

Name Dr.Kuntal Mouli Hati
Designation Principal Scientist
Qualification Ph. D. (Agricultural Physics)
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Educational Qualifications

- Ph.D. (Agricultural Physics), ICAR- Indian Agricultural Research Institute, New Delhi (1996)
- M. Sc. (Agricultural Physics), ICAR- Indian Agricultural Research Institute, New Delhi (1993)
- B. Sc. (Ag) (Hons), Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal (1990)

Professional Experience

- Scientist at ICAR- Indian Institute of Soil Science, Bhopal from 27/12/1996 to 26/12/2000
- Scientist(Sr. Scale) at ICAR-Indian Institute of Soil Science, Bhopal from 27/12/2000 to 26/12/2005
- Senior Scientist at ICAR- Indian Institute of Soil Science, Bhopal from 27/12/2005 to 26/12/2011
- Principal Scientist at ICAR- Indian Institute of Soil Science, Bhopal from 27/12/2011 to 26/03/2023
- Principal Scientist at ICAR-NBSS &LUP, R.C. Kolkata from 27/03/2023

Research Areas

- Rainwater Water Harvesting and Recycling
- Soil Health Evaluation and Management under Long-term Tillage and Integrated Nutrient Management
- Conservation Agriculture and Carbon Sequestration
- Distillery Effluent and Fly Ash Application Impact on Soil Health and Crop Productivity
- Crop Abiotic Stress Assessment using Remote Sensing
- Soil Spectroscopy and Chemometric Applications for Soil Analysis
- Terrain Analysis, Soil–Landscape Relationships and Soil Resource Monitoring
- Land Resource Inventory, Land Management Units and Agricultural Land Use Planning

International Experience

- Attended Training on Soil Spectroscopy at World Agroforestry Centre (ICRAF), Nairobi, Kenya
- Post-Doctoral Research Fellow at School of Agriculture and Food Sciences, The University of Queensland, St. Lucia Campus, Australia

Awards:

- Golden Jubilee Commemoration Young Scientist Award of the Indian Society of Soil Science, New Delhi
- ISSS- Dr. J.S.P. Yadav Memorial Award for Excellence in Soil Science of Indian Society of Soil Science, New Delhi
- Doreen Mashler Award of ICRISAT (CGIAR) as Team member of the IISS-ICRISAT Collaborative Project on Watershed Management
- Best Poster Paper Presentation Prize in the Symposium on “Geo-informatics Application for Sustainable Development” at WTC, IARI, New Delhi during February 17-19, 2004.
- Best Poster Award in 3rd International Agronomy Congress on “Agriculture Diversification, Climate Change management and Livelihoods” held during 27 to 29th November, 2012 at IARI, New Delhi.
- Oral Presentation Award in International Symposium on ‘New-Dimensions in Agro-meteorology for Sustainable Agriculture’ at GB Pant University of Agriculture and Technology, Pantnagar held during October 16-18, 2014.
- National Scholarship sponsored by West Bengal Board of Secondary Education.
- Merit-cum-means Scholarship from ICAR during B.Sc.(Ag.) Hons.
- ICAR Junior Research Fellowship in Soil Science for Master’s Degree Programme.
- Stood first in the Indian Agricultural Research Institute Entrance Examination for the Discipline of Agricultural Physics both for the Masters and Doctoral Degree Programmes.
- IARI Junior and Senior Fellowships for Masters and Doctoral Degree Programmes, respectively.

Honours/Recognitions

- Associate Fellowship of National Academy of Agricultural Sciences (2008)
- Endeavour Research Fellowship for Post-Doctoral Research by Government of Australia
- Councillor of the Indian Society of Soil Science for the biennium 2017-18
- Member, Assessment Committee (DG's & DDG's Nominee) for CAS promotion of Scientists in different ICAR Institutes
- Member, Editorial Board, Indian Journal of Agrophysics for the year 2020-23

Guided No. of M.Sc./Ph.D. students:

M.Sc Students – 4; Ph.D Student – 1

Ten Best Research Papers along with NAAS Rating-2026:

Sr. No.	Publication	NAAS Rating
1.	Hati, K.M. , Biswas, A.K., Bandyopadhyay, K.K. and Misra, A.K. 2004. Effect of post-methanation effluent on soil physical properties under soybean-wheat system in a Vertisol. <i>Journal of Plant Nutrition and Soil Science</i> 167: 584-590.	9.10
2.	Hati, K.M. , Mandal, K.G., Misra, A.K. Ghosh, P.K., and Bandyopadhyay, K.K. 2006. Effect of inorganic fertilizer and farmyard manure on soil physical properties, root distribution, water-use efficiency and seed yield of soybean in Vertisols of central India. <i>Bioresource Technology</i> 97(16): 2182-2188.	15.00
3.	Hati, K.M. , Swarup, A., Singh, D., Misra A.K. and Ghosh, P.K. 2006. Long-term continuous cropping, fertilization and manuring effects on soil physical properties and organic carbon content of a sandy loam soil. <i>Australian Journal of Soil Research</i> 44(5): 487-495.	8.40
4.	Hati, K.M. , Biswas, A.K., Bandyopadhyay, K.K. and Misra, A.K. 2007. Soil properties and crop yields on a vertisol in India with application of distillery effluent. <i>Soil and Tillage Research</i> 92(1-2): 60-68.	12.80
5.	Hati, K.M. , Swarup, A., Dwivedi A.K., Misra A.K. and Bandyopadhyay, K.K. (2007). Changes in soil physical properties and organic carbon status at the topsoil horizon of a vertisol of central India after 28 years of continuous cropping, fertilization and manuring. <i>Agriculture, Ecosystems and Environment</i> 119(2): 127-134.	12.40
6.	Hati, K.M. , Swarup, A., Mishra, B., M.C. Manna, Wanjari, R.H., Mandal, K.G. and Misra A.K. (2008). Impact of long-term application of fertilizer, manure and lime under intensive cropping on physical properties and organic carbon content of an Alfisol. <i>Geoderma</i> 148 (2): 173-179	12.60
7.	Mandal, K.G., Hati, K.M. , Misra, A.K. 2009. Biomass yield and energy analysis of soybean production in relation to fertilizer-NPK and organic manure. <i>Biomass and Bioenergy</i> 33: 1670–1679.	11.80
8.	Jha, P., Hati, K.M. , Dalal, R.C., Dang, Y.P., Kopittke, P. and Menzies, N.W. (2020). Soil carbon and nitrogen dynamics in a Vertisol following 50 years of no-tillage, crop stubble retention and nitrogen fertilization. <i>Geoderma</i> 358: 113996.	12.60
9.	Hati, K.M. , Jha, P., Dalal, R.C., Somasundaram, J., Dang, Y.P., Kopittke, P., Kirchoff, G. and Menzies, N.W. (2021). 50 years of continuous no-tillage, stubble retention and nitrogen fertilization enhanced macro-aggregate formation and stabilisation in a Vertisol. <i>Soil and Tillage Research</i> 214: 105163, 1-11.	12.80
10.	Hati, K.M. , Sinha, N.K., Mohanty, M., Jha, P., Londhe, S., Sila, A., Towett, E., Chaudhary, R.S., Jayaraman, S., VassandaCoumar, M., Thakur, J.K., Dey, P., Shepherd, K., Muchhala, P., Weullow, E., Singh, M., Dhyani, S.K., Biradar, C., Rizvi, J., Patra, A.K., and Chaudhari, S.K. (2022) Mid-Infrared Reflectance Spectroscopy for Estimation of Soil Properties of Alfisols from Eastern India. <i>Sustainability</i> , 14 (9), 4883.	9.30

Publications:

Peer-reviewed Journals:

International: 50

National: 52

Books, Book Chapters and Bulletins: 70

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

Research Gate link: <https://www.researchgate.net/profile/Kuntal-Hati-22>