

**Name** Dr.Sanjay Kumar Ray  
**Date of birth** 25/12/1964  
**Designation** Principal Scientist & Head  
**Qualification** M.Sc. , Ph.D. (Ag.)  
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### **Educational Qualifications**

- B.Sc. (Honours) - Chemistry, 1983 - University of Calcutta
- M.Sc.- Agricultural Chemistry and Soil Science, 1985 - University of Calcutta
- Ph.D. - Agricultural Chemistry and Soil Science, 1992 - University of Calcutta

### **Professional Experience**

- Scientist - 03/12/1991 - 02/12/1996
- Scientist (Sr. Scale) - 03/12/1996 - 14/12/1999
- Senior Scientist – 15/12/1999 – 14/12/2007
- Senior Scientist – 15/12/1999 – 14/12/2007
- Principal Scientist – 15/12/2007 to 11/05/2015
- Principal Scientist Head, ICAR-NBSS&LUP, R.C.Jorhat -12/05/2015 to 31/08/2021
- Principal Scientist, ICAR-NBSS&LUP, R.C. Kolkata - 01/09/2021 to 31/10/2021
- Principal Scientist & Head, ICAR-NBSS &LUP,R.C. Kolkata - 01/11/2021

### **Research Areas**

- Soil Survey
- Genesis and Classification
- Soil Mineralogy
- Soil Carbon & Climate Change
- Soil and Land Quality
- Soil Chemistry and Soil Environment .

### **International Experience**

- Visiting Scientist at Soil and Water Science Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Florida, USA

### **Awards**

- 16 Awards including ICAR Team Award for outstanding work in Inter disciplinary Research, Usha Zende Award for best paper published in micronutrient research, Fellow of Maharashtra Academy of Sciences.

### **Honours/Recognitions**

- Member of Board of Management, Assam Agricultural University, Jorhat, Assam.
- Member of Study Advisory Committee, DST, Govt. of India.
- Member of Academic Council, Assam Womens' University, Jorhat, Assam.
- Members of IMC, ATARI (Zone-VI), Guwahati, Assam; ICAR-NRRI, Cuttack and ICAR-CICR, Nagpur.
- Member of the Interim Research Committee, BCKV, Mohanpur, West Bengal.
- Sectional Editor, Journal of the Indian Society of Soil Science.
- Member, Global Technology Watch Group (GTWG) for Sustainable Agriculture, DST, Govt. of India.
- Member, Academic Council of Assam Agriculture University, Jorhat, Assam.
- Member of Research Advisory Committee of Rain Forest Research Institute (RFRI), Jorhat, Assam.
- Member, Research Advisory Committee of Central Muga Eri Research and Training Institute, Central Silk Board, Govt. of India, Lahdoigarh, Jorhat.
- Member of Institute Management Committee of ICAR Research Complex for North Eastern Hill Region, Barapani, Meghalaya.
- Member of Institute Management Committee of the ICAR-Indian Institute of Soil Science, Bhopal.
- Member, State Coordination Committee for Second Green Revolution in Eastern India;
- Consortium made by the Ministry of Agriculture and Farmer's Welfare, Govt. of India.

- Member of Regional Research Advisory Committee, Regional Sericulture Research Institute, Jorhat.
- Member Scientific Research Council of KVK, Sibsagar, Assam, KVK, Jhargram, West Bengal.

#### Ten Best Research Papers along with NAAS Rating-2022

SNo	Publication	NAAS Rating
1.	Ray, S.K., Varadachari, Chandrika and Ghosh, Kunal (1993). Novel slow-releasing micronutrient fertilizers. I. Zinc Compounds. Industrial & Engg. Chemistry Research (American Chemical Society), 32(6): 1218-1227. (Citation - 41, Impact factor - 2.59, 06.10.2017).	9.57
2.	Ray, S.K., Gajbhiye, K.S., Challa, O., Prasad, Jagdish, Singh, S.R., Anantwar, S.G., Gaikwad, M.S. and Padihar, S.K. (2000). Systematic soil survey to identify potential sodicity areas in parts of Tawa Command, Madhya Pradesh. Journal of the Indian Society of Soil Science. 48(2): 346-351.	5.31
3.	Ray, S.K., Chandran, P., Bhattacharyya, T., Durge, S.L. and Pal, D.K. (2003). Layer Charge of two Benchmark Vertisol clays by alkylammonium method. Clay Research. 22: 13-27.	-
4.	Chandran, P., Ray, S.K., Bhattacharyya, T., Srivastava, P., Krishnan, P. and Pal, D.K. (2005). Lateritic soils of Kerala, India: their mineralogy, genesis and taxonomy. Australian Journal of Soil Research 43:839-852	7.69
5.	Bhattacharyya, T., Pal, D.K., Easter, M., Batjes, N.H., Milne, E., Gajbhiye, K.S., Chandran, P., Ray, S.K., Mandal, C., Paustian, K., Williams, S., Killian, K., Coleman, K., Faloon, P. and Powlson, D.S. (2007). Modelled soil organic carbon stocks and changes in the Indo-Gangetic Plains, India from 1980 to 2030. Agriculture Ecosystems and Environment 122(1), 84-94.	10.24
6.	Ray, S.K., et al. (2014) Soil and land quality of the Indo-Gangetic Plains of India. Current Science, 107(9): 1470-1486.	6.73
7.	Vasu, Duraisamy, Tiwary, Pramod, Chandran, Padikkal, Singh, Surendra Kumar, Ray, Sanjay Kumar, Butte, Pravin and Parhad, Vilas (2018) A conceptual model of natural land degradation based on regressive pedogenesis in semiarid tropical environments. Land Degrad. & Dev., DOI:10.1002/ldr.3000 ( <a href="https://doi.org/10.1002/ldr.3000">https://doi.org/10.1002/ldr.3000</a> ).	9.78
8.	Gurav, P. Priya, Datta, S.C., Ray, S.K., Choudhari, P.L. and Ahmed, N. (2018) Assessment of potassium release threshold levels of Vertisols (shrink-swell soils) in different agro-ecological regions of India. Applied Clay Science, 165:155-163.	10.61
9.	Ray, Prasenjit, Chattaraj, Sudipta, Bandyopadhyay, Siladitya, Jena, Roomesh Kumar, Singh, Surendra Kumar. and Ray, Sanjay Kumar. (2021). Shifting cultivation, soil degradation and agricultural land use planning in the north eastern hill region of India using geo-spatial techniques. Land Degradation and Development, 1-23.	9.78
10.	Hota, Surabhi, Mishra Vidyanand, Mourya Krishna Kumar, Giri Krishna, Kumar Dinesh, Jha Prakash Kumar, Saikia Uday Shankar, Prasad Vara P.V. and Ray, Sanjay Kumar (2022). Land Use, Landform, and Soil Management as Determinants of Soil Physicochemical Properties and Microbial Abundance of Lower Brahmaputra Valley, India. Sustainability, 14: 2241-2258. ( <a href="https://doi.org/10.3390/su14042241">https://doi.org/10.3390/su14042241</a> )	8.58

#### Total Publications (Peer-reviewed journals only)

International: 31

National: 96

Google Scholar link: <https://scholar.google.com/citations?user=QHyU0nkAAAAJ&hl=en&oi=sra>

Research Gate link: <https://www.researchgate.net/profile/S-Ray-4>