

Biographical Profile of Dr Sanjay Kumar Shukla *PhD (IIT Kanpur), MTech (IIT Kanpur), BSc Eng (BIT Sindri), FIEAust, FIGS, FIE(India), MASCE, MIGS, MIRC, MISRMTT, MISTE, MCAII*



Dr Sanjay Kumar Shukla is the Founding Editor-in-Chief of the *International Journal of Geosynthetics and Ground Engineering* (Springer International Publishing, Switzerland), and the Founding Research Group Leader of Geotechnical and Geoenvironmental Engineering Research Group at the School of Engineering, Edith Cowan University, Joondalup, Perth, Australia. **He is also the Adjunct Professor of Civil Engineering at Delhi Technological University, Delhi, India.**

He graduated in 1988 with a first-class degree with distinction in Civil Engineering from BIT Sindri (Ranchi University, Ranchi), India. He earned his MTech in Civil Engineering (Engineering Geology) in 1992 and PhD in Civil Engineering (Geotechnical Engineering) in 1995 from the Indian Institute of Technology Kanpur, India.

Dr Shukla has held a visiting appointment at the James Cook University, Australia from April 2008 to October 2008, where he taught Geosynthetic Engineering and Rock Mechanics, and he has been an Adjunct Associate Professor there during 2008 to 2011. He has also held visiting appointments at the Department of Civil and Structural Engineering, the Hong Kong Polytechnic University, Hong Kong during 2002 to 2005. Prior to joining the Edith Cowan University in April 2009, he has been an Associate Professor at the Department of Civil Engineering, Indian Institute of Technology BHU, Varanasi, India, and also taught at Harcourt Butler Technical University, Kanpur, India, North Eastern Regional Institute of Technology, Nirjuli, India, and BIT Sindri, India. He has been the Foreign Faculty at the Indian Institute of Technology, Bhubaneswar, India and Delhi Technological University, Delhi, India in 2016 under Global Initiative of Academic Networks (GIAN) programme of Ministry of Human Resource Development (MHRD), Government of India, New Delhi. He collaborates with several international universities, research institutions, industries and individuals on academic and field projects. As a Consulting Geotechnical Engineer, he has successfully provided solutions to the challenging field problems faced by many engineering organizations.

He has over 25 years of experience in teaching, research, consultancy, administration/management, and professional engagement. His primary areas of research expertise include geosynthetics and fibres for sustainable developments, ground improvement methods, earth pressure and slope stability, soil-structure interaction, and environmental, mining and pavement geotechnics. He has a strong research profile (**h-index: 30, i10-index: 87, RG Score: 36.14**). His research contributions include development of many new fundamental engineering concepts for applications in field projects covering civil engineering as well as multidisciplinary areas, such as mining and geological engineering, and they have been cited widely. He has authored over 275 research papers and technical articles, including over 170 refereed journal publications. He is also author/editor of 22 books, including 7 textbooks, and 22 book chapters. His books titled 'Core Principles of Soil Mechanics' and 'Core Concepts of Geotechnical Engineering' published by ICE Publishing, London are very popular textbooks in the core geotechnical engineering courses worldwide and have been Amazon **Best Sellers 2020 and 2021**. Shukla's generalized expression/theory for active thrust (2015) and Shukla's generalized expression/theory for passive resistance (2013) are being used by practicing engineers worldwide for designing the retaining structures. Shukla's wraparound geosynthetic reinforcement technique, developed during 2007-2008 for strengthening the foundation soil, has been well established by experimental and mathematical developments, and is now in routine practice.

He has been honoured with the **IGS Award (2018)** from the International Geosynthetics Society, USA, in recognition of outstanding contribution to the development and use of geosynthetics during 2014-2017 award period, *Executive Dean's Award* (2011) from Edith Cowan University, Australia for establishing teaching and research infrastructure in Civil Engineering, the *Outstanding Researcher Award* (2010) from Edith Cowan University, Australia, the *Vishwakarma Award* (2007) from the Akhil Bharatiya Vidhwat Parishad, India for the best technical contribution in the form of a book at the global level, and the *Best Paper Awards* (1995, 2015, 2016) from the Indian Geotechnical Society, New Delhi, India.

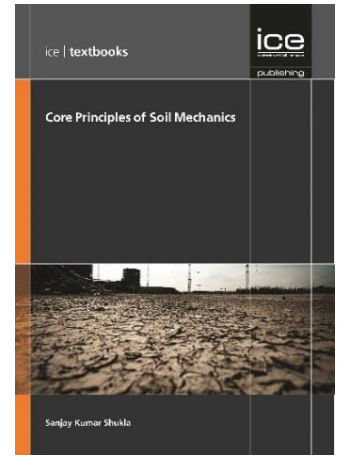
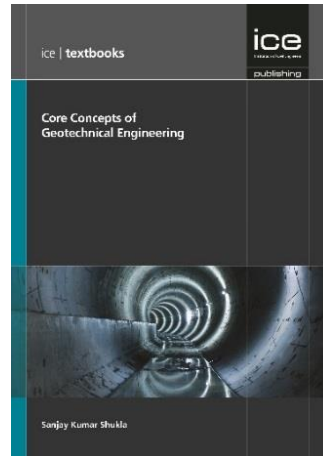
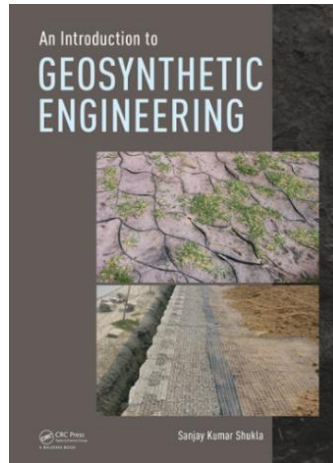
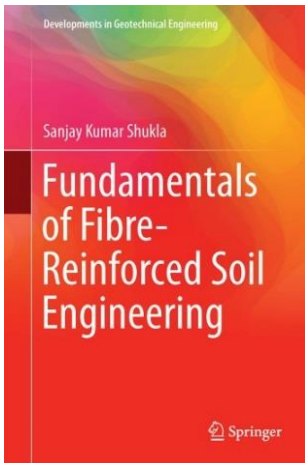
Presently, Dr Shukla is a Book Series Editor of *Lecture Notes in Civil Engineering* (Springer, Switzerland), a Senior Editor (Civil and Environmental Engineering) of *Cogent Engineering* (Taylor and Francis, UK), and a Regional Editor (Australia) of the *Soil Mechanics and Foundation Engineering* (Moscow, Russia). He serves on the editorial boards of nine international journals, including *Ground Improvement* (ICE Publishing, UK), *Geotechnical Research* (ICE Publishing, UK), and *Journal of Mountain Science* (Springer, Switzerland). He has been the Guest Editor for the Special Issues of *Indian Geotechnical Journal* (Vol. 43, No. 4, 2013) on Geosynthetic Engineering, and *International Journal of Geotechnical Engineering* (Vol. 8, No. 3, 2014) on Geosynthetics. He is a reviewer of more than 30 international journals in the areas of Civil (Geotechnical) Engineering.

He is a fellow of Engineers Australia, a life fellow of Institution of Engineers (India) and Indian Geotechnical Society, a member of American Society of Civil Engineers (ASCE), and International Geosynthetics Society, and a life member of Indian Roads Congress, Indian Society for Rock Mechanics and Tunnelling Technology, Indian Society for Technical Education, and Coal Ash Institute of India. He has been the Founding Honorary Secretary of Indian Geotechnical Society, Varanasi Chapter during 2005-2007, and its Chairman during 2007-2009.

Book Publications

Textbooks

1. **Shukla, S.K.** (2017). *Fundamentals of Fibre-Reinforced Soil Engineering*. Springer Nature, Singapore.
2. **Shukla, S.K.** (2016). *An Introduction to Geosynthetic Engineering*. CRC Press, Taylor and Francis, London, UK.
3. **Shukla, S.K.** (2015). *Core Concepts of Geotechnical Engineering*. ICE Publishing, London, UK.
4. **Shukla, S.K.** (2014). *Core Principles of Soil Mechanics*. ICE Publishing, London, UK.
5. Das, B.M. and **Shukla, S.K.** (2013). *Earth Anchors*. 2nd edition, J. Ross Publishing, Florida, USA.
6. Sivakugan, N., **Shukla, S.K.** and Das, B.M. (2013). *Rock Mechanics – An Introduction*. CRC Press, Taylor and Francis, Florida, USA.
7. **Shukla, S.K.** and Yin, J.-H. (2006). *Fundamentals of Geosynthetic Engineering*. Taylor and Francis, London, UK.

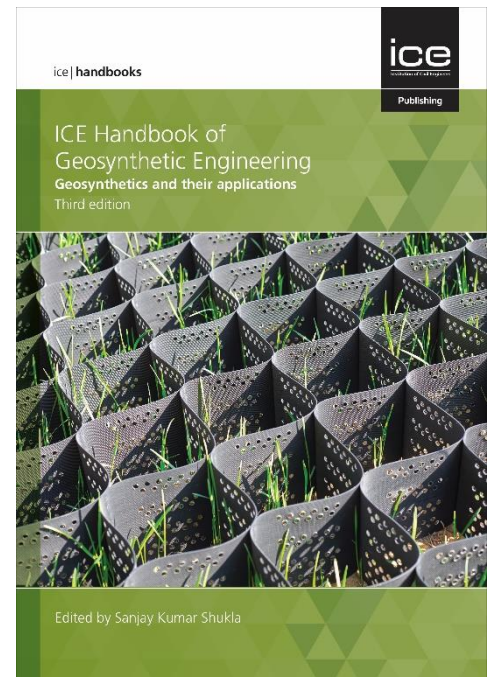


Reference books

8. **Shukla, S.K.** (2022). *Engineering Characteristics of Soils and Rocks of India*. CRC Press, Taylor and Francis, London.
9. **Shukla, S.K.** (2021). *Handbook of Geosynthetic Engineering*. 3rd edition, ICE Publishing, London, UK.
10. Kanoungo, A., Kanwar, V.S. and **Shukla, S.K.** (2020). *Characteristics of Asphalt Modified with Industrial Waste Sludge Containing Calcium Carbonate*. LAP Lambert Academic Publishing, Mauritius
11. **Shukla, S.K.** (2002). *Geosynthetics and Their Applications*. Thomas Telford Publishing, London, UK.

Conference Proceedings Books

12. **Shukla, S.K.**, Raman, S.N., Bhattacharjee, B. and Bhattacharjee, J. (Eds.) (2021). *Advances in Geotechnics and Structural Engineering*. Springer International Publishing, Switzerland.
13. **Shukla, S.K.**, Chandrasekaran, S., Das, B.B. and Kolathayar, S. (Eds.) (2021). *Smart Technologies for Sustainable Development*. Springer International Publishing, Switzerland.
14. Patel, S., Solanki, C.H., Reddy, K.R. and **Shukla, S.K.** (Eds.) (2021). *Proceedings of the Indian Geotechnical Conference 2019, Vol. I*, Springer International Publishing, Switzerland.
15. Patel, S., Solanki, C.H., Reddy, K.R. and **Shukla, S.K.** (Eds.) (2021). *Proceedings of the Indian Geotechnical Conference 2019, Vol. II*, Springer International Publishing, Switzerland.
16. Patel, S., Solanki, C.H., Reddy, K.R. and **Shukla, S.K.** (Eds.) (2021). *Proceedings of the Indian Geotechnical Conference 2019, Vol. III*, Springer International Publishing, Switzerland.
17. Patel, S., Solanki, C.H., Reddy, K.R. and **Shukla, S.K.** (Eds.) (2021). *Proceedings of the Indian Geotechnical Conference 2019, Vol. IV*, Springer International Publishing, Switzerland.
18. Patel, S., Solanki, C.H., Reddy, K.R. and **Shukla, S.K.** (Eds.) (2021). *Proceedings of the Indian Geotechnical Conference 2019, Vol. V*, Springer International Publishing, Switzerland.
19. Kanwar, V.S. and **Shukla, S.K.** (2020). *Sustainable Civil Engineering Practices*, Springer International Publishing, Switzerland.
20. **Shukla, S.K.**, Barai S.V. and Mehta, A. (Eds.) (2020). *Advances in Sustainable Construction Materials and Geotechnical Engineering*, Springer International Publishing, Switzerland.



21. Kallel, A., Erguler, Z.A., Cui, Z.-D., Karrech, A., Karakus, M., Kulatilake, P. and **Shukla, S.K.** (Eds.) (2019). *Recent Advances in Geoenvironmental Engineering, Geomechanics and Geotechnics, and Geohazards*, Springer International Publishing, Switzerland.
22. **Shukla, S.K.** and Guler, E. (Eds.) (2018). *Advances in Reinforced Soil Structures*, Springer International Publishing, Switzerland.

Research Publications (Selected only, from over 275 technical articles)

- Raja, M.N.A. and **Shukla, S.K.** (2021). Multivariate adaptive regression splines model for reinforced soil foundations. *Geosynthetics International*, UK, Vol. 28, No. 4, pp. 368–390.
- Raja, M.N.A. and **Shukla, S.K.** (2021). Predicting the settlement of geosynthetic-reinforced soil foundations using evolutionary artificial intelligence technique. *Geotextiles and Geomembranes*, UK, DOI: 10.1016/j.geotexmem.2021.04.007.
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- Pandey, L.M.S. and **Shukla, S.K.** (2020). Detection of leakage of MSW landfill leachates through a liner defect: experimental and analytical methods. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, USA, Vol. 146, No. 8: 04020060, pp. 1-11.
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- Pandey, L.M.S. and **Shukla, S.K.** (2018). Effect of state of compaction on the electrical resistivity of sand-bentonite materials. *Journal of Applied Geophysics*, Netherlands, Vol. 155, No.1, pp. 208-216.
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- Shrivastava, N., Zen, K. and **Shukla, S.K.** (2017). Modelling of compaction grouting technique with development of cylindrical cavity expansion problem in a finite medium. *International Journal of Geosynthetics and Ground Engineering*, Switzerland, Vol. 3, No. 4: 40, pp. 1-12.
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- **Shukla, S.K.** and Chandra, S. (1994). The effect of prestressing on the settlement characteristics of geosynthetic-reinforced soil. *Geotextiles and Geomembranes*, UK, Vol. 13, No. 8, p. 531-543.

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