

RESUME

NAME: Prof. Pabitra Kumar Mani

DESIGNATION: Professor. Agril. Chemistry and Soil Science

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1. **OFFICIAL ADDRESS FOR CORRESPONDENCE:**

2. **PHONE :** Mobile: 9477465968
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3. **EMAIL:** Institutional: mani.pabitra.kr@bckv.edu.in,
Alternative: pabitramani@gmail.com

4. **ORCID ID:** _____

5. **GOOGLE SCHOLAR PROFILE:** <https://scholar.google.com/citations?user=9If0710AAAAJ>
Citations: 1108; h-index 14: i10 index- 20

6. **RESEARCHGATE PROFILE:** <https://www.researchgate.net/profile/Pabitra-Mani>

7. **DATE OF BIRTH:** 07/07/1963

8. **DATE OF JOINING TO THE UNIVERSITY:** 06 /01 /1997

9. ACADEMIC PROFILE:

LEVEL	NAME OF THE DEGREE WITH DISCIPLINE/ DEPARTMENT	INSTITUTE	YEAR OF PASSING
DOCTORAL	Agril. Chemistry and Soil Science	BCKV	1993
MASTER'S	Agril. Chemistry and Soil Science	BCKV	1987
BACHELOR'S	B. Sc. Ag. (Hons.)	BCKV	1985

10. EMPLOYMENT HISTORY: (Starting from present position)

POSITION	ORGANIZATION	PERIOD	
		From (Date)	To (Date)
Professor	BCKV	06.01.2012	Till date
Associate Professor	BCKV	06.01.2009	05.01.2012
Reader	BCKV	06.01.2006	05.01.2009
Sr. Lecturer (Res.)	BCKV	06.01.2001	05.01.2006
Lecturer	BCKV	06.01.1997	05.01.2001

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

SL. NO.	NAME OF THE POST(S) / RESPONSIBILITY(IES)	PERIOD	
		From (Date)	To (Date)
1.	Member; BCKV Council (2012-14).	2012	2014
2.	Secretary, PG UG Council, Faculty of Agriculture	10.12. 2013	30.09.2015
3.	Act as a Centre-In-Charge for conducting AIEE for Agriculture (ICAR)	2014	2015

4.	Convener: Website Committee	2014	2015
5.	Editor and Data Compiler for publishing Officers' and Teachers' Directory of BCKV.	2018	
6.	Seminar Leader of the Department	2019	2022
7.	Organising Secretary, 22 nd Convocation of BCKV	19.05.2023	
8.	Secretary, PG- UG Council, Faculty of Agriculture	01.06.2022	30.05.2023
9.	Treasurer, Alumni Association BCKV	2012	Till date

12. AREA OF RESEARCH : (Bulleted list)

- Long-Term Fertility Experiment of Rice –Wheat Cropping System
- C sequestration
- B and Zn Nutrition
- Heavy metal pollution study in Dhapa dumpsite, Kolkata
- Coastal Sundarbans: Sandeshkhali Block
- Nitrogen dynamics including N¹⁵ studies; Introducing PCU, PSCU in West Bengal

13. COURSES ASSOCIATED WITH:

LEVEL	COURSE NO.	COURSE TITLE	CREDIT
UNDERGRADUATE	ACSS-103	Fundamentals of Soil Science	1+1
	Soil-111, (Agril. Engg).	Principles of Soil Science	1+1
	ACSS(H) 158 (F/ Hort.)	Soil Fertility and Nutrient Management	1+1
	ACSS-305	Problematic Soils and their Management	1+1
	AGMP-355	Geo informatics and Nanotechnology for Precision farming	1+1
POST GRADUATE	Soil-504	Soil Mineralogy, Genesis and Classification	2+1
	Soil-509	Remote sensing and GIS techniques for soil and crop studies	2+1
Ph.D.	Soil-608	Clay Mineralogy	2+1
	Soil-653	Physical Chemistry of Soil	2+0
	Soil-751	Geomorphology and Geochemistry	2+0

14. NUMBER OF STUDENTS SUPERVISED:

Master's - 14 Doctoral- 05

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

- Acted as an External Examiner and Question setter of :
 1. Orissa University of Agriculture and Technology, Bhubaneswar
 2. Kalyani University, Kalyani
 3. Visva-Bharati, Bolpur

4. Uttar Banga Krishi Viswavidyalaya, Pundibari
5. Assam Agriculture University, Jorhat
6. Bihar Agriculture University (Sabor)
7. Central Agriculture University (Pasighat)
8. College of Agriculture, Central Agricultural University, Imphal
9. Tripura College of Agriculture, Tripura
10. College of Post Graduate Studies in Agriculture, Umiam, Meghalaya

• **Acted as Reviewer of the Journal**

- Journal of Indian Society of Soil Science
- European Journal of Soil Science
- Archives of Agronomy and Soil Science
- Frontiers
- Journal of Potassium Research
- Journal of Crop and Weed
- University of Mauritius Research Journal
- ISRO Land Degradation
- International Journal of Basic and Applied Agricultural Research (IJBAAR)
- Board of Research on Nuclear Science, BARC
- SATSA Mukhapatra
- Journal of Agriculture and Technology

• **Moderator of Question papers at UG level:** Visva-Bharati

• **Ph.D. Comprehensive viva voce exam:** Sushmita Konwar and Subham Roy (AAU) 28.02.23

• **Thesis Evaluation** (from Assam Agricultural University)

- Pinky Kumbang (Regn. No. 313 of 2007, Roll No.11-AMJ-91)... M.Sc
- Jeewan Job Shangne (Regn.No.408 of 2013, Roll No.13-AMJ-113)--M.Sc
- Rashmi Baruah (Regn. No. 411 of 2012, Roll No. 12-ADJ-48) ... Ph. D.
- Nilim Kalita (Regn No. 254 of 2016, Roll No. 2016-ADJ-77)...Ph.D.
- Samikhya Bhuyan (Regn.No144 of 2011; Roll No.2019-ADJ-69).... Ph.D. (2023)
- Laxmanarayanan M (Reg. No. 80 of 2019) (Roll No.2019-ADJ-66).. Ph.D. (2023)
- Kondareddy AN (Regn. No. 276 of 2018, Roll No. 2018-ADJ-68), Ph.D. (2022)
- Thesis Viva-Voce of Uddipan Rajkonwar, from AAU; Ph. D (10.10.2017)
- **Thesis evaluation** (from Uttar Banga Krishi Viswavidyalaya)
Basabduutta Bhabai (Regn. No. A-2017-02-D) Ph. D. 2023

16. LIFE MEMBERSHIP OF ACADEMIC SOCIETIES

Indian Society of Soil Science

Crop and Weed Science Society

17. PROJECT ACTIVITIES

Sl. No.	TITLE OF THE PROJECT	FUNDING AGENCY	ONGOING/ COMPLETED	PI/ Co-PI
1.	Status, causes and impacts of Arsenic contamination in ground water in parts of West Bengal vis-à-vis management of Agricultural systems	ICAR	Completed 01.01.1998- 30.06.2001	Co-PI
2.	Characterisation and mapping of rice-wheat system-its changes and constraints to system sustainability	ICAR NATP, PSR-17	01.11.1999- 31.12.2002	Collaborating Scientist
3.	Assessment And Improvement of Soil Quality and Resilience for Rainfed Production System	ICAR NATP, RRPS-20	Completed 2000-2004	Co-PI
4.	Response of Nutritional and therapeutic product on yield and quality of Potato tubers in West Bengal, India” sponsored	Stoller Enterprise, Inc, USA.	Completed (2007-08)	P.I.
5.	Strategies for Sustainable Management of Degraded Coastal Land and Water for Enhancing Livelihood Security of the Farming Communities	NAIP project, Component– III (GEF Funded),	Completed 2009-2014	Co-CCPI
6.	“Increasing use efficiency of nitrogen fertilizers under different ecologies with varied cropping systems and management practices”	BRNS, DAE, as of the Pilot Project as Component 4	Completed 2014 - 2020	P.I.

18. CAPACITY BUILDING/FACULTY DEVELOPMENT PROGRAMME

A. ORGANIZED :

Organized 14 farmer’s Training at Sandeshkhali, 24 Pgs(N) under the NAIP, Comp (III) (GEF) mandate of the Project.

SL. NO.	NAME OF THE PROGRAMME	DURATION	No of Farmers	ROLE
1	Crop diversification and its management in coastal Sundarbans (at Dhuchanikhali village)	1 Day (29.08.2010)	67	Coordinator
2	Vegetable production in the coastal ecosystem (at Tushkhali village)	1 Day (07.02.2011)	71	Coordinator
3	A simple method for vermicompost preparation and its utility in salt-affected area (at Korakati village)	1 Day (05.03.2011)	86	Coordinator
4	Composting and vermicomposting (at Dhuchanikhali village)	1 Day (06.03.2011)	43	Coordinator
5	Livestock Health Management (at Tushkhali village)	1 Day (22.08.2011)	122	Coordinator
6	Composting and vermicomposting	1 Day	52	Coordinator

	(at Tushkhali village)	(08.02.2012)		
7	A simple method for vermicompost preparation and its utility in salt-affected area (at Dhuchanikhali village)	1 Day (26.09.2012)	61	Coordinator
8	Crop diversification and its management in coastal Sundarbans (at Korakati village)	1 Day (10.11.2012)	36	Coordinator
9	Livestock Health Management (at Dhuchanikhali village)	1 Day (17.02.2013)	56	Coordinator
10	Crop diversification and its management in coastal Sundarbans (at Tushkhali village)	1 Day (14.04.2013)	38	Coordinator
11	Vegetable production in coastal ecosystem (at Dhuchanikhali village)	1 Day (15.04.2013)	57	Coordinator
12	Easy techniques for fish cultivation in paddy cum fish culture (at Tushkhali village)	1 Day (20.05.2013)	116	Coordinator
13	Simple method for Vermi-compost Preparation and its utility in salt-affected area (at Tushkhali village)	1 Day (21.05.2013)	69	Coordinator
14	Easy techniques for fish cultivation in paddy cum fish culture (at Dhuchanikhali village)	1 Day (21.05.2013)	47	Coordinator

B. ATTENDED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
1.	Imparting training to the farmers on the package of practices of pulses and oilseeds during the FLD programme organized by the AICRP on Cropping Systems	One day each	Gangajalghanti, Pandua	Interaction with farmers

19. SEMINAR/ SYMPOSIUM/ WORKSHOP etc

A. ORGANIZED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE

B. ATTENDED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
1.	International Symposium on "Importance of potassium in nutrient management for sustainable crop production in India (Abstract No. 35)	Dec.3-5, 2001	PRII and IPI, held in New Delhi	Presented as Poster

2.	National Symposium <i>on</i> Recent Advances in Rice-based Farming Systems.	Nov. 17-19, 2004.	CRRI, Cuttack,	Lead Speaker
3.	Attended 26th Workshop of AICRP on Cropping System	1-4 th Dec., 2004	CSKHPKV, Palampur	Presentation of the research
4.	International Conference on Soil, water, and Environmental quality-issues and strategies	Jan. 28-Feb.1, 2005	IARI, New Delhi	presented at poster session
5.	Attended and presented a paper at the 18th World Congress of Soil Science,	July 9-15, 2006	Philadelphia, Pennsylvania. USA	presented at poster session
6.	IPI-OUAT-IPNI International Symposium On “Potassium Role and Benefits in Improving Nutrient Management for Food Production, Quality and Reduced Environmental Damages”	Nov.5-7, 2009.	OUAT and IPI, held at OUAT, Bhubaneswar	paper presented
7.	National Seminar on Developments in Soil Science held during the Platinum Jubilee of the Indian Society of Soil Science	22-25 th December, 2009.	IARI. New Delhi	paper presented
8.	34 th Indian Social Science Congress held at Dr. B. R. Ambedkar University	10-14 th March, 2010.	Dr.B.R. Ambedkar Univ. Hyderabad	Oral presentation
9.	Attended NAIP Comp-III (GEF) CIC meeting of the project entitled “Strategies for sustainable management of degraded coastal land and water for enhancing livelihood security of farming communities”	22nd July, 2010	CSSRI, Canning	Co-CCPI
10.	Presented a paper at the 75th Annual Convention of the Indian Society of Soil Science	14-17 November, 2010.	IISS, Bhopal	Oral presentation
11.	Attended Biennial Workshop of AICRP on Integrated Framing System	December 10-13, 2010.	ANGRAU, Hyderabad,	
12.	Participated Live programme in Krishi darshan programme of Kolkata Doordarshan on the topic” Use of organic manures in cropping sequence”	Telecast at 5.30 p.m. on 12.04.2011	Kolkata Doordarshan	Expert
13.	Live programme in Krishi Darshan programme of Kolkata Doordarshan on the topic ”Use of Micronutrients in Agriculture”	Telecast at 5.30 p.m. on 29.11.2011.	Kolkata Doordarshan	Expert
14.	Attended NAIP Comp-III (GEF) CAC meeting of the project entitled “Strategies for sustainable management of degraded coastal land and water for enhancing livelihood security of farming communities”	23rd March, 2012.	Nimpith KVK, Nimpith during	Co-CCPI
15.	Attended NAIP Comp-III (GEF) Mid-	16 th May,	NASC	Co-CCPI

	term Review Workshop of the project entitled “Strategies for sustainable management of degraded coastal land and water for enhancing livelihood security of farming communities”	2012.	Complex, New Delhi-12	
16.	Attended NAIP Comp-III (GEF) Meeting of Country Portfolio Evaluation (CPE) of GEF Project in India entitled “Strategies for sustainable management of degraded coastal land and water for enhancing livelihood security of farming communities”	31st December, 2012.	NIRJAFT, Kolkata,	Co-CCPI
17.	Attended Group discussion on Simulating Nitrogen Dynamics in Ganga Basins of India	25 th March, 2013	NASC Complex, New Delhi-12	As Co-PI
18.	Delivered Lectures on “Selection of crops for green manuring in eco-friendly agriculture”, to women farmers	13.05.2013	Agricultural Training Centre, Kalyani	Invited Speaker
19.	Attended NAIP Comp-III (GEF) CAC meeting of the project entitled “Strategies for sustainable management of degraded coastal land and water for enhancing livelihood security of farming communities”	26-28th October, 2013	Sundarban (Cruise Paramhansa	Co-CCPI
20.	Attended a group discussion at BARC, Mumbai	14-17th Sept. 2015.	Mumbai	PI
21.	Attended a group discussion at BARC, Mumbai	10-11 th Nov., 2016	Mumbai	PI
22.	Attended 82 nd Annual Convention and National Seminar on “Developments in Soil Science-2017” of ISSS	11-14 December, 2017.	Amity University Kolkata	Poster Presentation
23.	Delivered on “Soil Health” at Vivekananda Institute of Biotechnology, Nimpith	5 th December, 2017	Vivekananda Institute of Biotechnolog y, Nimpith	Invited lecture
24.	Participated Live programme in Krishi darshan programme of Kolkata Doordarshan on the topic “ Krishi o Paribesh”	Telecast at 5.30 p.m. on 02.01.2018.	Kolkata Doordarshan	Invited Speaker
25.	Attended National Conference on "Innovative farming for Food and Livelihood security under Changing Climate" held at BCKV	12-13 th January, 2018.	Kalyani	Poster Presentation
26.	Delivered invited lecture on “Soil Health - Be the solution to soil pollution”	5th December, 2018.	Soil Survey Department , DC Bldg, Kalyani	Invited lecture
27.	Attended State level workshop on “Current strategies and emerging issues	February 26-27, 2019	FACC. BCKV.	Poster Presentation

	of soil-water-environmental management in agricultural system”			
28	Attended National Seminar on “Agro-chemical inputs and its extension approaches towards food-security and bio-safety: Prospects & Challenges (AEFS-2019)”	16 th November, 2019	SAMETI, Narendrapur, West Bengal	Invited Lecture
29.	Attended International Seminar on “Agriskills for Convergence in Research, Industry & Livelihood (ACRIL 2019)” organized by the Crop and Weed Science Society (CWSS), Bidhan Chandra Krishi Viswavidyalaya	November 28 – December 01, 2019	Farmers’ Academy & Convention Centre BCKV, Kalyani, Nadia, WB.	Poster Presentation
30.	Delivered on “Soil health restoration in coastal saline area to enhance crop and water productivity” at Central Inland Fisheries Research Institute, Barrackpore.	5 th Dec. 2021	CIFRI, Barrackpore	Invited Lecture
31.	Delivered on “Soil where food begins” at Central Research Farm, BCKV Gayeshpur, Nadia.	5 th Dec. 2022	CR Farm, Gayeshpur	Invited Lecture
32.	Delivered on “Soil and water: A source of life” at Central Research Farm, BCKV, Gayeshpur, Nadia.	5 th Dec. 2023	CR Farm, Gayeshpur	Invited Lecture

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

- Recipient of **ISCA Young Scientist Award** in Agricultural Sciences Section conferred by Indian Science Congress Association, during 82nd Session at Goa in **1993**.
- Recipient of **Zonal Award (East Zone)** for best Ph. D Thesis conferred by Indian Society of Soil Science, New Delhi, in **1994**.
- Recipient of **Best Paper Presentation Award in 17th State Science and Technology Congress**, held at WBUAFS, Belgachia, 4-5th March, **2010**.
- Recipient of **the Best Poster Presentation Award for the paper** “Effect of organics application on soil biological indices and rice yield under different rice-based cropping system in Coastal Sundarbans” by Tarik Mitran, **P. K. Mani**, B. Mandal, and D. Mazumdar, during 77th Annual Convention of ISSS held at PAU, Ludhiana, on 3rd December, **2012**.
- Recipient of **the Best Poster Presentation Award for the paper** “A study of nitrogen use efficiency in SRI over direct seeded and transplanted rice” by Chowdhury Monirul Haque, Aritra Saha, and Pabitra Kumar Mani during the 82nd Annual Convention and National Seminar on “ Developments in Soil Science-2017” of ISSS held at Amity University, 11-14 December **2017**.
- Global Environmental Facilitator (GEF) (World Bank) appreciated 3 best Success stories from BCKV Centre (selected for publication in the GEF Annual report 2014).

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

22. PUBLICATIONS

A. BOOKS: Nil

B. BOOK CHAPTERS : (7)

- (i) Samui, R.C., Bandyopadhyay, P. and **Mani, P.K.** (2002). State-wise issues and technologies of oilseed based cropping systems: West Bengal. In Proc. of Oilseed based cropping systems: issues and technologies (part iii) (eds.) B. Gangwar, S.K. Sharma, and R. L. Yadav, PDCSR, Modipuram, UP, pp.354-360.
- (ii) **Mani, P.K.** (2011.) Manure for vegetable production in Fundamentals of Vegetable Production (Ed. S. K. Rana), NIPA publishers, New Delhi.
- (iii) **Mani, P.K.** (2011). Fertilizers in vegetable production in Fundamentals of Vegetable Production (Ed. S. K. Rana), NIPA publishers, New Delhi. 2011.
- (iv) Pramanik, M, **Mani, P.K.**, Ray , M., Mitran, T., Chatterjee, S., Chandran, N, Kundu, A.L., Samui, R.C., Mazumdar, D., Sahu, P.K., and Mandal, B. Long term integrated nutrient management in cereal based cropping systems (eds: Gangwar, B. *et al.*(2014) Integrated nutrient supply of Rice-Wheat System; Kalyani Centre:AICRP on IFS, Modipuram. Meerut. pp. 140-152)
- (v) **Mani, P.K.** and Mondal, S. (2016). Agri-nanotechniques for plant availability of Nutrients”. In: Kole, C, Sakthi Kumar, D., Khodakovskaya, M. V. (Editors), **Plant Nanotechnology: Principles and Practices. Springer:** ISBN 978-3-319-42154-4. <https://doi.org/10.1007/978-3-319-42154-4>
- (vi) **Mani. P.K.**, Mandal, A., Biswas, S., Sarkar, B., Mitran, T and Meena, R.S. (2021). Remote Sensing and Geographic Information System: A Tool for Precision Farming. Chapter 2). In: Mitran, T., Meena. R.S., Chakraborty, A.(Editors) **Geospatial Technologies for Crops and Soils. Springer,** 8-981-15-6864-0 (eBook) <https://doi.org/10.1007/978-981-15-6864-0>
- (vii) Mandal, A. Dhaliwal, S.S., **Mani, P. K.**, Toor, A.S. (2021). Conservation agricultural practices under organic farming. Chapter 2. In: Meena, VS., Meena, S.K., Rakshit, A., Stanley, J., Rao, S.(Editors). **Advances in organic farming.** <https://doi.org/10.1016/C2019-0-04079-4>

C. RESEARCH PAPERS (Best 10)

- 1) Majumdar, B., Mandal, B., Bandyopadhyay, P.K., Gangopadhyay, A., **Mani, P. K.**, Kundu, A.L., Mazumdar, D. (2008). Organic Amendments Influence Soil Organic Carbon Pools and Rice–Wheat productivity, *Soil Sci. Soc. Am. J.* **72(3):** 775-785. [doi:10.2136/sssaj2006.0378](https://doi.org/10.2136/sssaj2006.0378) (**NAAS rating: 8.90**)
- 2) Bandyopadhyay, P. K., Saha, S., **Mani, P.K.** and 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 rating: 12.10**)
- 3) Mitran, T., **Mani, P.K.**, Ray, M., and Mazumdar, D. (2015). Long–term manuring and fertilization influences soil inorganic phosphorus transformation vis-a-vis Rice yield under Rice-Wheat cropping system. *Archives of Agronomy and Soil Science.* <http://dx.doi.org/10.1080/03650340.2015.1036747> (**NAAS: 8.40**).

- 4) Mitran, T. and **Mani, P. K.** (2017). Effect of organic amendments on rice yield trend, P use efficiency, Uptake and Apparent P balance in soil under long-term rice-wheat rotation. *J Plant Nutrition*. **40(9)**:1312-1322. <http://dx.doi.org/10.1080/01904167.2016.1267205> (**NAAS: 8.10**).
- 5) Mitran, T., **Mani, P.K.**, Basak, N. and Mandal, B. (2017). Application of organics influences soil biological indices vis-a-vis rice equivalent yield in different Rice-based cropping system under low land situation in Coastal Sundarbans of India. *Comm. Soil Sci. Plant Anal.* 48;170-185. <http://dx.doi.org/10.1080/00103624.2016.1254229>, ISSN 0010-3624 (Print), 1532-2416 (Online) (**NAAS: 7.80**)
- 6) Saha, A., **Mani, P.K.**, Hazra, G.C. and Mitran, T. (2017). Assessing suitability of different extractants for determining available Boron in soil. *J Plant Nutrition*. 40(19): 2651–2661 (**NAAS: 8.10**) <http://dx.doi.org/10.1080/01904167.2017.1381125>
- 7) Mitran, T., **Mani, P. K.**, Basak, N. and Bandyopadhyay, P.K. (2018). Effects of Organic Amendments on Soil Physical Attributes and Aggregate-Associated Phosphorus Under Long-Term Rice-Wheat Cropping. *Pedosphere*, 28(5), 823-832. [https://doi.org/10.1016/S1002-0160\(17\)60423-5](https://doi.org/10.1016/S1002-0160(17)60423-5) (**I. Factor: 3.736; NAAS :11.70**).
- 8) Mitran, T., Basak, N., Mani, P K., Tamang, A., Singh, D.K., Biswas, S., Mandal, B. (2021). Improving crop productivity and soil quality through soil management practices in Coastal saline Agro-ecosystem. *Journal of Soil Science and Plant Nutrition*. <https://doi.org/10.1007/s42729-021-00624-8> (**NAAS: 9.61**).
- 9) Mani, P.K., Mandal, A., Mandal, D. Irfan, M., Hazra, G,C., Saha, S.(2021). Assessment of non-carcinogenic and carcinogenic risks due to ingestion of vegetables grown under sewage water irrigated soils near a 33 years old landfill site in Kolkata, India. *Exposure and Health*, <https://doi.org/10.1007/s12403-021-00407-7> (**NAAS: 12.70**).
- 10) Mandal, A. Majumder, A., Dhaliwal, S S., Toor, A.S. Mani, P.K., Naresh, R.K., Gupta R.K. and Mitran T (2022). Impact of agricultural management practices on soil carbon sequestration and its monitoring through simulation models and remote sensing techniques: A review. *Critical Reviews in Environmental Science and Technology*. 52(1):1-49. <https://doi.org/10.1080/10643389.2020.1811590> (**NAAS: 18.60**).

Pabitra Kumar Mani

Signature with Date
29.04.2024