FACULTY DETAILS



Dr. Manik Chandra Kundu

Assistant Professor of Soil Science, Department of ASEPAN (Agronomy, Soil Science, Agril. Engineering, Plant Physiology and Animal Science)

DEPARTMENT:

Department of ASEPAN (Agronomy, Soil Science & Agril. Chemistry, Agril. Engineering, Plant Physiology and Animal Science)

DATE OF BIRTH:

3rd January, 1980

EDUCATIONAL QUALIFICATION:

- B. Sc. (Agriculture) Hons., Bidhan Chandra Krishi Viswavidyalaya, 2002.
- M. Sc. (Agriculture) in Agricultural Chemistry & Soil Science, Bidhan Chandra Krishi Viswavidyalaya, 2004.
- Ph. D. (Agriculture) in Agricultural Chemistry & Soil Science, Bidhan Chandra Krishi Viswavidyalaya, 2008.
- National Eligibility Test (NET), Agricultural Scientists Recruitment Board, New Delhi, 2005.

CONTACT ADDRESS:

Department of ASEPAN,

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RESEARCH AREAS/INTEREST:

- Environmental Soil Science,
- Soil Physics,
- Soil Fertility and Nutrient management,
- Carbon Sequestration & Soil Health.

TEACHING EXPERIENCES:

Presently teaching different B.Sc. (Ag.), M.Sc. (Ag.) and Ph.D. courses in Soil Science & Agril.
Chemistry at Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan since 1st February, 2013.

RESEARCH EXPERIENCES:

- Worked as a Senior Research Fellow in the ICAR funded network project entitled "Delineation and mapping of nitrate contamination in soil and water in heavily fertilized and intensively cultivated districts of the country" from April 1, 2005 to May 31, 2008, in BCKV, West Bengal.
- Engaged in research work as a Ph.D. Scholar during 2004 to 2008 for conducting research on the thesis topic "Studies on nitrate loading in groundwater due to intensive cultivation in Hooghly district of West Bengal" from BCKV, West Bengal.
- Engaged in research work as Assistant Agricultural Chemist under West Bengal Agricultural Service (Research) Cadre in Water Management Research Station, Ranaghat, Nadia, West Bengal from August 14, 2008 to January 31, 2013.
- Actively engaged in research work and guiding PG students at the Department of ASEPAN, Palli Siksha Bhavana, (Institute of Agriculture), Visva-Bharati, West Bengal from 01.02.2013 till date.

EXTENSION ACTIVITIES:

• Actively participating in different extension programmes of the Institute as resource person in many training programmes, farmers-scientist meets, krishi mela, transfer to technology programme etc. with special reference to agriculture and allied sciences.

RECOGNITIONS/AWARDS AND HONOURS:

- The Indian Society of Soil Science Best Doctoral Presentation Award 2008 from the East Zone.
- Commendation Certificate in the final round contest for ISSS Best Doctoral Presentation Award 2008.
- Selected on rigorous screening for outstanding research contributions to the National Level for the Indian Science Congress Association's Young Scientist Award 2008 from the Agriculture and Forestry Sciences Section.
- Best Poster Presentation Award of the Indian Society of Soil Science in the Platinum Jubilee Symposium.

SCHOLARSHIP/FELLOWSHIP:

- Fellowship from S. J. Jindal Trust
- University Merit Scholarship for pursuing B.Sc. (Ag.) Hons. Degree
- University Merit Scholarship for pursuing M.Sc. (Ag.) Degree
- Senior Research Fellowship for a ICAR funded Network Project

INTERNATIONAL ASSIGNMENT:

Acting as Reviewers for the following International Journals:

• Environment, Monitoring and Assessment

- Water, Air and Soil Pollution
- Applied Water Science
- Geoderma

ACADEMIC DISTINCTION & MEMBERSHIP IN JOURNAL SOCIETIES:

- Indian Society of Soil Science
- Indian Science Congress Association (Life Member)
- Crop and Weed Science Society (Life Member)
- Indian Society of Coastal Agricultural Research
- Acting as an external examiner and paper setter of different Agricultural Universities
- Acted as Resource Person for Preparation of activity guide for National Children Science Congress 2010-2011 in the National Brainstorming Workshop on the theme Land Resource organized by RVPSP-DST, Government of India held at BCKV during February 14-17, 2010.

REFRESHER/ ORIENTATION/TRAINING COURSES ATTENDED:

- Participated in 21 days 2nd UGC Refresher Course in Development Studies at UGC Academic Staff College, University of Burdwan from 7th August, 2014 to 27th August, 2014.
- Participated in the Advanced Training Programme on Participatory Practices for Sustainable Development (PPSD) held during January 25 to February 1, 2008 for 7 days organized by Colorado State University, USA and Bidhan Chandra Krishi Viswavidyalaya.

SEMINAR/CONFERENCE/SYMPOSIUM ATTENDED:

International: 3 & National: 10

SUPERVISION OF RESEARCH:

- Guiding 2 students for conducting their thesis work for fulfillment of M.Sc. (Ag.) degree
- Guiding 1 student for conducting his thesis work for fulfillment of Ph.D. (Ag.) degree.

SIGNIFICANT PUBLICATIONS

Research papers published in International Journals: 10

- 1. Bhat, J.A., Kundu, M.C., Hazra, G.C. and Mandal, Biswapati (2010). Rehabilitating acid soils for increasing crop productivity through low-cost liming material. *Science of the Total Environment*. (2010). 408: 4346-4353.
- 2. Kundu, M.C. and Mandal, Biswapati (2010). Fluoride concentration in groundwater of North 24-Paraganas district of West Bengal, India. *Fluoride* 43(2): 160–164.
- 3. Kundu, M.C. and Mandal, Biswapati (2009). Nitrate enrichment in groundwater from long-term intensive agriculture: its mechanistic pathways and prediction through modeling. *Environmental Science & Technology* 43:5837-5843. (American Chemical Society).
- 4. Kundu, M.C., Mandal, Biswapati and Hazra, G.C. (2009). Nitrate and fluoride contamination in groundwater of an intensively managed agroecosystem: a functional relationship. *Science of the Total Environment*. 407: 2771-2782.
- 5. Kundu, M.C. and Mandal, Biswapati (2009). Agricultural activities and lithology influence

- nitrate and fluoride contamination in drinking groundwater of an intensively cultivated district in India. *Water, Air, & Soil Pollution* 198:243–252.
- 6. Kundu, M.C. and Mandal, Biswapati (2009). Assessment of potential hazards of fluoride contamination in drinking groundwater of an intensively cultivated district in West Bengal, India. *Environmental Monitoring and Assessment* 152:97–103.
- 7. Mandal, Biswapati, Majumder, Bidisha, Adhya, T.K., Bandyopadhyay, P.K., Gangopadhyay, A., Kundu, S., Sarkar, D., Kundu, M.C., Gupta Choudhury, S., Hazra, G.C., Samantaray, R.N., Mishra, A.K. (2008). The potential of double-cropped rice ecology to conserve organic carbon under subtropical climate. *Global Change Biology* 14, 2139-2151.
- 8. Sarkar, D., Mandal, Biswapati, Kundu, M.C. and Bhat, J.A. (2008). Soil properties influence distribution of extractable boron in soil profile. *Communications in Soil Science and Plant Analysis* 39: 2319-2332.
- 9. Kundu, M.C., Mandal, Biswapati and Sarkar, D. (2008). Assessment of the potential hazards of nitrate contamination in surface and groundwater in a heavily fertilized and intensively cultivated district of India. *Environmental Monitoring and Assessment* 146:183–189.
- 10. Sarkar, D., Mandal, Biswapati, and Kundu, M.C. (2007). Increasing use efficiency of boron fertilisers by rescheduling the time and methods of application for crops in India. *Plant Soil* 301:77-85.

Research papers published in National Journals: 11

- 1. Kundu, M.C., Hazra, G.C., Biswas, P.K., Mondal, S. and Ghosh, G.K. (2014). Forms and distribution of potassium in some soils of Hooghly district of West Bengal. *Journal of Crop and Weed 10* (2): 31-37
- 2. Naskar, A., Kundu, M. C., Bandyopadhyay, P.K., Mallick, S. and Das, I. (2010). Evaluation of physic-chemical characteristics of red and lateritic soils of Purulia district of West Bengal. *Indian Agriculturist* 54(1&2): 41-48
- 3. Mandal, Biswapati, Kundu, M.C., and Sarkar, Dibyendu (2008). Soil organic carbon for maintenance of soil quality. *Journal of the Indian Society of Coastal Agricultural Research* 26(1) 28-35.
- 4. Chakrabortty, S., Kundu, M.C., and Saha, D. (2007). Influence of drying phases at different growth stages of rice on availability of N in a waterlogged limed soil. *Journal of Soils and Crops* 17 (2) 230-236.
- 5. Chakrabortty, S., Kundu, M.C., and Saha, D. (2007) Changes in available N in a water logged acid soil in presence and absence of a drying phase. *Plant Archives* 7 (1): 93-97.
- 6. Chakrabortty, S., Kundu, M.C., and Saha, D. (2006). Influence of drying phases at different growth stages of rice on total N in water logged limed soil. *Indian Agriculturist* 50 (3&4): 123-127.
- 7. Sarkar Dibyendu, Tarafdar, J.C. and Kundu, M.C. (2006). Effect of changes of soil pH on microbial activity and availability of phosphorus and sulphur. *Environment & Ecology* 25S (1): 200-202.
- 8. Kundu, M.C. (2006). Distribution of different forms of sulphur in rice growing soils of Nadia district of West Bengal. *Plant Archives* 6 (1), April 2006.
- 9. Kundu, M.C., Chakrabortty, S. and Mukhopadhyay, P. (2005). Soil fertility status of rice

- growing soils of four villages of Haringhata block under Nadia district of West Bengal. *Environment & Ecology* 23 (4): 922-925.
- 10. Chakrabortty, S., Bhat, J.A., Kundu, M.C. and Saha, D. (2005). Changes in available N in an Ustifluvent under different cycles of moisture regime. *Journal of Interacademicia*.9 (4): 538-543.
- 11. Kundu, M.C. and Mukhopadhyay, P. (2005). Available sulphur status of some rice growing soils of Haringhata block under Nadia district of West Bengal. *Environment & Ecology* 23S (Spl-3): 617-620.

List of book chapters published: 2

- 1. Mandal, Biswapati and Kundu, M.C. (2008). *Policy interventions to strengthen soil testing service in India*. In: Balanced and Integrated Nutrient Management Key Policy Issues. S.P. Sharma et al. (eds.), CSHP Agricultural University, Palampur. pp 117-124.
- 2. Kundu, M.C. and Mandal, Biswapati. (2007). Assessment of the potential hazards of nitrate contamination in surface and groundwater systems in Hooghly district of West Bengal, India. In: "Groundwater for Sustainable Development Problems, Perspectives and Challenges" edited by Prosun Bhattacharya (Sweden), AL. Ramanathan (India), Jochen Bundschuh (Germany, Costa Rica, Argentina), A.B. Mukherjee (India), A.K. Keshari, (India) and D. Chandrasekharam (India). Balkema Publication, Taylor and Francis Group, London, UK. pp 87-94.

Number of research papers presented/abstracted in national/international seminar: 27

(Manik Chandra Kundu)