

Name Dr. Sudipta Chattaraj
Date of birth 07.09.1985
Designation Senior Scientist
Qualification MSc, PhD (Agricultural Physics)
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Educational Qualifications

- Ph.D (Agricultural Physics), ICAR- Indian Agricultural Research Institute, New Delhi.
- M.Sc (Agricultural Physics), ICAR- Indian Agricultural Research Institute, New Delhi
- B.Sc. (Agriculture.) Uttar Banga Krishi Viswavidyalay (UBKV), Coochbehar, W. B.

Professional Experience

- Senior Scientist at NBSS&LUP, RC- Kolkata from 08.08.2022 till date.
- Scientist at NBSS&LUP, Nagpur from 2.05.2012 to 08.08.2022.
- Scientist at NAARM, Hyderabad from 23.01.2012 to 1.05.2012.

Research Areas

- Geospatial modeling and Digital Soil Mapping
- Heavy metal pollution in soil and water
- Bioaccumulation of heavy metals in food chain
- Ecological health risk evaluation in peri-urban agriculture
- Land degradation vulnerability assessment
- Land use land cover change study in GIS environment
- Climate smart land use planning
- Climate change
- Carbon sequestration
- Air pollution

Awards

- Best Oral Presentation Award, 3rd Joint Workshop of IUSS Working Groups on Digital Soil Mapping & GlobalSoilMap, Bengaluru, 2025.
- Oral Presentation Award (2nd Position), Society for Fertilizers and Environment, 11th Annual Convention & National Webinar, 2024.
- Best Poster Award, National Seminar on Soil Ecosystem Services for Sustainable Agriculture (SESSA), ISSLUP, Nagpur, 2024.
- Best Paper Award (1st Position), ICSTA 2023
- Recipient of AgriGrand Challenge Award, 2022 by Min. of Information and Technology, C-DAC, GOI
- SAS Young Research Fellow Award, 2021
- Best Researcher Award, 2021
- Digital India Award, 2020 as key member in ICAR-Krishi portal.
- Annexure - I
- Best paper presentation award in international conference, 2019
- Outstanding Young Scientist Award (ICAR-NBSS&LUP), 2016
- Best Poster Award (3 Nos.) in 2015, 2016 and 2019
- IARI Merit Medal, 2010

Honours/Recognitions

DST-Inspire Fellowship, 2010
Joint CSIR-UGC NET-JRF in Earth Science, 2010 (All India Rank 6)
IARI Merit Fellowship, 2009 (All India Rank 1)
Junior Research fellowship-ICAR, 2007 (All India Rank 1)
University merit scholarship, 2003-2007

Ten Best Research Papers along with NAAS Rating-2026

Sl. No	Publication	NAAS Rating
1	Chattaraj, S. , Daripa, A., Reza, S. K., Ghosh, B. N., Majhi, S., Mallick, D., ... & Rahman, F. H. (2025). Soil texture and lithological discontinuity mapping for sustainable land use planning: An application of digital soil mapping in a part of Eastern Himalayan Foothills, India. <i>Catena</i> , 258, 109253.	11.70
2	Chattaraj, A., Daripa, A., Chattaraj, S. , Reza, S. K., Dey, S., Paul, S., ... & Rahman, F. H. (2025). Potential Soil Loss Estimation Using Machine Learning and Geospatial Technology in Part of the Eastern Plateau and Hill Region of West Bengal. <i>Journal of the Indian Society of Remote Sensing</i> , 53(10), 3317-3337.	8.20
3	Malav, L. C., Daripa, A., Chattaraj, S. , Yadav, B., Jangir, A., Naitam, R. K., ... & Karak, T. (2025). Trace Elements in Untreated Wastewater in Central India: A Controversial Consideration for Irrigating Vegetables—To Employ or Not to Employ? <i>LC Malav et al. Biological Trace Element Research</i> , 203(12), 6353-6377.	9.60
4	Reza, S. K., Chattaraj, S. , Mukhopadhyay, S., Daripa, A., Saha, S., & Ray, S. K. (2024). Delineation of high-resolution soil carbon management zones using digital soil mapping: A step towards mitigating climate change in the Northeastern Himalayas, India. <i>Soil Use and Management</i> , 40(1), e12995.	9.70
5	Sharma, R. P., Chattaraj, S. , Jangir, A., Tiwari, G., Dash, B., Daripa, A. and Naitam, R.K. (2022). Geospatial variability mapping of soil nutrients for site specific input optimization in a part of central India. <i>Agronomy journal</i> . https://doi.org/10.1002/agj2.21025 .	8.00
6	Daripa, A., Chattaraj, S. , Malav, L. C., Sharma, R., Naitam, R. K., Mohekar, D. S., & Ramamurthy, V. (2022). Land Use based distribution pattern, fractionation forms and health risk assessment of heavy metals in mining-affected soils of Western Ghat of Goa, India. <i>Int J Plant Soil Sci</i> , 34(23), 838-854.	5.07
7	Sharma, R. P., Chattaraj, S. , Vasu, D., Karthikeyan, K., Tiwary, P. , Naitam, R. K. , Dash, B., Tiwari, G., Jangir, A., Daripa, A., Singh, S. K., Anantwar, S. G. and Nimkar A. M. (2020). Spatial variability assessment of soil fertility in black soils of central India using geostatistical modeling, <i>Archives of Agronomy and Soil Science</i> , DOI: 10.1080/03650340.2020.1766678.	7.80
8	Chattaraj, S. , Srivastava, R., Barthwal, A. K., Giri, J. D., Mohekar, D. S., Obi Reddy, G. P., Daripa, A., Chatterji, S. and Singh. S. K. Semi-automated object-based landform classification modelling in a part of the Deccan Plateau of central India. (2017). <i>International Journal of Remote Sensing</i> , 38:17, 4855-4867, DOI: 10.1080/01431161.2017.1333652.	8.60
9	Chattaraj, S. , Chakraborty, D., Sehgal, V.K., Paul, R.K., Singh, S.D., Daripa, A. and Pathak H. (2014). Predicting the impact of climate change on water requirement of wheat in the semi-arid Indo-Gangetic Plains of India. <i>Agriculture, Ecosystems and Environment</i> , 197, 174-183.	12.40
10	Chattaraj, S. , Chakraborty, D., Garg, R. N., Singh, G. P., Gupta, V. K., Singh, S., & Singh, R. (2013). Hyperspectral remote sensing for growth-stage-specific water use in wheat. <i>Field Crops Research</i> , 144, 179-191.	12.40

Total Publications (Peer-reviewed journals only):

International: 16

National: 11

Google Scholar link: <https://scholar.google.com/citations?user=jmHKeCYAAAAJ&hl=en>