

Name: Dr. Sunil Kumar
Date of birth: 1st March, 1989
Designation: Scientist (Senior Scale)
Qualification: Ph.D. (Soil Science & Agriculture Chemistry)
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Educational Qualifications:

- Ph.D. (Soil Science): CCS, Haryana Agricultural University, Hisar Haryana.
- ICAR-NET: Agricultural Scientist Recruitment Board, Delhi.
- M.Sc. (Ag.) Soil Science & Agri. Chemistry, SKRAU, Bikaner, Rajasthan.
- B.Sc. (Agri. Sci.): CSA, University of Agriculture & Technology, Kanpur, Uttar Pradesh.

Professional Experience:

- Scientist (Senior Scale) (2019 to till date), at ICAR-National Bureau of Soil Survey & Land Use Planning Regional Centre, New Delhi, India.
- Scientist (2015-2019), at ICAR-National Bureau of Soil Survey & Land Use Planning Regional Centre, Udaipur, India.
- Scientist at ICAR-NBSS & LUP, Nagpur from 10th April to 6th September 2015.
- Scientist at ICAR-NAARM, Hyderabad from 1st January to 31st March, 2015.

Research Areas:

- Application of geospatial technologies in natural resource management studies.
- Digital Soil mapping (DSM) and land resource inventory (LRI).
- Soil genesis, mineralogy, soil erosion, and carbon sequestration.
- Soil fertility, Soil physics & chemistry.

Awards:

- Gold Medal in M.Sc. (Ag.) Soil Science & Agri, Chem. SKRAU, Bikaner (2012).
- Junior Research Fellowship (JRF-2010) M.Sc. (Soil Science & Agri. Chem), SKRAU, Bikaner, Rajasthan.
- DST-INSPIRE Fellowship (2013) in Ph.D. (Soil Science), CCS HAU, Hisar.
- Young Scientist Award for outstanding contribution and recognition in the field of Soil Science & Agri. Chemistry on the occasion of National Conference organized by SAST, CSJM University Kanpur 27-29 January, 2023.
- Best Poster Award in the National Seminar on Soil Ecosystem Services for Sustainable Agriculture (SESSA) held at ICAR-NBSS&LUP campus Nagpur during 21-23 February, 2024.

Honours/Recognitions:

- Reviewer for national/international journals
- Nodal officer of “Mera Gaon Mera Gavray”
- Vice-chairmen of Rajbhasha Karyanvayan Samiti at ICAR-NBSS&LUP, RC, Delhi
- External examiner of B.Sc. (Ag.) practical exam at college of agriculture, SKNAU University Kishangarh Bas (Alwar) Rajasthan.

Top Ten Best Research Papers (Based on NAAS Rating-2026)

S.No.	Publication	NAAS Rating
1.	Kumar, Sunil, Gulati, I.J., Yadav, S.R., Yadav, R.S., Moharana, Meena, R.L., Singh, R.,	7.70

- Tailor, B.L., and Singh, R.S. (2018). Impact of low potassium fertilization on potassium transformation under different crop management systems in western plain of arid India. *Journal of Plant Nutrition*, 41(4), 411-424.
2. Moharana, P.C., Naitam, R.K., Verma, T.P., Meena, R.L., **Kumar, Sunil.**, Tailor, B.L., Singh, R.S., Singh, S.K. and Samal, S.K. 2017. Effect of long-term cropping systems on soil organic carbon pools and soil quality in western plain of hot arid India. *Archives of Agronomy and Soil Science*, 63(12), 1661-1675. **7.80**
 3. Moharana, P.C., Singh, R.S., Singh, S.K., Jena, R.K., Naitam, R.K., Verma, T.P., Nogiya, M., Meena, R.L., Gupta, D.K., **Kumar, Sunil.**, Tailor, B.L., and Singh, R. (2018). Assessment of soil quality monitoring indicators under long term rice cultivation in hot arid Ghaggar-flood plains of India. *Archives of Agronomy and Soil Science*, 64:14, 2030-2044, DOI:10.1080/03650340.2018.1476755 **7.80**
 4. Verma, T.P., Moharana, P.C., Naitam, R.K., Meena, R.L., **Kumar, Sunil.**, Singh, R., Tailor, B.L., Singh, R.S. and Singh, S.K. 2017. Impact of cropping intensity on soil properties and plant available nutrients in hot arid environment of North-Western India. *Journal of Plant Nutrition*, 40(20), 2872-2888. **7.70**
 5. Moharana, P.C., Yadav, B., Malav, L.C., **Kumar, Sunil.**, Meena, R.L., Nogiya, M., Biswas, H., Patil, N.G. (2024). Regional prediction of soil organic carbon dynamics for intensive farmland in the hot arid climate of India using the machine learning model. *Environmental Earth Sciences*. 83:529 <https://doi.org/10.1007/s12665-024-11834-5>. **8.80**
 6. **Kumar, S.**, Phogat, V.K., Dahiya, R., Yadav, V., Meena, R.L., Nogiya, M., Yadav, L. P., Priya, H., Yadav, S. K., Tiwari, S. and Surya, J.N. (2023). Assessment of poor-quality irrigation water under different cropping systems in arid and semi-arid region, India. *Agricultural Mechanization in Asia Africa and Latin America*, 54 (08), 15359-15367. **6.40**
 7. Nogiya, M., Moharana, P.C., Meena, R.L., Yadav, B., Jangir, A., Malav, L.C., Sharma, R.P., **Kumar, S.**, Meena, R.S., Sharma, G.K., Jena, R.K., Mina, B.L., Patil, N.G. (2024). Spatial variability of soil variables using geostatistical approaches in the hot arid region of India. *Environmental Earth Sciences*, 83:432 <https://doi.org/10.1007/s12665-024-11737-5>. **8.80**
 8. Upadhyay, P.K., Singh, V.K., Shekhawat, K., Dwivedi, B.S., Mishra, R.P., Singh, R.K., Rathore, S.S., Singh, S.K., Rani, M., Sarkar, S., Dey, A., Babu, S., Sahoo, R.N., Rajanna, G.A., Tyagi, V., **Kumar, S.**, Meenakshi, Patel, A. and Shukla, G. (2025). Sustainable nitrogen management in maize using optical sensor: Assessing yield, economics, and environmental impact. *Field Crops Research*, 322: 10975. **12.40**
 9. Moharana, P. C., Yadav, B., Nogiya, M., Meena, R. L., Jangir, A., Malav, L. C., **Kumar, S.**, Sharma, R.P., Meena, R.S., Naitam, R., Kumar, N., Vasu, D., Tiwari, G., Dash, B., Shirale, A.O., Adamala, S., Singh, R.S., Mina, B.L., Biswas, H. and Patil, N. G. (2025). Estimating Soil Depth in Data-Sparse Regions: A Machine Learning Approach for Western India. *Communications in Soil Science and Plant Analysis*, 56(7), 1106-1131. <https://doi.org/10.1080/00103624.2025.2449946>. **7.40**
 10. Yadav, K.K., Mali, N.L., **Kumar Sunil***, Surya, J.N., Moharana, P.C., Nogiya, M. and Meena, R.L. (2022) Assessment of soil quality and spatial variability of soil properties using geo- spatial techniques in sub-humid southern plain of Rajasthan, India. *Journal of the Indian Society of Soil Science*, 70: 69-85. DOI: 10.5958/0974-0228.2022.00004.4 **5.34**

Total Publications (Peer-reviewed journals only):

International: 14

National: 12

Google Scholar link: <https://scholar.google.com/citations?user=HvGaEcMAAAAJ>

Research Gate link: <https://www.researchgate.net/profile/Sunil-Kumar-19>