

RESUME

NAME: DR. PRASANTA KUMAR BANDYOPADHYAY

DESIGNATION: Professor

CONTACTS:

1. OFFICIAL ADDRESS FOR CORRESPONDENCE:

Department of Agricultural Chemistry and Soil Science, Mohanpur

2. PHONE : Mobile: 9433335557//8910229299

WhatsApp: 9433335557

3. EMAIL : Institutional: bandyopadhyay.prasanta.kr@bckv.edu.in

Alternative: pkb_bckv@rediffmail.com

4. ORCID ID: <https://orcid.org/0000-0002-2059-7946>

5. GOOGLE SCHOLAR PROFILE:

<https://scholar.google.co.in/citations?user=o2VeN1EAAAAAJ&hl=e>

6. RESEARCHGATE PROFILE: [https://www.researchgate.net/profile/Prasanta-](https://www.researchgate.net/profile/Prasanta-Kumar-Bandyopadhyay)

[Kumar- Bandyopadhyay](https://www.researchgate.net/profile/Prasanta-Kumar-Bandyopadhyay)

7. DATE OF BIRTH: 05/01/1963

8. DATE OF JOINING TO THE UNIVERSITY: 25/02/1997



9. ACADEMIC PROFILE

| LEVEL | NAME OF THE DEGREE WITH DISCIPLINE/ DEPARTMENT | INSTITUTE | YEAR OF PASSING |
|------------|--|---------------|-----------------|
| DOCTORAL | Agril. Chemistry and Soil Science | BCKV | 1994 |
| MASTER'S | Agril. Chemistry and Soil Science | BCKV | 1987 |
| BACHELOR'S | B. Sc. Ag. (Hons.) | Visva Bharati | 1985 |

10. EMPLOYMENT HISTORY: (Starting from present position)

| POSITION | ORGANIZATION | PERIOD | |
|----------------------|--------------|-------------|------------|
| | | From (Date) | To (Date) |
| Professor | BCKV | 25.02.2012 | Till date |
| Associate Professor | BCKV | 25.02.2009 | 24.02.2012 |
| Reader | BCKV | 25.02.2006 | 24.02.2009 |
| Lecturer (Sr. Scale) | BCKV | 25.02.2001 | 24.02.2006 |
| Lecturer | BCKV | 25.02.1997 | 24.02.2001 |

11. ADMINISTRATIVE POST(S)/ RESPONSIBILITY(IES) (IF ANY)

| SL. NO. | NAME OF THE POST(S)/ RESPONSIBILITY(IES) | PERIOD | |
|---------|---|-------------|-----------|
| | | From (Date) | To (Date) |
| 1. | Chief Scientist and Officer-in-charge of AICRP on Irrigation Water Management | 22.12.2021 | Till date |
| 2. | Dean of Students' Welfare | 1.11.2022 | 06.9.2023 |

12. AREA OF RESEARCH: (Bulleted list)

- ❖ Methods and strategies to characterize soils physically and hydraulically at various temporal and spatial scales
- ❖ Resource conservation technology for mitigating abiotic stress & nutrient use efficiency
- ❖ Water management in rainfed and irrigated systems
- ❖ Plant root-soil water interactions and evapotranspiration
- ❖ Soil structural integrity as influenced by different management practices and physical protection
- ❖ Carbon sequestration in soils
- ❖ Pedotransfer functions for ease determination of physical properties for soil quality indicators

13. COURSES ASSOCIATED WITH

| LEVEL | COURSE NO. | COURSE TITLE | CREDIT |
|---------------|--------------|--------------------------------|--------|
| UNDERGRADUATE | ACSS-103 | Fundamentals of Soil Science | 1+1 |
| | ACSS-103 (H) | Fundamentals of Soil Science | 1+1 |
| POSTGRADUATE | SOIL-501 | Soil Physics | 2+1 |
| | SOIL-512 | Land Degradation & Restoration | 1+0 |
| | SWE-554 | Crop Environmental Engineering | 2+1 |
| Ph.D. | SOIL-601 | Recent Trends in Soil Physics | 2+0 |

14. NUMBER OF STUDENTS SUPERVISED

- ❖ Master's: 16
- ❖ Doctoral: 06

15. RESOURCE PERSON FOR OTHER INSTITUTES (involvement in teaching or working as member of academic/ research bodies of other organizations, if any)

1. Acted as an Examiner/Question setter/ Thesis evaluator:

- i) Orissa University of Agriculture and Technology, Bhubaneswar
- ii) Visva-Bharati University, Santiniketan
- iii) Uttar Banga Krishi Viswavidyalaya, Pundibari
- iv) IIT, Kharagpur
- v) IARI, New Delhi
- vi) CCSHAU, Hisar

2. Member of the Selection Committee:

- i) IIT Kharagpur

3. Adjunct Faculty Member:

- i) Uttar Banga Krishi Viswavidyalaya, Pundibari

16. LIFE MEMBERSHIP OF ACADEMIC SOCIETIES

1. Indian Society of Soil Science

17. PROJECT ACTIVITIES

| SL. NO. | TITLE OF THE PROJECT | FUNDING AGENCY | ONGOING/ COMPLETED | PI/ Co-PI |
|---------|---|--|--------------------------------------|-----------|
| 1. | Assessment of quality and resilience of soils in diverse agro-ecosystems | NAIP (ICAR), funded by world bank & GOI | Completed (July 2008 to March 2012) | Co-PI |
| 2. | Development of organic package of practice of various components in a farming system and their transfer to farmers' field under certified organic farming | Rastriya Krishi Vikash Yojana, Govt. of West Bengal | Completed (April 2010 to March 2013) | Co-PI |
| 3. | Mitigating abiotic stresses and enhancing resource-use efficiency in pulses in rice fallows through innovative Resource conservation practices | National Fund for Basic, Strategic and Frontier Application Research in Agriculture (ICAR) | Completed (June 2011 to May 2016) | PI |
| 4. | Relationship between Sclerotium rolfsii, Rhizoctonia solanai, the soil and climatic variable in three major cropping system in the country and identification of markers for resistance to Sclerotium rolfsii | National Fund for Basic, Strategic and Frontier Application Research in Agriculture (ICAR) | Completed (April 2013 to March 2018) | Co-PI |

18. CAPACITY BUILDING/FACULTY DEVELOPMENT PROGRAMME

A. ORGANIZED: Nil

| SL. NO. | NAME OF THE PROGRAMME | DURATION | PLACE | ROLE |
|---------|-----------------------|----------|-------|------|
| | | | | |

B. ATTENDED

| SL. NO. | NAME OF THE PROGRAMME | DURATION | PLACE | ROLE |
|---------|---|---------------------------|-----------------------------------|--------------------|
| 1. | ICAR sponsored “National Training Course on Agricultural Water Management” | 07-27 Jan., 2002 | CSSRI, Karnal | Trainee |
| 2. | Farmers’ Training on Soil testing | 2004 | Nadia KVK, Gayeshpur | Resource Person |
| 3. | “Advanced strategies for the mitigation of heavy metals and arsenic pollution in agricultural production systems” | 06-26 Dec., 2005 | BCKV, Mohanpur | Trainee |
| 4. | Farmers’ Training on Composting: Methods & Utilities | 2005 | Nadia KVK, Gayeshpur | Resource Person |
| 5. | Lecture as well as practical demonstration on “Improvement of soil physical quality by Organic farming” to the ADAs’ in a training on organic farming | 25 June- 04 July, 2008 | BCKV, Mohanpur | Resource Person |
| 6. | In Zilla Krishi Mela on a Seminar “Mrittika Sanraksharane sasya baichitrakoroner gurutto” | 15 Feb., 2009 | Balurghat, Dakshin Dinajpur | Resource person |
| 7. | The brainstorming workshop on the theme of “Land Resources” for the preparation of manuscripts of National Children Science Congress (NCSC) by DST, GOI | 14-17 Feb., 2010 | BCKV, Mohanpur | Resource person |
| 8. | Celebration of World Water Day on | 22 Mar., | BCKV, | Resource |

| | | | | |
|-----|--|------------------|-----------------------|--------------------|
| | “Groundwater: making the invisible visible” | 2022 | Mohanpur | person |
| 9. | Delivered on “Soil where food begins” at Central Research Farm, BCKV, Gayeshpur, Nadia | 05 Dec., 2022 | CR Farm, Gayeshpur | Resource person |
| 10. | Celebration of World Water Day on “Accelerating the change to solve the water and sanitation crisis” | 22 Mar., 2023 | BCKV, Mohanpur | Resource person |
| 11. | Delivered on “Soil and water: A source of life” at Central Research Farm, BCKV, Gayeshpur, Nadia. | 05 Dec., 2023 | CR Farm, Gayeshpur | Resource person |

19. SEMINAR/ SYMPOSIUM/ WORKSHOP etc.

A. ORGANIZED: Nil

| SL. NO. | NAME OF THE PROGRAMME | DURATION | PLACE | ROLE |
|---------|-----------------------|----------|-------|------|
| | | | | |

B. ATTENDED

| SL. NO. | NAME OF THE PROGRAMME | DURATION | PLACE | ROLE |
|---------|--|--------------------------|---------------------------|-----------|
| 1. | State level Workshop-cum-training on Jute under special Jute Development Program | 17-19 June, 1998 | Pundibari, Coochbehar. | Presenter |
| 2. | State level Workshop-cum-training on Jute under special Jute Development Program | 24-26 May, 2000 | Pundibari, Coochbehar | Presenter |
| 3. | National Seminar on Developments in Soil Science, Indian Society of Soil Science | 04 Nov.-Dec. 08, 2003 | CSAAU&T, Kanpur | Presenter |
| 4. | National Seminar on Developments in Soil Science, Indian Society of Soil Science | 27-29 Oct, 2004 | ANGRAU, Hydrabad | Presenter |

| | | | | |
|-----|---|-----------------------|--------------------------------|--------------------|
| 5. | International Conference on Soil, Water & Environment Quality – Issues and Challenges | 28Jan.-1Feb., 2005 | IARI, New Delhi | Presenter |
| 6. | National Seminar on Technology Options of Organic Inputs for Sustaining Health in Indian Agriculture, Sponsored by National Centre of Organic Farming | 25-27 Nov., 2006 | Visva Bharati, Santiniketan | Presenter |
| 7. | National seminar on Maintenance of Soil Health and Food Security, Indian Society of Agricultural Chemists | 27-28 Nov., 2009 | BCKV, Mohanpur | Presenter |
| 8. | Platinum Jubilee Symposium on Soil Science in Meeting the Challenges to Food Security and Environmental Quality, Indian Society of Soil Science | 22-25 Dec. 2009. | IARI. New Delhi. | Presenter |
| 9. | National Seminar on Developments in Soil Science, Indian Society of Soil Science | 14-17 Nov. 2010. | IISS, Bhopal. | Presenter |
| 10. | International Symposium on System Intensification Towards Food and Environmental Security, Crop and Weed Science Society | 24-27Feb, 2011 | BCKV, Mohanpur | Presenter |
| 11. | National Seminar on Developments in Soil Science, Indian Society of Soil Science | 3-6 Dec., 2012 | PAU. Ludhiana | Presenter |
| 12. | National Seminar on “Developments in Soil Science -2014” | 24-27 Nov., 2014 | ANGRAU, Hyderabad | Presenter |
| 13. | International Conference of the Bangladesh Society of Agronomy | 31 Oct., 2015 | BAU, Dhaka | Presenter |
| 14. | National Seminar on” Sustainable Agriculture for Food Security and Better Environment” | 17-18 Dec., 2015 | BCKV, Mohanpur | Presenter |
| 15. | National Seminar on “Environmental Concern on Fertilizer Use in Future” | Feb 2016 | BCKV, Mohanpur | Resource person |

| | | | | |
|-----|---|---------------------|------------------------------|--------------------|
| 16. | National Seminar on “Maximizing fertilizer use efficiency and environmental health for posterity” | 8 Mar., 2017 | RKMVU, Narendrapur | Presenter |
| 17. | National Seminar on “Developments in Soil Science -2017” | 11-14 Dec., 2017 | Amity Univ, Kolkata | Presenter |
| 18. | National Seminar-cum- AGM on “Agri-chemicals for a benign environment” | 29 Mar., 2018 | BCKV, Mohanpur | Resource Person |
| 19. | National Seminar on "Developments in Soil Science - 2019" | 15-18 Nov., 2019 | BHU, Varanasi | Resource Person |
| 20. | National Seminar on “Developments in Soil Science -2021” | 16-19 Nov., 2021 | Sriniketan, Visva Bharati | Resource Person |
| 21. | Annual scientist meeting of AICRP on Irrigation Water Management (online) | 19-22 July, 2022 | IIWM, Bhubaneswar | Presenter |
| 22. | Chief scientist meeting of AICRP on Irrigation Water Management (Online) | 21-23 June, 2023 | HPKV, Palampur | Presenter |
| 23. | Biennial Workshop of AICRP on Irrigation Water Management | 2-4 July, 2024 | ANDAUT, Ayodhya | Presenter |

20. PATENTS/ HONOURS/ AWARDS/ RECOGNITION (Bulleted list)

- Recipient of Best Poster Presentation Award in 2004 (ISSS), 2016 (CWSS)
- Adjunct Faculty Member, UBKV, Pundibari (2018-2019)
- Editorial Board Member of the Journal of the Indian Society of Soil Science (2020-2023)
- Reviewer of Journals of International repute viz., European journal of Soil Science; Australian Journal of Soil Research; Agricultural Water Management; Agriculture Ecosystems & Environment; Journal of Environmental Management; Bioresource Technology etc.

21. INTERNATIONAL COLLABORATIONS/ INVOLVEMENT, IF ANY (Bulleted list): Nil

22. PUBLICATIONS

- BOOKS: Nil**
- BOOK CHAPTERS (Best 10)**

1. **Bandyopadhyay, P.K.** 2014. “Root distribution pattern of pulses in response to water availability” In “Resource Conservation Technology in Pulses”-Chapter-40: Eds: Ghosh et al. Scientific Publishers (India), ISBN: 978-81-7233-885-5. Page No. 512 to 520
2. Singh, A.K. and **Bandyopadhyay, P.K.** 2019. “Instrumentation for soil moisture determination” In “Soil Analysis” Chapter – 6.2: Eds: Singh et al. Indian Society of Soil Science, New Delhi.
3. **Bandyopadhyay, P.K.** 2020. “Functional Behaviour of Soil Physical Parameters for Regulating Organic C Pools” In “Carbon Management in Tropical and Sub-Tropical Terrestrial Systems” Chapter – 14: Eds: Ghosh et al. Springer Nature Singapore Pte Ltd. doi: 10.1007/978-981-13-9628-1_14
4. Mukherjee, S., Kundu, A., Kundu, R., Adhikari, S., and **Bandyopadhyay, P.K.** 2021. Comprehensive Soil Science, Jain Brothers, New Delhi. ISBN: 978-93-90576-21-0
5. Kundu, A., Mukherjee, S., Nandi, R. and **Bandyopadhyay, P.K.** 2021. Conservation agriculture-an approach towards sustainability of soil physical health. In Conservation agriculture and climate change: Impacts and adaptations, New India Publishing Agency, New Delhi, pp 283-307. ISBN: 978-93-90591-08-4
6. Saha, S., Dey, M., Bose, S., Poddar, R. and **Bandyopadhyay, P.K.** 2024. “Alleviation of Heavy Metal Stress Through the Use of Nanotechnology” In “The Nanotechnology Driven Agriculture” Chapter 9. p. 151-164. DOI: 10.1201/9781003376446-9

C. RESEARCH PAPERS (Best 10)

1. **Bandyopadhyay, P. K.**, Mallick, S. and Rana, S.K. 2005. Actual evapotranspiration and crop coefficients of peanut under varying soil moisture levels in a humid tropical region of India. Irrigation Science 23 (4): 161-169. <https://doi10.1007/s00271-005-0104-7> (NAAS: 9.00)
2. Mandal, B., Majumder Bidisha, **Bandyopadhyay, P.K.**, Hazra, G.C., Gangopadhyay, A., Samantaray, R.N., Mishra, A.K., Chaudhury, J., Saha, M.N. and Kundu, S. 2007. The potential of cropping systems and soil amendments for carbon sequestration in soils under long-term experiments in subtropical India. Global Change Biology 13: 357–369, <https://doi10.1111/j.1365-2486.2006.01309.x> (NAAS: 17.60)
3. Mandal, B., Majumder Bidisha, Adhya, T.K., **Bandyopadhyay, P.K.**, Gangopadhyay, A., Sarkar D., Kundu, M.C., Gupta Choudhury, S., Hazra, G.C., Kundu, S., Samantaray, R.N. and Mishra, A.K. 2008. Potential of double-cropped rice ecology to conserve organic carbon under subtropical climate. Global Change Biology 14, 2139–2151, <https://doi10.1111/j.1365-2486.2008.01627.x> (NAAS: 17.60)
4. Majumder, Bidisha., Mandal, B., **Bandyopadhyay, P.K.**, Gangopadhyay, A., Mani, P.K., Kundu, A.L. and Mazumdar, D. 2008. Organic amendments influence soil organic carbon pools and rice–wheat productivity. Soil Science Society of America Journal 72:775–785. <https://doi10.2136/sssaj2006.0378> (NAAS: 8.90)
5. **Bandyopadhyay, P.K.**, Saha Subita, Mani, P.K., Mandal, B. 2010. Effect of organic inputs on aggregate associated organic carbon concentration under long-term rice–wheat

cropping system. *Geoderma* 154: 379–386, <https://doi.org/10.1016/j.geoderma.2009.11.011> (NAAS: 12.10)

6. **Bandyopadhyay, P.K.**, Singh, K.C., Mondal, K., Nath, R., Ghosh, P.K., Kumar, N., Basu, P.S. and S.S. Singh. 2016. Effects of stubble length of rice in mitigating soil moisture stress and on yield of lentil in rice-lentil relay crop. *Agricultural Water Management* 173: 91-102. <http://dx.doi.org/10.1016/j.agwat.2016.05.009> (NAAS: 12.70)
7. Nandi, R., Mondal, K., Singh, K.C., Saha, M., **Bandyopadhyay, P.K.** and Ghosh, P.K. 2021. Yield-water relationships of lentil grown under different rice establishments in Lower Gangetic Plain of India. *Agricultural Water Management* 246:106675. <https://doi.org/10.1016/j.agwat.2020.106675> (NAAS: 12.70)
8. Biswas, T., **Bandyopadhyay, P.K.**, Nandi, R., Mukherjee, S., Kundu, A., Reddy, P., Mandal, B., Kumar, P. 2022. Impact of mulching and nutrients on soil water balance and actual evapotranspiration of irrigated winter cabbage (*Brassica oleracea* var. capitata L.). *Agricultural Water Management* 263 <https://doi.org/10.1016/j.agwat.2022.107456> (NAAS: 12.70)
9. Mukherjee, S., Nandi, R., Kundu, A., **Bandyopadhyay, P.K.**, Nalia, A., Ghatak, P., Nath, R. 2022. Soil water stress and physiological responses of chickpea (*Cicer arietinum* L.) subject to tillage and irrigation management in lower Gangetic plain. *Agricultural Water Management* 263 <https://doi.org/10.1016/j.agwat.2021.107443> (NAAS: 12.70)
10. Nandi, R., Mukherjee, S., **Bandyopadhyay, P.K.**, Saha, M., Singh, K.C., Ghatak, P., Kundu, A., Saha, S., Nath, R., Chakraborti, P. 2023. Assessment and mitigation of soil water stress of rainfed lentil (*Lens culinaris* Medik) through sowing time, tillage and potassic fertilization disparities. *Agricultural Water Management* 277 <https://doi.org/10.1016/j.agwat.2022.108120> (NAAS: 12.70)



18.7.2024

Signature with Date