M.Tech (Civil Engg.) IIT, Kanpur, 1<sup>st</sup> Class

1967 **B.Tech (Hons., 1**st Class) in Civil Engg, **IIT Kharagpur** 

1962 **I.Sc-** First Division U.P. Board

1960 **High School,** I<sup>st</sup> division and 19<sup>th</sup> position in UP Board

1958 **Middle School,** 1<sup>st</sup> Division and 1<sup>st</sup> position in Jaunpur district board

## **Courses Taught**

- Soil Mechanics: Undergraduate (B.Tech) and post graduate (M.Tech) for 39 year
- Foundation Engg: Undergraduate (B.Tech) and post graduate (M.Tech) for 39 years
- Civil Engg Subjects: Undergraduate B.Tech) for 39 years

## **Dissertations Supervised:**

M. Tech Thesis (Supervised): 35

# Ph.D. Thesis: One (awarded), One (Under supervision)

M.S. Kushwaha (2007) Strength and Stiffness Parameters of CL Soil of the Alluvial

Deposits

# Topics of M. Tech thesis supervised:

Shilpi Mahapatra(2011)	Settlement due to Compressible Pile	
S .K. Lal (2009)	Settlement of Axially loaded friction and compressible pile by analytical methods.	
Gagan Srivastava (2009)	A study on the geotechnical properties of soil-fly ash and soil-lime-fly ash admixtures.	
K.K. Yadav (2009)	Understanding of induced stresses in soil due to point and sub-surface loading at shallow depth.	
M, Kumar (2008)	Stresses induced in soil due to axially loaded compressible pile and its effect on settlement	
Bandana Sinha (2008)	Load displacement characteristics of model pile on sand bed under compression and tensile loading	
Ashok Kumar (2007)	Use of fly ash in dyke and design of dyke.	
Lalbabu Singh (2005)	Load settlement behaviour of circular footings resting on unreinforced and reinforced soil bed	
Akhilesh Kumar (2004) Study of fly ash and fly ash-soil admixture for sub-base of road		

Akhilesh Kumar (2004) Study of fly ash and fly ash-soil admixture for sub-base of road

Anuradha Sharma (2004) Bond's method of analysis for predicting the settlement of shallow and pile foundation

Dina Nath (2003) Load settlement curve behavior due to axially loaded circular footing

resting on sand bed and reinforced sand bed

Harishanker Prasad (2003) CBR of CL type of alluvial soil of Varanasi and use of sand layer as sub-

base material in road construction.

Prakash Kumar (2002) Effect of surcharge load and compaction on CBR value of alluvial soil of

Varanasi

V.P. Singh (2002) Utilization of fly-ash in construction of dykes and embankments

Rajasekhar Gurram (2001)	Computational package for induced stresses in soils for axially loaded	
friction and end bearing piles		

Stivastava, A.K. (1999) vertical stresses induced in soil due to axially loaded compressible piles	Srivastava, A.K. (1999)	Vertical stresses induced in soil due to axially loaded compressible pi	les
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and its effect on settlement

Mishra, D.K. (1999) Prediction of load settlement curves and bearing capacity of foundations of

silty soil by laboratory plate load test.

Dubey, Anil Kumar (1996) Shear strength parameters and compositional study for brick manufacturing

of alluvial soil

Narendra Kumar (1995) Use of fly ash in soil stabilization for roads

Rajesh Ranjan (1993) Understanding of shear strength parameters of silty soil and Chopen and

Ganga sands

Jha, A.K. (1991) Shear strength of alluvial soil

Verma, L (1989) Load transfer in axially loaded piles in sand

Singh, A.K. (1989) Study of shear strength parameters of Ganga sand

Singh, R (1989) Studies of shear strength parameters of Varanasi silt by HVORSLEV'S

theory

Singh, U.P. (1987) Understanding of elastic properties of Varanasi soil and settlement of

structures resting on it

Srivastava, R.K. (1986) Behavioral and economical appraisal of soil stabilizers for rural road

Singh, G.N. (1985) Vertical stresses in soils due to axially loaded compressible piles and its

effect on settlement analysis.

Pentachari, K (1985) Studies on compositional influence on California Bearing Ratio

Singh, B.N. (1983) Studies on California Bearing Ratio of silty deposits

Singh, S.K. (1983) Studies of shear strength parameters of saturated silt

Tewari, S.R. (1981) Studies of porous media and curvilinear surface flow on the seepage profile

Jaiswal, K.L. (1979) Determination of point resistance, skin friction of piles in silty deposits

Singh, U.C. (1978) Prediction of load settlement behavior of foundation on silty deposits

Markandey, S.K. (1977) Understanding of cohesion and φ of silty deposits by drained shear test

Singh, Y. (1975) Load settlement characteristics of foundations on silty soils

# **Papers Published**

Singh, Virendra (2012), "Analytical Method for Settlement of Axially Loaded Pile". Indian Geotechincal Journal, ISSN:2046-8983, Vol. 42 no.2, pp 75-86. (Springer)

Singh, Virendra (2009), "Use of fly ash in road and embankment construction". ETWMT 2009, Pune.

Singh, Virendra (2005), "Use of fly ash in construction of dyke", Int. Conf. on solid waste and technology management, USA, 2005.

Singh, Virendra (2005), "Stress path dependent deformation modulii of partially saturated CL type of soil, IGC, Dec, 2005.

Singh, Virendra (2004), "Use of sand layer as sub-base material", IGC 2004.

Singh, Virendra, et. al. (2002), "Effect of surcharge and compaction on the CBR value of alluvial soil", IGC 2002, Allahabad, DEc. 20-23, Vol. 1, pp. 62-65.

Singh, Virendra et. al. (2001), "Stresses due to loaded piles and settlement", IGC 2001, Dec 14-16, pp. 171-174.

Singh, V & N, Kumar (1997), "Use of fly ash in base and sub-base of roads", Proc. of 13<sup>th</sup> international conference on solid waste technology and Management, Philadelphia, USA, Nov. 16-19, 3C

Singh, V et. al. (1997), "Use of fly ash for soil stabilization for roads", IGC, 1997, pp. 375-378

Singh V (1996), "Stresses and settlements in soils due to axially loaded piles and pile groups", International Conference on Deep foundations, DF1, 96, pp. 101-105

Singh, V (1994), "Shear strength parameters of silty soils in terms effective stresses", IGC, Warangal, India.

Singh, V (1991), "Immediate settlements of shallow foundations on silty and sandy soils", IGC, Surat, India.

Singh, V. (1989), "Modulus of elasticity of Varanasi silty soil", IGC, Visakapatinam, Dec. 10-14

Singh, V. (1988), "Bearing capacity of structures on silty deposits", IGC Allahabad, Dec. 15-17

Singh, V. (1987), "Vertical stresses in soils due to axially loaded compressible piles and settlement calculations", Indian Geotechnical Journal, 17(3), pp. 223-248.

Singh, V. (1985), "Stresses in soils due to loaded friction piles and settlement calculations", 30th Congress of Indian Society of theoretical and applied mechanics, Dec. 1985, CM 29.

Singh, V (1983), "Stresses profile near the river band", Seminar of meandering of alluvial streams, March 19-21, Varanasi.

Boswell, L and Singh, V. (1981), "Computer methods for predicting piles behavior", Proc of 1<sup>st</sup> International Conference on Computing in Civil Engg, May 12-14, New York, USA, pp. 825-836.

Singh, V. (1977), "Shear strength parameters of partially saturated compacted silt", Symposium in Civil Engg, BHU, Varanasi.

Singh, V. (1976), "Stresses in soils due to vertical load on piles", ASCE Proc. 2<sup>nd</sup> International Conference of Numerical methods in Geo-Mechanics, pp. 451-462.

Roy, N. and Singh, V. (1975), "Stresses in soils due to axially loaded friction piles", Indian Geotechnical Journal, Vol. 1, pp. 21-53.

Singh, V. (1975), "Determination of modulus of sub-grade reaction of foundation on silty soils", 20<sup>th</sup> Conference of Indian Society of theoretical and applied mechanics.

Singh, V. (1972), "Stress coefficients in soil due to vertical load on single pile of varying length-diameter ratio", Proc. of modern trend in Civil Engg, Roorkee, Nov-11-13.

Singh, V. (1972), "Critical analysis of Boussinesq Solutions", Journal of Institution of Engineers.

### **Academic Achievements**

- Recipient of Royal Society Bursary for post Doctoral work in the University of Southampton and City University, London.
- Recognition of paper, "Stresses in soils due to axially loaded friction piles", by CIRIA Report 1983, a British Publication.

### **Technical Consultations**

- Worked as a Consultant for foundation problems for Coal India and Thermal Power Ltd.
- Worked on many small projects for PWD and Irrigation Dept. for determining the Bearing capacity
- Worked as examiner for U.P. University, UPSC Delhi and UPPSC, Allahabad.

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### **Projects**

Completed a project on "Understanding of shear strength of alluvial soil for brick manufacturing", AICTE Project.

Completed an e-project on Geotechnical Engineering sponsored by UGC.

### **Refresher Courses Attended**

Advances in analysis and design of foundation conducted by I.I.Sc, Bangalore. Recent trends Rock Mechanics, sponsored by ISTE.

### Administrative and extra-curricular activities

- Dean, Faculty of Engg. and Tech., Mewar University. Chittorgarh
- Dean, Faculty of Engg. & Tech., IT, BHU, Varanasi.
- Head, Civil Engg, IT, BHU, Varanasi for 3 years.
- Director & Dean, Institute of Tech., Dr. RML University, Faizabad.
- Warden and Administrative warden for Morvi hostel for 6 years.
- In-charge of Soil Mechanics Lab, Dept of Civil Engg, IT, BHU for 6 years
- Chairman, Athletics, BHU for 3 years
- Member, Deputation Committee, BHU for 3 years
- Returning Officer for BHU for 1 year

(Prof. Virendra Singh)

Civil Engineering, I. T. B.H.U.Varanasi