

Curriculum Vita'e

Name : Prof. Pratap Kumar Padhy
Date of Birth : 25/04/1972
Position Held : Professor & HOD
Address for correspondence : Department of Environmental Studies
Institute of Science
VISVA-BHARATI (A Central University)
Santiniketan-731 235, Birbhum, West Bengal, India
Phone: 8250364428 (M)
e-mail: pkpadhy@visva-bharati.ac.in
ResearchGate: (14) Pratap Kumar Padhy ([researchgate.net](https://www.researchgate.net))
Google Scholar: Pratap Kumar Padhy - Google Scholar
Web link: www.visvabharati.ac.in/PratapKumarPadhy.html

Academic Records

Exam. Passed	Yr. of Passing	University	Subjects Taken	Class/ Division	% of Marks/ CGPA
Graduation	1991	OUAT, Bhubaneswar	Botany(H), Zoology Chemistry	First	77.25
M.Sc.	1993	JNU, New Delhi	Environmental Sciences	First	7.51/9.0
M.Phil	1995	JNU, New Delhi	Environmental Sciences	First	8.70/9.0
Ph.D	2000	JNU, New Delhi	Environmental Sciences	Awarded	

Service Record since beginning (at Department of Environmental Studies, Visva-Bharati):

1. Assistant Professor: 13th November, 1999 to 12th November 2011.
2. Associate Professor: 13th November 2011 – 12th November 2014
3. Professor: 13th November 2014 onwards.

Research Experiences:

i) Air Pollution

1. Research experience on **different aspects of air pollution** (air pollution and plants, air pollution and forests, air pollution and human health etc) since 1999 to till date.
2. Four years research experience (1995-1999) in Ph.D work on the topic "**Volatile Organic Compounds (VOC) and Air Quality: Measurement of VOC in Ambient Environment and Estimation of VOC Emission from Anthropogenic and Natural Sources**".
3. Two years research experience in Master of Philosophy (M.Phil), on the topic "**Estimation of Volatile Organic Compounds (VOCs) in the Urban Environment of Delhi**".
4. Working experience in estimation of air pollutants such as **SO₂, O₃, NO_x, VOC, PAH** and chamber fumigations of the first two pollutants.

ii) Soil Pollution

1. Research experience during M.Sc. project report, entitled "**Characterization of Soil on the Basis of Physico-Chemical Properties**".

iii) Water Pollution

1. *Studies on water quality of the industrial belt of the Subarnarekha River basin and its impact on living system.*
2. Some working experience on arsenic and fluoride contamination in water, soil and plants in Birbhum, West Bengal.

iv) Instrumentation

1. Working knowledge of instruments such as Gas Chromatography (GC), YesPlus IAQ Monitor, MiniVol TAS, Handy Air Sampler, High Volume Sampler, Atomic Absorption Spectrometer (AAS), Spectrophotometer, Oxygen Electrode, High Resolution Microscopes, Refrigerated Ultra Centrifuges, pH meter, EC meter, Flame Photometer etc.

Teaching Experiences:

1. Dr. Padhy teaches the following papers in different courses at Visva-Bharati (V-B): **M.Sc. Environmental Science** (Sem-I: Introduction to Environmental Sc., Climatology & Climate Change, Techniques in Environmental Sc., Practical-I; Sem-II: Energy & Environment, Air Pollution, Biodiversity & Conservation, Practical-II; Sem-III: Ecology, Practical-III, Project work; Sem-IV: Environmental Biotechnology, Project work); **Ph.D. Coursework** (Research Methodology and Techniques, Air Pollution and Health (Optional Paper)); and **Undergraduate** (compulsory Environmental Studies in all departments of Visva-Bharati having

undergraduate programme). Dr. Padhy has post-graduate and undergraduate teaching experience since he joined V-B since 1999-till date. Dr. Padhy also took a number of classes in other departments, viz., Environmental Chemistry (M. Sc-II special paper) and Instrumentation (M.Sc.-I) in the Department of Chemistry; Environmental Botany (M. Sc-II special paper) in the Department of Botany; Environmental Biotechnology (M. Sc-II) and Methods & Techniques in Biotechnology (M. Sc.-I) in the Department of Biotechnology) in different departments of Visva-Bharati since November 1999 to 2006.

2. Acted as a Visiting Lecturer at the Utkal University, Bhubaneswar to teach postgraduate students of Environmental Science (2002-2004).

Administrative Experience:

1. HOD, Department of Environmental Studies, 16th July, 2020 - till date.
2. HOD, Department of Environmental Studies, 1st April, 2018 to 30th September, 2018.
3. HOD, Department of Environmental Studies, 4th July, 2013 to 16th July, 2017.
4. In-Charge, Centre for Environmental Studies, 10th August, 2009 to 8th September, 2009.
5. In-Charge, Centre for Environmental Studies, 9th March 2007 to 22nd November, 2007.

Members of the Committee in the University Administration

1. Chairman, Green Audit Committee, Visva-Bharati, 2021- till date.
2. Chairman, Waste Management Committee, Visva-Bharati, 2024 - 2025.
3. Chairman, RTS under PM Suryaghar Muft Bijli Yojna, Visva-Bharati, 2024 - 2025.
4. Member, Tender Committee, 2022-23 (till 29th February, 2024), Visva-Bharati.
5. Member, Azadi Ka Amrit Mahotsav Committee, 11.01.2023, Visva-Bharati.
6. Member, Academic Council, JNU, New Delhi (20.11.2023 – 19.11.2025).
7. Coordinator, SCCN Committee, Visva-Bharati.

Laboratory Worked/Working with

I have gained practical experience from the following prestigious academic institutions in India.

1. **Air Quality and Health Laboratory**, Department of Env. Studies, V-B.
2. **Air pollution and Plants Laboratory**, SES, JNU, New Delhi.
3. **R & D Unit**, IOC, Faridabad.
4. **Spectral Chemistry Lab.**, IIT, New Delhi.
5. **Soil Pollution and Solid Waste Management Lab.**, SES, JNU, New Delhi.

Achievements (Awards, Honours, Scholarships, Fellowships etc.)

1. Completed a UGC sponsored 3 week Refresher Course “14th Refresher Course in Environmental Science” during 4th December – 24th December 2007 at Academic Staff College, The University of Burdwan, Burdwan.
2. Completed two week NNRMS (ISRO) sponsored Training Programme on Remote Sensing and GIS during November 20 – December 2 2006 at the Department of Geology and Geophysics, IIT, Kharagpur.
3. Completed a UGC sponsored 3 week Refresher Course on Life Science and Sustainable Development during 13th February to 5th March 2005 at Department of Zoology, School of Life Science, Visva-Bharati, Santiniketan.
4. Honorary appointment to the Research Board of Advisors by the American Biographical Institute.
5. Completed a UGC sponsored 3 week Refresher Course on Environment and Law during 28th October to 18th November 2001 at Sivatosh Mookerjee Science Centre, Kolkata.
6. Awarded **President of India Medal** for General Proficiency from JNU, New Delhi for the year 1995-1996.
7. Qualified National Eligibility Test (NET, CSIR-UGC) in 1996.
8. Post-doctoral Fellow (SRF), Imperial College, London (ODA Project) July 1998 - November 1999.
9. Senior Research Fellow (SRF), UGC, July 1995 – July, 1998
10. Junior Research Fellow, UGC, July 1993 - July 1995.
11. Qualified Graduate Aptitude Test in Engineering (GATE-93).
12. Topper in Botany (Honours) during Graduation.

Designing of New Curriculum:

1. Dr. Padhy had designed the undergraduate (compulsory) syllabus in Environmental Studies for Visva-Bharati and the university followed the same till the session, 2005-06 and then it was replaced by a common UGC Module syllabus and subsequently as Ability Enhancement Compulsory Course (AECC –Environment Studies).
2. Dr. Padhy has contributed significantly in designing the postgraduate syllabus in Environmental Sciences for the Department of Environmental Studies, Visva-Bharati.
3. Dr. Padhy has also designed the Ph.D. Coursework syllabus in Environmental Science for the Department of Environmental Studies, Visva-Bharati.

Special Training:

1. Seventh Leadership Course on “*Environmental Awareness and Wildlife Conservation*”, Organised by the Training & Extension Division, Zoological Survey of India, Calcutta, Supported by Ministry of Environment and Forests, Government of India, New Delhi, 13-16th March 2001.
2. Participated the Trainers’ Training on AIDS Education Programme on "Universities Talk AIDS Phase-II”, Organised by Training & Orientation Centre, NSS, IIT, Kharagpur,

Supported by Ministry of Culture, Youth Affairs & Sports, Government of India, New Delhi, September 14-16th 2001.

3. Conducted a Training Programme on AIDS Education, “Universities Talk AIDS Phase-II”, to the NSS volunteers of Visva-Bharati & delivered a lecture on “HIV, AIDS and the Role of Youth”, Organised by NSS, Visva-Bharati, Supported by Ministry of Culture, Youth Affairs & Sports, Government of India, New Delhi, 1st -2nd December 2002.

Membership of the International Learned Bodies

1. Life Member (L17802) of the "**Indian Science Congress Association**", Kolkata, India.
2. Life Member of the **Odisha Vigyan Academy**, Bhubaneswar.
3. Member of the "**American Chemical Society (ACS)**", Washington, D.C., USA during the period of 1998-1999.

Reviewer of the International Journals

Acted as a Reviewer of the international referred journals like The Lancet, PLoS Medicine, The Science of the Total Environment, Environmental Research, International Biodeterioration & Biodegradation, Arabian Journal of Geosciences, Natural Resources Research, Air Quality, Atmosphere and Health etc.

Country Visited

United States of America, Thailand, Bhutan

Research Projects Completed/Ongoing:

1. *Fine particulate matters in the air environment and their cancer risks in human being.* **SPARC Programme, MHRD**, Government of India, New Delhi, Approved Amount Rs. 70,77,190.00. Period (March, 2019 – September, 2023) (Ongoing as PI from Indian side with Prof. Soumya Niyogi, Canada).
2. *Physico-chemical characterization of River Ajay- A tributary of Ganga.* UGC MRP Rs. 12.06 lakhs (F. No. 42-437/2013 (SR) dt. 25/03/2013, Period (April 2013 - March 2017). Completed (as Co-PI; Dr. U. K. Singh, DISER, Visva-Bharati PI).
3. *Assessment of volatile organic compounds (VOCs) exposures during biomass combustion in rural homes and its impact on respiratory health.* UGC MRP (10.68 lakhs). (F. No. 37-479/2009 (SR) dt. 12/01/2010, Period (February 2010 - January 2013). Completed (as PI).
4. *Role of exercise and sport in modulating cellular and immunological changes induced by air pollution.* UGC MRP Rs. 5.34 lakhs (F. No. 5-148/2005 (HRP) dt. 30/03/2006, Period (July 2006 - December 2009). Completed (as Co-PI; Dr. Samiran Mondal, Department of Physical Education, Visva-Bharati PI).

Details of Supervision:

- 1) No. of Post-Doctoral fellows guided/guiding: **03**
- 2) No. of Scholars Awarded Ph.D. degree: **14 + 04** (HOD Supervisor)
- 3) No. of Ph.D. Scholars supervising: **Eight (4 submitting soon)**.
- 4) No. of M.Sc. Projects Supervised/Supervising: **Eighty-Eight**.

Details of Post-Doctoral Research Supervised/Supervising:

1. Dr. Sukanta Nayek – CSIR (RA) (Award No. 09/202(0076)/2K18-EMR-I). Assessment of redox properties of the particulate matters of indoor air pollution from solid biofuel burning during cooking in rural households (during 1st May 2018 – April, 2021).
2. 0Dr. Ramansu Goswami - CSIR (SRF) (Award No. 09/202(0033)/2K-II-EMR-I). Isolation of naturally occurring arsenic resistant bacteria and studying the effect of arsenic on growth, structure and virulence of bacteria (during 1st April 2011 – 21st July 2011).
3. Dr. Bijaya Kumar Padhy - CSIR (SRF-Extended) (Award No. 09/202(0013)/2K8-EMR-I) (during 6th November 2008 – 8th January 2009).

Details of Ph.D. Thesis Supervised:

1. *A Comparative Assessment of Urban and Rural Indoor Air Quality and its Impact on Community Health*, 2009 -- Bijaya Kumar Padhi.
2. *Air Pollution Status around Stone Crusher Units at Lalpahari and Its Effects on Two Tree Species and Avifauna Diversity*, 2012 – Dulal Chandra Saha.
3. *Studies on the effect of arsenic on pathophysiology of arsenic resistant bacteria*, 2012 – Ramansu Goswami (with Co-supervision from Dr. S. Mazumder, Dept. of Zoology, V-B).
4. *Dust pollution in Jharia coalfield area and their health implications*, April 2015 – Tofan Kumar Rout (with Co-supervision from Dr. R. Ebhin Masto, CFRI (CSIR), Dhanbad).
5. *Studies on water quality of the industrial belt of the Subarnarekha River basin and its impact on mice – 2016* - Kumar Manoj (with Co-supervision from Prof. S. Chaudhury, CES, V-B).
6. *Assessment of women's respiratory health exposed to volatile organic compounds (VOCs) and Particulate matters from biomass fuel burning in rural households – 2017*-Sukanta Nayek.
7. *Air pollution and respiratory health assessment of school going children in industrial and urban areas of Durgapur and Behampore, West Bengal – 2018* - Suraj Ghosh.
8. *Exploring the antioxidant activity of biogenic agents and their applicability in the toxic metal removal from the aqueous system – 2018* - Deepa Kumari (with Co-supervision from Dr. Naznin Ara Begum, Dept. of Chemistry, V-B).
9. *Evaluation of rainwater quality, aerosol characteristics and their impacts on crops in and around Durgapur, West Bengal, India – 2019* - Lokanath Sahu.
10. *Effects of Indoor Air Pollution on Respiratory Health: Study on Rabha Tribe in Goalpara district, Assam – 2019* - Rumi Rabha.
11. *Air Pollution Effects on Forest and Its Impact on Ecosystem Services in Barjora Forest, Bankura, West Bengal, India- 2019* - Dipti Kamrakar.

12. *Indoor air quality and health risk assessment of rural tribal women in Birbhum district West Bengal* - Mallika Chowdhury.
13. *A Comparative Study of Outdoor Air Pollution, with Special Reference to Health risks of Non-smoking Adult Male Population, in Urban & Industrial Areas of West Bengal* – Buddhadev Ghosh.

Co-supervised Ph. D. Thesis:

1. *Role of earthworm *Lampito mauritii* in amending Pb and Zn contaminated soil and its biochemical responses* -- Sulata Maity with Dr. Shibani Chaudhury.

Ph.D. Thesis Supervised as HoD Supervisor

1. *Selection of cellulolytic microorganisms for enhancement of biogas production* - Mr. Amit Kumar Chakraborty.
2. *Characterization of lignocellulolytic microbes and their immobilization in biochar for enhanced biogas production* - Mr. Binay Kumar Show.
3. *Isolation and characterization of potent cellulolytic microorganisms and their application for biogas production* – Mrs. Debasree Sinha (Prof. S. Chaudhury).
4. *Biochemical effects and bioaccumulation of the pesticides chlorpyrifos and monocrotophos on the apple snail *Pila globosa* (Swainson)* - Mr. Subhasis Pal (Prof. S. Chaudhury).

Details of Ph.D. Thesis Supervising:

1. *Impacts of coal based dust particles on medicinal plants in Santaldih, Purulia, West Bengal* - Chandan Kumar Majee
2. *Studies on toxic trace element accumulation vis-a-vis remediation potential of plants in an industrial area of West Bengal* – Shubhasree Singha.
3. *Qualitative and quantitative analysis of ambient aerosol associated PAHs from industrial, urban and peri-urban areas of West Bengal* – Noor-E-Azam.
4. *Characterization of wet and dry deposition of aerosols and their effects on crops in an industrial port city, Paradeep, Odisha* - Sukhamoy Chowdhury.
5. *Study on size-segregated particulate matter, its source and health risk assessment over an industrial port city, Paradeep, Odisha* - Arijit Rout.
6. *Graphene metal oxide nanocomposites and their potential application for dye removal from wastewater of textile industry* - Seikh Rameeja.
7. *Subhadip Chakraborty*: Topic yet to be decided
8. *Bhairav Mahato*: Topic yet to be decided

Details of M.Sc. Project (Dissertation) Supervised:

1. Evaluation of Non-Timber forest products (NFTPS) in Ballavpur wildlife Sanctuary, Santiniketan. 2005 - Bijaya Kumar Padhi
2. Measurements of As and F from water bodies of Santiniketan and assessment of crop loss due to their toxicity. 2005 - Pinky Chatterjee
3. Municipal Solid wastes management and Physico-Chemical characterization of soils at Municipal dumping sites. 2005 - Sudip Chandra
4. Air pollution and Plant health: A study in the peri-urban area of Santiniketan. 2006 - Dipanwita Das
5. A comparative study on Phytodiversity at Santiniketan with special emphasis on their medical value and chemical properties. 2006 - Pranabesh Ghosh
6. Evaluation of atmospheric purity in suburban areas through lichen: A case study in Bolpur-Santiniketan, India. 2007 - Toofan Ku. Rout
7. A study of rainwater chemistry at the vicinity of Industrial area and at Santiniketan, West Bengal, India. 2008 - Apurva Lal Mukherjee
8. A comparative study of rainwater chemistry at urban and suburban area of east India. 2008 - Paramita Ghosh
9. Effect of arsenic on seed germination and seedling growth in Paddy crop (*Oriza sativa*). 2008 - Pranab Kumar Jana
10. Algal distribution and diversity in the three ponds of Santiniketan. 2008 - Rup Bhattacharjee
11. Evaluation of the Impact of domestic and municipal effluent on the physico-chemical characterisation of freshwater ponds. 2008 - Shivani Vyas.
12. Determination and measurement of fluoride from water bodies of Bankura district and assessment of crop loss due to fluoride toxicity. 2009 - Arpita Kundu
13. A study of diurnal and seasonal variations of ozone and NO_x in Santiniketan and its surrounding semi-urban areas. 2009 - Ria Bhaumik.
14. A study on air pollution and its effect on plants and human health in peri-urban and urban area. 2010 - Subhajit Banik.
15. Effects of air pollution on plant health. 2010 - Manidipa Singha Ray.
16. Measurement of suspended particulate matter and gaseous air pollutants in Bolpur-Santiniketan areas. 2011 - Kushal Porel.
17. Effect of simulated acid rain on seed germination and seedling growth in rice paddy (*Oriza sativa*). 2011 - Rumi Rabha.
18. Physico-chemical characterization of the Subarnarekha river water at some selected sites in West Bengal and Odisha, India, through index analysis approach. 2012 - Balwant Kumar.
19. Measurement of air pollutants in the urban and peri-urban areas of Bolpur-Santiniketan. 2012 - Dhrubajyoti Hazra.
20. The effects of air pollution on Chipkuthi Forest, Santiniketan. 2013 - Shayantika Dey.
21. Physicochemical characterization of water quality of Damodar River, India. 2013 - Dipti Karmakar.
22. Characterization and Classification of Water Resources of the Steel City Durgapur and Adjoining Areas, West Bengal, India: Application of Index Analyses and Multivariate Statistical Analyses Approaches. 2013 - Rama Bhattacharya.

23. Determination of Trophic Level by Carlson's Trophic State Index (TSI) and Study of Green Algae in different Ponds of Santiniketan and adjoining areas. 2014 - Arnab Mitra.
24. Assessment of Air Pollution effects on Plants in Santiniketan and its adjoining area using Air Pollution Tolerance Index. 2014 - Anupam Sarkar.
25. Assessment of respiratory health due to smoking in some Visva-Bharati boy's hostels students. 2015 - Avijit Bez.
26. Baseline Study on Solid Waste of Bolpur Municipality and Santiniketan Areas and their Possible Management. 2015 - Arpita Dey.
27. Respiratory health assessment of school going children of Sriniketan and Durgapur area using Spirometry. 2015 – Chandan Kumar Majee.
28. Effects of air pollution on plants: A comparative study between Ballavpur Wildlife Sanctuary (BWLS) and Barjora forest. 2015 - Nivedita Mallik.
29. Assessment of soil quality by interaction with laboratory based waste water 2015 - Md. Nawab.
30. Indoor air pollution and tribal health: A case study of Kaliganj. 2016 - Shreyasi Paul.
31. Effects of air pollution on *Shorea robusta* and *Acacia auriculiformis*: A comparative study between Barjora forest, Bankura and Ballavpur Wildlife Sanctuary (BWLS). 2016 - Brati Kole.
32. Effects of air pollution on respiratory health of school going children: A comparative study on Bolpur and Durgapur. 2016 - Diptendu Kapri.
33. Abatement of particulate air pollutants and heavy metals by plants around BTPS, Bandel, West Bengal. 2016 - Swagata Ghosh.
34. Effects of particulate matter (PM) and heavy metals on the pulmonary function of school going children in Bolpur and Berhampore: A comparative assessment. 2016 - Mallika Chowdhury.
35. Generation and Sustainable Management of Solid Wastes in Boys' Hostels and Main Campus Gardens of Visva-Bharati: A Case Study. 2017 - Chandradip Debnath.
36. Effects of air pollution on sajne tree (*Moringa oleifera*): A comparative study between Durgapur and Santiniketan, West Bengal, India. 2017 – Shilpi Mondal.
37. Assessment of air pollution tolerance index and anticipated performance index for the development of green belt to reduce the level of air pollution in Santiniketan. 2017 – Kuheli Deb.
38. Study on solid waste management of the girl's hostels of Santiniketan, Visva-Bharati. 2017 – Rituparna Mal.
39. Water quality assessment of some selected Indian rivers through trace elements pollution index. 2017 – Susama Pandit.
40. Water Quality Assessment of some selected Indian Rivers through the development of Trace Element Pollution Index (TEPI). 2017 – Arindam Ghosh.
41. Study on solid waste management at Visva-Bharati campus. 2017 – Priyanka Mondal.
42. Study of plants for assessing their medicinal value, preliminary screening of secondary metabolites and air pollution abatement potential in Visva-Bharati campus, Santiniketan. 2018 - Bisweswari Ghosh
43. Estimation of carbon sequestration potential of some common tree species at Visva-Bharati campus, Santiniketan by non-destructive method. 2018 - Tulika Saha
44. Indoor air pollution from biomass fuel in Lalbandh area, Santiniketan, Birbhum – A major threat to women health. 2018 - Sama Khatun

45. Physico-chemical characterization of agricultural soils of village Aushgram, Purba Bardhaman. 2018 - Pritam Dey.
46. Assessment of respiratory morbidity in adult university students of Visva-Bharati, Santiniketan, India, 2019 - Buddhadev Ghosh.
47. Effects of atmospheric dust particles on biochemical and physiological parameters of shrubs at Bolpur, Birbhum, West Bengal, 2019 - Anwesa Roy.
48. Effects of dust fall on road side plants and study of their abatement capacity, 2019 - Kanika Mahato.
49. Physiochemical characterization of groundwater, study of fluoride content in soil and rice grain and assessment of health effects in Bankura district, West Bengal, 2019 - Koyeli Das.
50. Exposure of indoor air pollutants originating from unprocessed biomass fuels and their impacts on women health, 2019 - Srija Sinha Roy.
51. Study of the biochemical parameters and secondary metabolites of medicinal plants in Santiniketan, 2020 - Supriya Ghosh.
52. A short questionnaire survey for assessing the patient health status of R. G. Kar Medical College and Hospital, Kolkata, West Bengal, 2020 - Anusree Datta.
53. Air and noise pollution in some selected traffic intersection of Kolkata Municipal Corporation, 2020 - Krishanu Bhowmik.
54. Households air pollution and associated health impacts from solid biomass fuels in rural area of Santiniketan, West Bengal, 2020 – Chumki Sen.
55. Analysis of respiratory health and smoking issues among students of Visva-Bharati, Santiniketan, India, 2020 – Rishav Ray.
56. Source apportionment and size fraction of particulate matter and health outcomes in urban and industrial region, 2021 – Atin Chatterjee.
57. Indoor aerosols and their health effects on human beings, 2021 – Sanchari Roy.
58. Effects of bio-aerosols on human health: A special focus on COVID-19 pandemic, 2021 – Tanmoy Kumar Maharathy.
59. Particulate air pollution and neurotoxicity: A review, 2021 – Rupsa Ghosh.
60. Impacts of pollen on human health and the roles of air pollutants and climatic factors on allergenicity of pollen, 2021 – Antara Roy.
61. Studies on particulate pollution monitoring of Malda, Murshidabad and Nadia district, West Bengal, India, 2022 - Md. Maimun Habib.
62. Temporal variation of air quality index in Darjeeling, Kalimpong and Jalpaiguri, 2022 - Jayashree Mahato.
63. Distribution of air pollutants in different metrological condition, South 24 Paraganas and Jhargram, West Bengal, India, 2022 - Harish Chandra Barman.
64. Monitoring of air pollutants load and air quality over Kolkata district, West Bengal, India, 2022 – Lovely Dayal.
65. Study of air pollutants in semi-urban area of Alipurduar and Coochbehar districts in West Bengal, India, 2022 – Ayontika Deb Chowdhury.
66. Study of air pollutants present in the ambient air of Burdwan district, West Bengal, India, 2022 – Atul Chandra Murmu.
67. Assessment of ambient air quality over Purulia, Bankura, and Birbhum District, 2022 – Priti Sao.
68. A comparative study of air pollution status of urban, semi-urban and industrial area of Hooghly, West Bengal, India, 2022 - Rupsa Biswas.

69. Assessment of air quality in semi-urban and urban areas of district Howrah, West Bengal, India, 2022 – Sourina Pramanik.
70. Air quality monitoring with meteorological parameters of North 24 Parganas, 2022 – Sayoni Ghosh.
71. Studies on air pollution status of Medinipur district in West Bengal, India, 2022 – Susmita Mahato.
72. An assessment of the spatiotemporal variations of air quality in Kolkata, West Bengal, India, 2023 – Amit Mondal.
73. Spatiotemporal distribution and trend analysis of carbon monoxide in the capital cities of states of India, 2023 – Ananya Mondal.
74. A comparative assessment of pulmonary function and co-morbidity of fishmonger and non-fishmonger of Bolpur, West Bengal, 2023 – Anisha Roy.
75. An assessment of the spatiotemporal variations of air quality in Bolpur, West Bengal, India, 2023 – Md Sarwar Alam.
76. Effects of air pollution on roadside shrubs: A comparative study between Santiniketan and Durgapur, using APTI, 2023 – Pinki Biswas.
77. Assessment of lung function and respiratory morbidity study in young educated adult male and female smokers and non-smokers in Santiniketan: A case study, 2023 – Pravati Pal.
78. Assessment of air pollution tolerance of road-side shrubs in Bolpur and Durgapur using air pollution tolerance index (APTI), 2023 – Senjuti Das.
79. An assessment of the spatiotemporal variations of air quality in Durgapur, West Bengal, India, 2023 – Srijan Gupta.
80. Studies on spatial distribution of air quality in West Bengal districts in India: A comprehensive assessment of air quality, 2024 - Banya Lohar.
81. Spatiotemporal distribution of benzene, toluene, ethylbenzene and xylene (BTEX) with meteorological factors in India, 2024 - Dildar Ali.
82. Isolation and characterization of heavy metal resistant bacteria from industrial area of Durgapur, 2024 - Susma Mandi.
83. A comparative study of pulmonary function and respiratory symptoms in fishmongers and non-fishmongers, 2024 - Rubina Sultana.
84. Impact of air pollution on respiratory health: A comparative study of roadside workers in polluted and non-polluted areas, 2024 - Manjila Yasmin.
85. A comparative study on spatiotemporal variation of air quality between semi-urban area, Bolpur and industrial area, Durgapur, 2025 - Mrinmoyie Seth
86. Spatiotemporal variation of air quality in Asansol and Bolpur, West Bangal: A comparative study, 2025 - Sayon Mondal
87. A study on Asiatic elephant corridor, habitat suitability modelling and human-elephant conflict in Madarihat, Alipurduar, West Bengal, 2025 - Oliva Sarkar
88. Screening of plant growth promoting traits in heavy metal resistant bacteria from industrial area of Durgapur, 2025 - Sonampi Dawn

List of Publications:

i) Research Paper Published: **70**

ii. Chapters in the Book/Papers in Proceedings: **42**

i) Research Paper Published

1. Kumar, B., **Padhy, P. K.**, Kumari, D., Singh, M.P., Goswami, S. and Singh, U. K. (2025). Pathways of major ion chemistry and evaluation of contaminants in the River Ajay, India. *Water Supply*, WS2025030. 27th February, 2025.
2. Ghosh, Arindam; Manoj, Kumar; **Padhy, P. K.** and Pankaj, P. P. (2024). Assessment of Trace Element Pollution in Indian Rivers: Development of a Pollution Index and Implications for Water Quality Management, *International Journal of Lakes and Rivers*, 17, 1, 17-27.
3. Ghosh, B., Ali, S. Y., and **Padhy, P. K.** (2024). Spatiotemporal Distribution of Air Quality Dynamics and Health Risks Study during 2019-2021 lockdown in Urban and Industrial Cities of West Bengal, India, *Discover Atmosphere*, 2, 10, 1-15. <https://doi.org/10.1007/s44292-024-00014-6>
4. Das, Somen, Neha Shri, Paromita Chakraborty, Indramani Dhada, Atin Adhikari, Krishnamurthi Kannan, and **Pratap Kumar Padhy** (2024). Spatio-temporal trends in deaths due to Cardio Vascular Disease (CVD) attributable to air pollution in India and its states: Evidence from the Global Burden of Disease Study 2019. *The Evidence*, 2 (3), 1-15.
5. Ghosh, Buddhadev, Harish Chandra Barman and **Padhy, P. K.** (2024). Trends of air pollution variations during pre-Diwali, Diwali and post-Diwali periods and health risk assessment using HAQI in India. *Discover Environment*, 2, 81, 1-12.
6. Shaik, Rameeja; Ghosh, Buddhadev; Barman, Harish Chandra; Rout, Arijit; **Padhy, P. K.** (2024). Green Nanotech: A Review of Carbon-Based Nanomaterials for Tackling Environmental Pollution Challenges, *Nature Environment and Pollution Technology*, 23, 3, 1783-1794. <https://doi.org/10.46488/NEPT.2024.v23i03.051>
7. Ghosh, Buddhadev, **Padhy, P. K.**, Ali, S. Y., Shaik, R., Hossain, M., Nayek, S., Bhui, I., and Majee, C. K. (2024). Spatiotemporal distribution of PM_{2.5} and health risk assessment in Kolkata, India: Evaluation of non-carcinogenic health hazards and premature mortality, *Urban Climate*, 56, 102005.
8. Ghosh, Buddhadev; Mondal, A.; De, M.; Rout, T. K. and **Padhy, P. K.** (2024). Spatiotemporal distribution of carbon monoxide dynamics and probabilistic health risk assessment: A comprehensive sensitivity analysis across India's state capitals. *Environmental Challenges*, 15, 100891.
9. Ghosh, Buddhadev, Barman, H.C., Ghosh, S., Habib, M. M., Mahato, J., Dayal, L., Mahato, S., Sao, P., Murmu, A. C., Deb Chowdhury, A., Pramanik, S., Biswas, R., Kumar, S., and **Padhy, P. K.** (2024). Air pollution status and attributable health effects across the state of West Bengal, India during 2016-2021. *Environmental Monitoring and Assessment*, 196: 165. <https://doi.org/10.1007/s10661-024-12333-7>.
10. Ghosh, B., Barman, H. C. and **Padhy, P. K.** (2023). Analysis of spatiotemporal distribution of air quality index (AQI) in the state of West Bengal, India from 2016 to 2021. *Discover Atmosphere*, 1:1. <https://doi.org/10.1007/s44292-023-00001-3>.
11. Ghosh, B.; **Padhy, P.K.**; Niyogi, S.; Patra, P.K.; Hecker, M. (2023). A Comparative Study of Heavy Metal Pollution in Ambient Air and the Health Risks Assessment in Industrial, Urban and Semi-Urban Areas of West Bengal, India: An Evaluation of Carcinogenic, Non-

- Carcinogenic, and Additional Lifetime Cancer Cases. *Environments*, 10, 190. <https://doi.org/10.3390/environments10110190>.
12. Ghosh, S., De, Munmun, Rout, T. K. and **Padhy, P. K.** (2023). Study on spatiotemporal distribution and health risk assessment of BTEX in urban ambient air of Kolkata and Howrah, West Bengal, India: Evaluation of carcinogenic, non-carcinogenic and additional leukaemia cases, *Atmospheric Pollution Research*, 14, 101878. The impact factor of *Atmospheric Pollution Research* is 4.5 and belongs to Elsevier ScienceDirect.
 13. Majee, C. K., Ali, S. Y. and **Padhy, P. K.** (2023). Effects of atmospheric dust particles on common medicinal plants in an industrial area of West Bengal, India, *Environmental Monitoring and Assessment*, 195, 978. doi.org/10.1007/s10661-023-11573-3. The impact factor of *Environmental Monitoring and Assessment* is 3.1 and belongs to Springer.
 14. Ghosh, B., Nayek, S. and Padhy, P. K. (2023). Effects of nationwide lockdown due to COVID-19 on ambient air quality in the state of West Bengal, India, *Journal of Scientific Research*, 15, 1. 183-200. *Journal of Scientific Research* is in UGC Care list of journal.
 15. Ghosh, B., Nayek, S. and Padhy, P. K. (2022). Assessment of respiratory morbidity and epidemiological survey of tobacco smokers and non-smokers among educated young adults in Visva-Bharati, Santiniketan: A case study, *Current World Environment*, 17, 2, 331-340.
 16. Chowdhury, M., Ghosh, S. and **Padhy, P. K.** (2022). Effects of Indoor air pollution on tribal community in rural India and health risks assessment due to domestic biomass burning: A realistic approach using lung deposition model, *Environmental Science and Pollution Research*, 29, 59606–59618.
 17. Bhakta, S., Rout, T. K., Karmakar, D., Pawar, C. and **Padhy, P. K.** (2022). Trace elements and their potential risk assessment on polar ecosystem of Larsemann Hills, East Antarctica, *Polar Science*, 31, 100788.
 18. Karmakar, D., Deb, K. and **Padhy, P. K.** (2021). Ecophysiological responses of tree species due to air pollution for biomonitoring of environmental health in urban area, *Urban Climate*, 35, 100741.
 19. Nayek, S. and **Padhy, P. K.** (2020). Personal exposure to VOCs (BTX) and women health risk assessment in rural kitchen from solid biofuel burning during cooking in West Bengal, India, *Chemosphere*, 244, 125447. IF: 5.108.
 20. Karmakar, D. and **Padhy, P. K.** (2019). Air pollution tolerance, anticipated performance, and metal accumulation indices of plant species for greenbelt development in urban industrial area. *Chemosphere*, 237, 124522.
 21. Karmakar, D. and **Padhy, P. K.** (2019). Metals uptake from particulate matter through foliar transfer and their impact on antioxidant enzymes activity of *S. robusta* in a tropical forest, West Bengal, India. *Archives of Environmental Contamination and Toxicology*, 76, 605-616. DOI: 10.1007/s00244-019-00599-9). IF: 2.421
 22. Rabha, R., Ghosh, S. and **Padhy, P. K.** (2019). Effects of biomass burning on pulmonary functions in tribal women in North-Eastern India. *Women and Health*, 59,3,229-239 (published online on 1st August 2018). DOI: 10.1080/03630242.2018.1452834. IF: 1.307.
 23. Karmakar, D., Ghosh, Tirthankar and **Padhy, P. K.** (2019). Effects of air pollution on carbon sequestration potential in two tropical forests of West Bengal, India. *Ecological Indicators*, 98, 377-388. doi.org/10.1016/j.ecolind.2018.11.014. IF: 4.391.
 24. Kumari, Deepa, Mallick, T., **Padhy, P. K.**, Mondal, S., Karmakar, A. and Begum, N. A. (2018). The degradation of toxic organic dyes in aqueous medium in greener ways:

- Exploring the utility of Indian Curry Leaf plant and the nanoparticles synthesized using it. *Desalination and Water Treatment*, 129, 266-278 (October). IF: 1.383
25. Rabha, R., Ghosh, S. and **Padhy, P. K.** (2018). Indoor air pollution in rural north-east India: Elemental compositions, changes in haematological indices, oxidative stress and health risks, *Ecotoxicology and Environmental Safety*, 165, 393-403. IF: 4.0
 26. Ghosh, S., Rabha, R., Chowdhury, M. and **Padhy, P. K.** (2018). Source and chemical species characterization of PM₁₀ and human health risk assessment of semi-urban, urban and industrial areas of West Bengal, India, *Chemosphere*, 207, 626-636. doi.org/10.1016/j.chemosphere.2018.05.133. IF: 4.551
 27. Nayek, S. and **Padhy, P. K.** (2018). Approximation of personal exposure to fine particulate matters (PM_{2.5}) during cooking using solid biomass fuels in the kitchens of rural West Bengal, India. *Environmental Science and Pollution Research*, 25, 16, 15925–15933. DOI: 10.1007/s11356-018-1831-7. IF: 2.8
 28. Sahu, L. and **Padhy, P. K.** (2017). Evaluation of rain water quality in rural and urban areas of West Bengal, India, *International Journal of Bioresource, Environment and Agricultural Sciences*, 3, 4, 643-649. IF:
 29. Ghosh, S., Rabha, R., Chowdhury, M. and **Padhy, P. K.** (2017). Seasonal Trends and Correlation of Criteria Pollutants and Heavy Metals in Ambient Air of Bolpur (Semi Urban), India. *International Journal for Research in Applied Science & Engineering Technology*, 5 (8), 1490-1498. IF: 4.8
 30. Nayek, S. and **Padhy, P. K.** (2017). Daily personal exposure of women cooks to respirable particulate matters during cooking with solid bio-fuels in a rural community of West Bengal, India. *Aerosol and Air Quality Research*, 17, 245-252. IF: 2.814
 31. Karmakar, D., Malik, Nivedita and **Padhy, P. K.** (2016). Effects of Industrial Air pollution on Biochemical parameters of *Shorea robusta* and *Acacia auriculiformis*, *Research Journal of Recent Sciences*, 5(4), 1-5.
 32. Manoj, K., **Padhy, P. K.** (2015). Environmental perspectives of pond ecosystems: Global issues, services and Indian scenarios. *Current World Environment*, 10, 3, 848-867.
 33. Manoj, K., **Padhy, P. K.** (2015). Discourse and review of environmental quality of river bodies in India: An appraisal of physico-chemical and biological parameters as indicators of water quality. *Current World Environment*, 10, 2, 537-571.
 34. Manoj, K., **Padhy, P. K.** and Chaudhury, S. (2015). Distribution pattern analysis of six trace element and development of trace element pollution index for a Peninsular River basin, Chottanagpur plateau. *Indian Journal of Environmental Protection*, 35, 8, 666-679.
 35. Rout, T. K., Masto, R. E., **Padhy, P. K.**, Ram, L. C., George, J., and Joshi, G. (2015). Heavy metals in dusts from commercial and residential areas of Jharia coal mining town. *Environmental Earth Sciences*, 73, 347-359. DOI 10.1007/s12665-014-3429-9. Published online 5th July 2014.
 36. Goswami, R., Mukherjee, S., Rana, V.S., Saha, D.R., Raman, R., **Padhy, P.K.**, Mazumder, S. (2015). Isolation and characterization of arsenic resistant bacteria from contaminated water-bodies in West Bengal, India. *Geomicrobiology Journal*, 32, 17-26.
 37. Manoj K. and **Padhy, P. K.** (2014). Multivariate statistical techniques and water quality assessment: discourse and review on some analytical models. *International Journal of Environmental Sciences*, 5, 3, 607-626.

38. Manoj K. and **Padhy, P. K.** (2014). Distribution, enrichment and ecological risk assessment of six elements in bed sediments of a tropical river, Chottanagpur plateau: A spatial and temporal appraisal. *Journal of Environmental Protection*, 5, 1419-1434.
39. Rout, T. K., Masto, R. E., **Padhy, P. K.**, George, J., Ram, L. C. and Maity, S. (2014). Dust fall and elemental flux in a coal mining area, *Journal of Geochemical Exploration*, 144, C, 443-455. (September, 2014).
40. Manoj K., Bhattacharyya R. and **Padhy, P. K.** Hydrogeochemical Evaluation of Groundwater of the steel city Durgapur, West Bengal, India. *Research Journal of Chemical Sciences*, 4, 6, 1-12, June 2014.
41. Goswami, R., Mandal, S., Mandal, S., **Padhy, P. K.**, Ray, S. and Mazumder, S. (2014). Effect of temperature and arsenic on *Aeromonas hydrophila* growth, a modelling approach. *Biologia*, 69, 7, 825-833.
42. Rout, T. K., Masto, R. E., Ram, L. C., George, J. and **Padhy, P. K.** (2013). Assessment of human health risks from heavy metals in outdoor dust samples in a coal mining area. *Environmental Geochemistry and Health*, 35, 347-356.
43. Manoj, K., Ghosh, S. and **Padhy, P. K.** (2013). Characterization and classification of hydrochemistry using multivariate graphical and hydrostatistical techniques. *Research Journal of Chemical Sciences*, 3(5), 32-42, May (2013).
44. Manoj K., Bhattacharyya R. and **Padhy, P. K.** (2013). Forest and Wildlife Scenarios of Northern West Bengal, India: A Review. *International Research Journal of Biological Sciences*, 2(7), 70-79, July (2013).
45. Manoj K. and **Padhy, P. K.** (2013). Oxidative Stress and Heavy Metals: An Appraisal with Reference to Environmental Biology. *International Research Journal of Biological Sciences*, 2(10), 91-101, October (2013).
46. Bhattacharyya, R., Manoj, K. and **Padhy, P. K.** (2013). Index Analysis, Graphical and Multivariate Statistical Approaches for Hydrochemical Characterisation of Damodar River and its Canal System, Durgapur, West Bengal, India. *International Research Journal of Environmental Sciences*, 2, 2, 53-62.
47. **Padhy, P. K.** (2013). Effects of stone crushers' pollution on plant morphology and biochemistry. *The Ecoscan (An International Quarterly Journal of Environmental Science)*, Special Issue, 3, 307-313.
48. Manoj K., Kumar, B. and **Padhy, P. K.** (2013). Spatial assessment and characterisation of the Subarnarekha river water through index analyses approaches and chemometrics. *The Ecoscan (An International Quarterly Journal of Environmental Science)*, Special Issue, 3, 321-330.
49. Nayek, S., Porel, K., Hazra, D. & **Padhy, P. K.** (2013). Air pollution profile of the Santiniketan-Bolpur-Sriniketan semi-urban area. *The Ecoscan (An International Quarterly Journal of Environmental Science)*, Special Issue, 3, 315-319.
50. Manoj, K. and **Padhy, P. K.** (2013). Climate Change, Water Resources and Food Production: Some Highlights from India's Standpoint. *International Research Journal of Environment Sciences*, 2(1), 79-87.
51. Manoj, K., Kumar, B. and **Padhy, P. K.** (2012). Characterisation of Metals in Water and Sediments of Subarnarekha River along the Projects' Sites in Lower Basin, India, *Universal Journal of Environmental Research and Technology (UJERT)*, 2, 5, October, 2012, 402-410.

52. Manoj, K., **Padhy, P. K.** and Chaudhury, S. (2012). Study of Heavy Metal Contamination of the River Water through Index Analysis Approach and Environmetrics, *Bulletin of Environment, Pharmacology and Life Sciences*, 1, 10, September 2012, 7-15.
53. Saha, D. C. & **Padhy, P. K.** (2012). Effect of particulate pollution on rate of transpiration in *Shorea robusta* at Lalpahari forest. *Trees – Structure and Function*, 26, 4, 1215-1223.
54. Saha, D. C. & **Padhy, P. K.** (2011). Effect of air and noise pollution on species diversity and population density of forest birds at Lalpahari, West Bengal, India. *Science of the Total Environment*, 409, 24, 5328-5336 (November 15, 2011).
55. Saha, D. C. & **Padhy, P. K.** (2011). Effects of stone crushing industry on *Shorea robusta* and *Madhuca indica* foliage in Lalpahari forest. *Atmospheric Pollution Research*, 2, 463-476 (October, 2011).
56. Goswami, R., Ghosh, D., Saha, D. R., **Padhy, P. K.** and Mazumder, S. (2011). Effect of acute and chronic arsenic exposure on growth, structure and virulence of *Aeromonas hydrophila* isolated from fish. *Microbial Pathogenesis*, 50, 63-69 (February, 2011).
57. Padhi, B. K., **Padhy, P. K.**, Sahu, L., Jain V.K. and Ghosh R. (2010). Assessment of intra-urban variability in indoor air quality and its impact on children's health. *Air Quality, Atmosphere and Health*, 3, 3, 149-158.
58. Padhi, B. K., Rath, J. and **Padhy, P. K.** (2010). Diatoms for assessing the ecological condition of inland freshwater bodies. *World Review of Science, Technology and Sustainable Development*, 7, 4, 352-359.
59. **Padhy, P. K.** and Padhi, B. K. (2009). Effects of biomass combustion smoke on hematological and antioxidant profile among children (8-13 years) in India. *Inhalation Toxicology*, 21, 8, 705-711.
60. Padhi, B. K., and **Padhy, P. K.** (2008). Domestic Fuels, Indoor Air Pollution and Children's Health: The Case of Rural India. *In Environmental Challenges in Pacific Basin, Annals of New York Academy of Science*, 1140: 209-217.
61. **Padhy, P. K.** and Padhi, B. K. (2008). Assessment of noise quality in Bolpur-Santiniketan Areas (India), *Journal of Environmental Research and Development*, 3, 1, 301-306.
62. Padhi, B. K. and **Padhy, P. K.** (2008). Assessment of intra-urban variability in outdoor air quality and its health risks. *Inhalation Toxicology*, 20, 11, 973-979.
63. Maity, S., **Padhy, P. K.** and Chaudhury, S. (2008). The role of earthworm *Lampito mauritii* (Kinberg) in amending lead and zinc treated soil, *Bioresource Technology*, 99, 7291-7298.
64. Padhi, B. K. and **Padhy, P. K.** (2008). Status of non-timber forest products (NTFPs) in Ballavpur Wildlife Sanctuary, West Bengal, India: Does it contribute to sustainable livelihood? *Science and Culture*, 74, 7/8, 287-290.
65. **Padhy, P. K.** and Varshney, C. K. (2005). Isoprene emission from tropical tree species, *Environmental Pollution*, 135, 1, 101-109.
66. **Padhy, P. K.** and Varshney, C. K. (2005). Emission of Volatile Organic Compounds (VOC) from Tropical Plant Species in India, *Chemosphere*, 59, 11, 1643-1653.
67. **Padhy, P. K.** and Varshney, C. K. (2000). Total Non-methane volatile organic compounds (TNMVOC) in the environment of Delhi. *Atmospheric Environment*, 34, 577-584.
68. **Padhy, P. K.** and Varshney, C. K. (2000). Ambient methane levels in Delhi. *Chemosphere-Global Change Science*, 2, 2, 185-190.
69. Varshney, C. K. and **Padhy, P. K.** (1999). Emission of total volatile organic compounds (TVOC) from anthropogenic sources in India. *Journal of Industrial Ecology*, 2, 4, 93-105.

70. Varshney, C. K. and **Padhy, P. K.** (1998). Total Volatile Organic Compounds (TVOC) in the Urban Environment of Delhi, *Journal of the Air and Waste Management Association*, 48, 174-179.

ii. Chapters in the Book/Papers in Proceedings:

1. **Padhy, P. K.**, Niyogi, Soumya, Patra, P. K. and Hecker, Markus. (2024). Airborne Particulate Matter: Impact on Human Health and Environment (Edited Book), Springer Nature, Cham, Switzerland. pp 218. (ISBN: 978-3-031-84407-2).
2. **Padhy, P. K.**, Niyogi, Soumya, Patra, P. K. and Hecker, Markus. (2024). Airborne Particulate Matter: Impact on Human Health and Environment (Edited Book), Co-published by Springer International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India, pp 223. (ISBN: 978-93-81891-89-6).
3. Singha, Shubhasree and **Padhy, P. K.** (2024). A review on the assessment of the heavy metal bioremediation potential of plants and microbes. *In Airborne Particulate Matter: Impact on Human Health and Environment*. Padhy, P. K., Niyogi, Soumya, Patra, P. K. and Hecker, Markus (Eds.). Co-published by Springer International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India, pp 209-223. (ISBN: 978-93-81891-89-6).
4. Ghosh, B., Nayek, S., and **Padhy, P. K.** (2024). Source apportionment characterization of airborne particulate matter induced toxic effects and various assay of oxidative potential measurement. *In Airborne Particulate Matter: Impact on Human Health and Environment*. Padhy, P. K., Niyogi, Soumya, Patra, P. K. and Hecker, Markus (Eds.). Co-published by Springer International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India, pp 143-166. (ISBN: 978-93-81891-89-6).
5. Ghosh, Rupsa, Ghosh, Buddhadev, Maharathy, T. K., Datta, Anusree and **Padhy, P. K.** (2024). Particulate air pollution and neurotoxicity: A review. *In Airborne Particulate Matter: Impact on Human Health and Environment*. Padhy, P. K., Niyogi, Soumya, Patra, P. K. and Hecker, Markus (Eds.). Co-published by Springer International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India, pp 127-142. (ISBN: 978-93-81891-89-6).
6. Chowdhury, M., Ghosh, B., Rabha, R., Chatterjee, Arindam and **Padhy, P. K.** (2024). Assessment of haematological and respiratory health risk from air pollution. *In Airborne Particulate Matter: Impact on Human Health and Environment*. Padhy, P. K., Niyogi, Soumya, Patra, P. K. and Hecker, Markus (Eds.). Co-published by Springer International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India, pp 109-125. (ISBN: 978-93-81891-89-6).
7. Noor E Azam and **Padhy, P. K.** (2024). A review on analytical methods for oxygenated polycyclic aromatic hydrocarbons (OPAHs) in airborne particulate. *In Airborne Particulate Matter: Impact on Human Health and Environment*. Padhy, P. K., Niyogi, Soumya, Patra, P. K. and Hecker, Markus (Eds.). Co-published by Springer International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India, pp 67-85. (ISBN: 978-93-81891-89-6).
8. **Padhy, P. K.**, Niyogi, Soumya, Patra, P. K. and Hecker, Markus (2024). Air Quality and Human Health (Edited Book), Springer-Nature Singapore Pvt. Ltd., pp 212. (ISBN: 978-981-97-1362-2).

9. Ghosh, B., Chowdhury, M., Ghosh, S. and **Padhy, P. K.** (2024). Outdoor air quality and assessment of its potential health risk to human being. *In Air Quality and Human Health*. **Padhy, P. K.**, Niyogi, Soumya, Patra, P. K. and Hecker, Markus (Eds.). Springer-Nature Singapore Pvt. Ltd., pp 121-134. (ISBN: 978-981-97-1362-2).
10. Ghosh, Buddhadev; Barman, Harish Chandra; De, Munmun; Noor E Azam; Roy, Anisha; Mondal, Ananya; Pal, Pravati; Mondal, Amit; Md. Sarwar Alam; Gupta, Srijan; and **Padhy, P. K.** (2024). Particulate matter and human health: A short review. *In Human and Environmental Health*, Priti Saha, Mobarok Hossain, and Santanu Rana (Eds.). Green Feather Publication, Howrah, pp 1-14. (ISBN 978-81-948349-2-2).
11. De, Munmun; Ghosh, Buddhadev; Barman, H. C., **Padhy, P. K.**, Patra, P. K. (2024). Source characterization and health risks of fluoride contamination in groundwater. *In Human and Environmental Health*, Priti Saha, Mobarok Hossain, and Santanu Rana (Eds.). Green Feather Publication, Howrah, 31-48. (ISBN 978-81-948349-2-2).
12. Noor E Azam, Buddhadev Ghosh, Harish Chandra Barman, Munmun De, Anisha Roy, Ananya Mondal, Pravati Pal, Amit Mondal, Md. Sarwar Alam, Srijan Gupta and **Padhy, P. K.** (2024). Effects of airborne polycyclic aromatic hydrocarbons (PAHs) on human health: A review. *In Human and Environmental Health*. Priti Saha, Mobarok Hossain, and Santanu Rana (Eds.). Green Feather Publication, Howrah, pp 82-110. (ISBN 978-81-948349-2-2).
13. Karmakar, D., Gupta, S., and **Padhy, P. K.** (2024). A critical review of different methods of estimation of the above-ground biomass and carbon stocks in India. *In: Ecophysiology of Tropical Plants: Recent Trends and Future Perspectives*, Tripathi, S., Bhadouria, R., Srivastav, P., Singh, R., Devi, R.S. (Eds.), CRC Press, Taylor and Francis Group, ISBN: 9781032370446, pp 233-252.
14. Ghosh, Buddhadev, Noor-E-Azam, **Padhy, P. K.** (2022). Outdoor air pollution: Source characterization and the health effects on human beings. *In: Environmental Education towards Sustainable Development*. Piyali Bose & Jayanta Mete (Eds.), RED'SHINE PUBLICATION, Stockholm, Sweden, pp 19-40. (ISBN: 978-91-987980-6-7).
15. Chowdhury, M., Ghosh, S. and **Padhy, P. K.** (2022). Effects of Biomass Burning on Lung Functions in Rural Tribal Women in Kaliganj Village, Santiniketan. *In: Impact of COVID-19 on Health and Economic Issues of India*. Debasis Bhattacharya & Daya Shankar Kushwaha (Eds.), New Delhi Publishers, New Delhi, (ISBN: 978-93-93878-53-3), pp. 1-15.
16. **Padhy, P. K.**, Patra, P. K. and Singh, U. K. (eds.) (2017). Emerging Issues in Environmental Science: Concerns and Management, New Delhi Publishers, New Delhi (ISBN: 978-9385503771), pp. 234.
17. Rout, T. K., **Padhy, P. K.** and Masto, R. E. (2017). Human Exposure Risks of Potentially Toxic Elements in the Dust: A Comparison Between Residential and Commercial Sites of a Coal Mining Town. *In: Emerging Issues in Environmental Science: Concerns and Management*. Padhy, P. K., Patra, P. K. and Singh, U. K. (eds.), New Delhi Publishers, New Delhi (ISBN: 978-93-85503-77-1), pp. 91-112.
18. Goswami, R., **Padhy, P. K.** and Mazumder, S. (2017). Bacterial Arsenic Resistance Mechanisms: New Insights. *In: Emerging Issues in Environmental Science: Concerns and Management*. Padhy, P. K., Patra, P. K. and Singh, U. K. (eds.), New Delhi Publishers, New Delhi (ISBN: 978-93-85503-77-1), pp. 187-193.
19. Manoj, K. and **Padhy, P. K.** (2017). Canal-Top Solar Power Plants in Gujarat (India): An

- Innovative Way to Harness Renewable Energy. *In: Emerging Issues in Environmental Science: Concerns and Management*. Padhy, P. K., Patra, P. K. and Singh, U. K. (eds.), New Delhi Publishers, New Delhi (ISBN: 978-93-85503-77-1), pp. 211-219.
20. Ghosh, S., Majee, C. K. and **Padhy, P. K.** (2017). Respiratory health assessment using spirometry: A study of school going children of Bolpur and Durgapur, *In: Human Development and Sustainability: Challenges and Strategies*. Sarkar, A. K. & Ghosh, P. K. (eds.), Atlantic Publishers and Distributors Pvt. Ltd, New Delhi (ISBN: 978-81-269-2307-6), pp. 192-200.
 21. Rabha, R., Karmakar, D., Ghosh, S., Nayek, S. and **Padhy, P. K.** (2016). Effects of wood use on lung functions of women in Assam, India. *In Green Energy and Sustainable Environment*. Chaudhury, S., Hazra, A. K. and Balachandran, S. (eds.), Akshar Prakashni, Bolpur (ISBN: 978-81-922916-6-6), pp. 231-236.
 22. Nayek, S., Ghosh, S., Karmakar, D., Rabha, R. and **Padhy, P. K.** (2016). Deterioration of women's health due to cooking using traditional solid bio-energy. *In Green Energy and Sustainable Environment*. Chaudhury, S., Hazra, A. K. and Balachandran, S. (eds.), Akshar Prakashni, Bolpur (ISBN: 978-81-922916-6-6), pp. 253-261.
 23. Kumar, B., Singh, U. K. and **Padhy, P. K.** (2014). Water quality assessment of Ajay River with reference to suitability for agricultural purpose. *In Environica*, Volume 1, Dec. 2014 (Proceeding volume of International Conference on Mother Earth: Save it to achieve sustainable Future for all, 10-12 December 2014, ISBN: 978-93-84106-14-0), pg. 121-127, published jointly by Department of Environmental Science, The University of Burdwan and Levant Books, Kolkata.
 24. **Padhy, P. K.** (2014). Effects of climate change on water resources, fisheries and aquaculture. *In the Proceedings of National Seminar on Global Climatic Change, Sea level Rise, Coastal Pollution and it's Effect on Capture & Culture Fishery and Sustainable Marine Fisheries Resources Management*", sponsored by Ministry of Earth Sciences, Government of India at Seminar Hall of Department of Zoology, Utkal University, Bhubaneswar, Odisha. Organized by Aabahana, Nachuni, Khurda, during 9-10th March, 2014, pp. 14-22.
 25. **Padhy, P. K.**, Patra, P. K., Balachandran, S. & Chaudhury, S. (Eds.) (2011). *Proceedings of the Regional Workshop on Environmental Engineering (RWEE-2008)*. Organised by CES, Visva-Bharati, Santiniketan, 19-20th January 2008.
 26. Bhattacharjee, R., Rath, J. and **Padhy, P. K.** (2011). Algal distribution and diversity in three ponds of Santiniketan. *In Proceedings of the Regional Workshop on Environmental Engineering (RWEE-2008)*. Padhy, P. K., Patra, P. K., Balachandran, S. & Chaudhury, S. (Eds.). Organised by CES, Visva-Bharati, pp 139-145.
 27. Sahu, L., Padhi, B. K. and **Padhy, P. K.** (2011). A review on rainwater quality in India. *In Proceedings of the Regional Workshop on Environmental Engineering (RWEE-2008)*. Padhy, P. K., Patra, P. K., Balachandran, S. & Chaudhury, S. (Eds.). Organised by CES, Visva-Bharati, pp 68-79.
 28. Rout T. K., Masto R. E., Ram, L. C., George, J. and **Padhy, P. K.** (2011) Characterizations of dust fall in Jharia and associated epidemiological health survey. *In Advances in Mine Production and Safety*. Pandey, J.K. (Ed.). The Institution of Engineers (India), Dhanbad Local Centre, Central Institute of Mining and Fuel Research, Dhanbad, 26-27th August 2011, pp 279-286.
 29. **Padhy, P. K.** (2011). Coastline Erosion and Biodiversity of Chilika Lake. *In the*

- Proceedings of National Seminar on Coastal Line Erosion & Irregularity in Monsoon Rain in Odisha & its Effect on Biodiversity, Capture Fishery & Agriculture Productivity.* Organized by Aabahana, Nachuni, Khurda, during 25-26th April, 2011, pp. 12-15.
30. Balachandran, S., Patra, P. K., **Padhy, P. K.**, Chaudhury, S., Singh, U. K., Mandal, P. (Eds.) (2010). *Proceedings of International Conference on Global Climate Change.* Balachandran, S., Patra, P. K., Padhy, P. K., Chaudhury, S., Singh, U. K., Mandal, P. (Eds.), Jointly organized by CES & ISERC, Visva-Bharati, Santiniketan, 19-21st February 2010.
 31. Sahu, L. and **Padhy, P. K.** (2010). Acidic precipitation and climate change. *In Proceedings of International Conference on Global Climate Change*, 19-21st February 2010. Balachandran, S., Patra, P. K., Padhy, P. K., Chaudhury, S., Singh, U. K., Mandal, P. (Eds.). Jointly organized by CES & ISERC, Visva-Bharati, pp 137-145.
 32. **Padhy, P. K.** (2009). Role of microbes in the abatement of air pollution. *In Environmental Microbiology*, Mishra, B. B., Nanda, D. R. and Dave, S. R. (Eds.), APH Publishing Corporation, New Delhi, pp. 193-204, ISBN: 978-81-313-0655-0.
 33. Sahu, L. and **Padhy, P. K.** (2009). A comparison of rainwater chemistry from different sites of West Bengal. *In the Proceedings of International Conference on Emerging Technologies in Environmental Science and Engineering.* Khan, R., Farooqi, I. H. and Basheer, F. (Eds.), Organized by the Department of Civil Engineering, AMU & The University of Toledo, USA, 26-28 October, 2009, Excel India Publisher, New Delhi. ISBN: 978-93-80043-42-5.
 34. Padhi, B. K., Ghosh, R. and **Padhy, P. K.** (2009). Household energy, indoor air pollution and Health: A case study in rural areas of West Bengal, India. *In the Proceedings of International Conference on Energy and Environment (EnviroEnergy 2009)*, pp 107-110.
 35. **Padhy, P. K.** (2009). Global warming and change in shoreline in coastal Orissa and its effect on Irrawaddy dolphin of Chilika Lake. *In the Proceedings of National Seminar on Effect of Global Warming and Rapid Change in Oceanic line at Coastal Orissa and its Effect on Irrawaddy dolphin of Lake Chilika.* Harichandana, N. (Ed.). Aabahana, Nachuni, Khurda, pp. 4-9.
 36. Padhi, B. K., Rout T.K. and **Padhy, P. K.** (2007). Comparison of Indoor and Outdoor Air Quality at Road Side Households of Sub-Urban Areas in India. *In Proceedings of the Ecotoxicology and Environmental Science*, Volume-II, Kolkata, India.
 37. Padhi, B. K. and **Padhy, P. K.** (2007). Urinary phenol as a biomarker of exposure to benzene from occupational exposures. *In Proceedings of the Biomarkers in the Health and Environmental Management*, Organized by Environmental Mutagen Society of India, pp 149-153, at Coimbatore, India.
 38. **Padhy, P. K.** (2005). Changes in environmental scenario after the Super Cyclone and flood in Orissa, *In River Floods: A Socio-technical Approach*, Rahim, K.M.B., Mukhopadhyay, M. and Sarkar, D. (eds.), ACB Publications, Kolkata, pp 113-134. ISBN: 81-87500-23-9.
 39. **Padhy, P. K.** (2004). Plants and air pollution, *In Current Issues in Environmental and Fish Biology*, Bhattacharya, S. and Maitra, S. (eds.), Daya Publishing House, Delhi, pp 188-200. ISBN: 81-7035-317-3.
 40. **Padhy, P. K.** (2004). Methane emission from India: Implications for air quality. *In The Proceedings of Joint International Conference on Sustainable Energy and Environment (SEE)*, Volume 2, pp 771-777, JGSEE, Bangkok, Thailand and Kyoto University, Japan, December 1-3, 2004.

41. **Padhy, P. K.** (2003). Air pollution scenario in India with a special reference to volatile organic compounds, *In Aspects of Environmental Studies*, Mandal S. (ed.), Visva-Bharati Publication, Kolkata, pp133-142. ISBN: 81-7522-340-5.
42. **Padhy, P. K.** (2003). Air pollution and human health: A comparative study of Durgapur and Bolpur-Santiniketan, *In Recent Environmental Changes – Its Impact on Health, Agriculture, and Ecosystem*, Santra, S. C. (ed.), World View, Kolkata, pp 48-62.

iii) Paper Presented in Conference/ Workshop Participation

1. Padhy, P. K. and Varshney, C. K., Methane in the ambient environment of Delhi: Implications for air quality, Paper presented in the International Conference on Plants and Environmental Pollution (ICPEP), held at Lucknow, India during November 26-30, 1996.
2. Participated the National Workshop on "Impacts of Air Pollution on Agriculture in India, Organised by WWF-India, Lodhi Road, New Delhi and Imperial College Centre for Environmental Technology, Imperial College, Berks, London, United Kingdom, 9-10 June, 1997.
3. Padhy, P. K., Diabeter and green pharmacy, Presented in the 4th International Seminar on Asian Network of research on Antidiabetic Plants (ANRAP), 16-18th January 2004, Kolkata.
4. Padhy, P. K. and Varshney, C. K., Total Non-Methane Volatile Organic Compounds (TNMVOC) in the Atmosphere of Delhi, paper presented in the First International Symposium on Issues in Environmental Pollution, held at Denver, Colorado, USA, August 23-27, 1998.
5. Padhy, P. K., Air pollution and the living system, paper presented in the Contact Programme for Talented School Children, Visva-Bharati, 23rd-29th July, 2000, supported by Department of Science and Technology, Govt. of India, New Delhi.
6. Padhy, P. K., Selection of plant species in the regions affected with air pollution, Proceedings of the 88th Indian Science Congress, held at IARI, Pusa, New Delhi, January 3-7th 2000.
7. Participated the Seventh Leadership Course on "Environmental Awareness and Wildlife Conservation", Organised by the Training & Extension Division, Zoological Survey of India, Calcutta, Supported by Ministry of Environment and Forests, Government of India, New Delhi, 13-16th March 2001.
8. Participated the Trainers' Training on AIDS Education Programme on "Universities Talk AIDS Phase-II", Organised by Training & Orientation Centre, NSS, IIT, Kharagpur, Supported by Ministry of Culture, Youth Affairs & Sports, Government of India, New Delhi, September 14-16th 2001.
9. Conducted a Training Programme on AIDS Education, "Universities Talk AIDS Phase-II", to the NSS volunteers of Visva-Bharati & delivered a lecture on "HIV, AIDS and the Role of Youth", Organised by NSS, Visva-Bharati, Supported by Ministry of Culture, Youth Affairs & Sports, Government of India, New Delhi, 1st -2nd December 2001.
10. Padhy, P. K., Plants and air pollution, paper presented in the National Seminar on Environmental Biology and Fish Biology, Visva-Bharati, 1st-3rd February, 2002.
11. Padhy, P.K. & Varshney, C.K., Volatile organic compounds (VOCs) in the atmosphere of Delhi. Paper presented in the workshop on Air toxics in Environment (BTX, VOCs, PAH),

7-8th March, 2002 Organised by Central Pollution Control Board, in collaboration with GTZ Indo-German Project.

12. Padhy, P. K., Role of non-timber forest products towards sustainable development. National Conference on Biodiversity: Past and Present, held at The Palaeobotanical Society, Lucknow, 28 – 29th November 2002.
13. Padhy, P. K., Changes in environmental scenario after the Super Cyclone and flood in Orissa, International Seminar on River Floods: A Socio-technical Approach, held at Natural Disaster Management Cell, Visva-Bharati, 14-16th February, 2003.
14. Padhy, P. K., Ayurveda and Environment, National Seminar on the Role of Ayurveda in the Present Times, held at the Department of Sankrit, Visva-Bharati, 8-9th March, 2003.
15. Padhy, P. K., Air pollution and human health: A comparative study of Durgapur and Bolpur-Santiniketan, Presented in the National Conference on Recent Environmental Changes – Its Impact on Health, Agriculture, and Ecosystem, 6-7th August 2003, University of Kalyani, Kalyani.
16. Konar, A., Mondal, S. and Padhy, P. K., Air pollution – A comparative study of physiological health and related physical fitness between polluted and non-polluted areas in West-Bengal, Presented in the National Conference on Recent Environmental Changes – Its Impact on Health, Agriculture, and Ecosystem, 6-7th August 2003, University of Kalyani, Kalyani.
17. Padhy, P. K., Methane emission from India: Implications for air quality, Presented orally in the Joint International Conference on Sustainable Energy and Environment (SEE), held at Hua Hin, Bangkok, Thailand, during 1 – 3rd December 2004.
18. S. Maity, P. K. Padhy and Shibani Chaudhury, Role of earthworm *Lampito mauritii* in amending Pb (II) contaminated soil, National Seminar on Vermitechnology and Waste Management, held at Mangalore University, during 28-29th January 2005.
19. Padhy, P. K., Participated in the interactive session of the workshop, “A History Towards Environmental Activism” Organized jointly by the Department of History, Visva-Bharati and Department of History, Jadavpur University, Kolkata at Department of History, Visva-Bharati, during 16 – 17th March 2005.
20. S. Maity, P. K. Padhy and Shibani Chaudhury. Amendment of Zn(II) contaminated soil by earthworm *Lampito mauritii* (Kinberg). International Seminar on Environmental Management, held at Centre for Environment, JNT University, Hyderabad during 28-30th October 2005.
21. Padhi, B. K. and Padhy, P. K., Evaluation of non-timber forest products (NTFPs) as a tool for sustainable forest management. International Congress of Chemistry and Environment, held at Indore, India during 24 - 26th December 2005.
22. Padhy, P. K., Physico-chemical characterization of soils at a municipal dumping site. International Congress of Chemistry and Environment, held at Indore, India during 24 - 26th December, 2005.
23. Padhi, B. K. and Padhy, P. K., Evaluation of non-timber forest products (NTFPs) as a tool for sustainable forest management. International Congress of Chemistry and Environment, held at Indore, India during 24 - 26th December 2005.
24. Padhi, B. K. and Padhy, P. K., An overview of NTFPS in India. National Seminar on Plant and Microbial Diversity: Prospects and Potentials. Department of Botany, Visva-Bharati, 17-19 December 2005.

25. Padhy, P. K. and Padhi, B. K., Sustainable management of non timber-timber forest products (NTFPs) is a valuable tool for rural development: a case study in the Ballavpur wildlife Sanctuary. National Seminar on Environment, Drinking Water and Public Health, Palli Charcha Kendra, Visva-Bharati, Sriniketan, March 20-21, 2006.
26. Participated two week NNRMS (ISRO) sponsored Training Programme on Remote Sensing and GIS during November 20 – December 2 2006 at the Department of Geology and Geophysics, IIT, Kharagpur.
27. Padhi, B. K. and Padhy, P. K., Air pollution and respiratory health. Presented in the 94th Indian Science Congress, Annamalai University, India during 3-7th January 2007.
28. Padhy, P. K. and Padhi, B. K., Non-timber forest products (NTFPs), Tribal livelihoods and Forest management: A Case Study of Ballavpur Wildlife Sanctuary, Santiniketan, West Bengal. Presented in the 94th Indian Science Congress, Annamalai University, India during 3-7th January 2007.
29. Padhi, B. K. and Padhy, P. K., Urinary phenol as a biomarker of exposure to benzene from occupational exposures. Presented in the International Conferences on Biomarkers in the Environment, Coimbatore India during 10-12th January 2007.
30. Padhi, B.K., Ghosh, R. and Padhy, P.K., Investigation of indoor air quality at road side households of sub-urban areas in India and evaluation of respiratory health of children. Presented in the International Conferences on Biomarkers in the Environment, Coimbatore India during 10-12th January 2007.
31. Padhi, B. K., Rout T.K. and Padhy, P. K., Comparison of Indoor and Outdoor Air Quality at Road Side Households of Sub-Urban Areas in India. Presented in the International Conferences on Ecotoxicology and Environmental Science, Kolkata, India during 15-17 January 2007.
32. Padhi, B. K., Rout, T.K. and **Padhy, P. K.**, Industrialization, Air Pollution and Health Effects: A comparative study of Durgapur and Santiniketan. *National Seminar (UGC Sponsored) on Environment and Sustainable Development-The Indian Context*, B.B. College, Asansol, West Bengal, India, 9-10 March 2007.
33. Ghosh, P., Padhi, B. K. and **Padhy, P. K.**, Heavy Metals in the Atmosphere in Indian context. *National Seminar (UGC Sponsored) on Environment and Sustainable Development-The Indian Context*, B.B. College, Asansol, West Bengal, India, 9-10 March 2007.
34. Padhi, B. K., Rout T.K., Ghosh, R., Ghosh, A. and **Padhy, P. K.**, Household Energy, Indoor Air Pollution and Womens' Health: The Case of Rural India. *National Seminar on Poverty, Health and Development*, Department of Rural Development, Visva-Bharati, Santiniketan, India, 10-11 March 2007.
35. Padhi, B. K., and **Padhy, P. K.**, Biomonitoring of Airborne Trace Elements with Foliose Lichen *Parmelia caperata* in a Suburban Area. *School on Trace Analysis*, Saha Institute of Nuclear Physics, 3-13 October, 2007.
36. Padhi, B. K., and **Padhy, P. K.**, Domestic Fuels, Indoor Air Pollution and Children's Health: The Case of Rural India. *12th International Conference of the Pacific Basin Consortium for Environment & Health Sciences*. Peking University, Beijing, China, 26-29 October, 2007.
37. Jana, P.K., Rout, T.K., Padhi, B. K., and **Padhy, P. K.**, Tree bark as an indicator of atmospheric quality: A case study in the Kolkata city of India. *International Congress on Environmental Research*, Bhopal, India, 28-30 November, 2007.

38. Bhattacharjee, R., Padhi, B. K., and **Padhy, P. K.**, Comparison of Indoor air Quality of classrooms in a suburban area of India. *International Congress on Environmental Research*, Bhopal, India. 28-30 November, 2007.
39. Ghosh, P., Mukherjee, A.L., Sahu, L., Padhi, B. K., and **Padhy, P. K.**, A study on the chemical composition of rain water in Kolkata city of India. *International Congress on Environmental Research*, Bhopal, India. 28-30 November, 2007.
40. Vyas, S., Bhattacharjee, R., Sahu, L., Padhi, B. K., and **Padhy, P. K.**, Impact of Domestic Effluent on the Physicochemical Properties of Water Bodies. *International Congress on Environmental Research*, Bhopal, India. 28-30 November, 2007.
41. Padhi, B. K., and **Padhy, P. K.**, Biomass combustion, indoor air pollution and respiratory health: A case study in rural tribal villages in India. *International Congress on Environmental Research*, Bhopal, India. 28-30 November, 2007.
42. Padhi, B. K., and **Padhy, P. K.**, Assessment of domestic energy use in rural India and their impact on indoor air pollution and respiratory health. *95th Indian Science Congress*, Andhra University, Visakhapatnam, India, 3-7 January 2008.
43. Jana, P.K., Padhi, B. K., and **Padhy, P. K.**, Tree bark as a bioindicator of air pollution. *95th Indian Science Congress*, Andhra University, Visakhapatnam, India, 3-7 January 2008.
44. Bhattacharjee, R., Rout, T. K., Rath, G. and **Padhy, P. K.**, Algal diversity in wastewater dominated pond in Bolpur, Birbhum. *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
45. Ghosh, P., Padhi, B. K. and **Padhy, P. K.**, Evaluation of precipitation composition at an urban and sub urban area in West Bengal, India. *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
46. Jana, P.K., Padhi, B. K., and **Padhy, P. K.**, Effect of arsenic on seed germination and seedling growth in rice (*Oriza sativa* L). *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
47. Mukherjee, A. L. and **Padhy, P.K.**, A study on rainwater at vicinity of industrial zone of West-Bengal, India. *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
48. Padhi, B. K. and **Padhy, P. K.** Indoor air pollution: A global health concern, *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
49. Sahu, L., Padhi, B. K. and **Padhy, P. K.** A review on rainwater quality in India. *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
50. Vyas, S., Padhi, B. K., and **Padhy, P. K.**, Use of water quality index for classification of inland freshwater ecosystems: Ecotoxicological, hydrological, and management considerations. *Regional Workshop on Environmental Engineering*, Visva-Bharati, Santiniketan, 19-20th January 2008.
51. Padhi, B. K., Sinha, B., and **Padhy, P. K.**, Contributions of Non-Timber Forest Products (NTFPs) to Households Food Security in Rural Tribal Areas of India. *Food Security and Environmental Change Linking Science, Development and Policy for Adaptation: An International Conference*, Oxford University, UK, 2-4 April, 2008 (presented).
52. Padhi, B. K., and **Padhy, P. K.**, Impact of Domestic Fuels on Indoor Air Quality and Respiratory Health: A Case Study in Rural Areas of West Bengal India. *The 11th*

- International Conference on Indoor Air Quality and Climate*, Indoor Air 2008 Congress, Technical University Denmark, 17-22 August, 2008 (accepted).
53. Padhi, B. K., and Padhy, P. K., Evaluation of respiratory health status of occupationally exposed male kitchen worker in India. *20th International Conference on Epidemiology in Occupational Health*. The Central American Institute for Studies on Toxic Substances, Universidad (IRET-UNA), Heredia, Costa Rica, June 9-11, 2008 (accepted).
 54. Padhy, P. K. Global warming and change in shoreline in coastal Orissa and its effect on Irrawaddy dolphin of Chilika Lake. National Seminar on “Effect of Global warming and rapid change in oceanic line at coastal Orissa and its effect on Irrawaddy dolphin of lake Chilika” (Sponsored by Ministry of Earth Sciences), held at Balugaon, Puri, Orissa. Organized by Aabahana (A NGO), Nachuni, Khurda, Orissa, 24-25th February 2009. (Invited Paper).
 55. Padhi, B. K., Ghosh, R. and **Padhy, P. K.** Household energy, indoor air pollution and health: A case study in rural areas of West Bengal, India. *International Conference on Energy and Environment (EnviroEnergy 2009)*, held at Taj Chandigarh, Chandigarh, organized by National Institute of Technology, Kurukshetra, India, 19-21 March 2009 (presented).
 56. Padhi, B. K., Ghosh R and **Padhy, P. K.** Exposures to Biomass Combustion Smoke and Respiratory Infections at Childhood in India. 11th International Congress on Combustion By-Products and their Health Effects. USEPA, NC USA, May 31 – June 3, 2009 (presented).
 57. Padhi, B. K. and **Padhy, P. K.** Indoor air pollution from biomass combustion: a major environmental challenge for children in rural India. Third WHO International Conference on Children’s Health and the Environment. Busan, Korea - 7 to 10 June 2009 (accepted).
 58. Padhi, B. K., **Padhy, P. K.**, Sahu, L. and Jain, V.K. Respiratory symptoms in relation to household energy and environmental tobacco smoke among children in India. ISEPEHH, 25-27 July, 2009 (accepted).
 59. **Padhy P. K.** Global warming and its mitigation. DST INSPIRE Summer Camp 2009 at Visva-Bharati, Santiniketan, 9-14th August 2009 (Invited Lecture as Resource person).
 60. Padhi, B. K., Jain, V.K., **Padhy, P. K.** and Ghosh, R. Impact of transportation on indoor air quality and children’s health. 13th International Conference of the Pacific Basin Consortium, Perth, Australia, 20-22nd November, 2009 (presented).
 61. **Padhy P. K.** Tree Emissions of VOC: Significance and Implications for global climate change, *International Conference on Mother Earth: Save it for Future Generation*, Organized by Department of Environmental Science, The University of Burdwan, Burdwan, 13-15th February 2010 (accepted).
 62. **Padhy P. K.** Does improper plantation have any role to play in the climate change? *International Conference on Global Climate Change*, Organized by Centre for Environmental Studies and Integrated Science, Visva-Bharati, 19-21st February 2010.
 63. **Padhy P. K.** Our Atmosphere: From Ancient to Present. Paper presented in the *International Seminar on Discourse on “Five Elements” Concept in a Philosophical and Developmental Perspective*, Organized by Cheena Bhavana, Visva-Bharati, Santiniketan, 20-21st March 2010 (Invited Paper).
 64. Padhi B. K., **Padhy P. K.**, Konar A., Mondal S., Amit Prakash, Jain, V. K. and Ghosh R. Impact of Pollution Exposures on Respiratory Health While Commuting to School.

- Specialty conference on Air Pollution and Health, AAAR-2010, San Diego, California, USA, March 22-26, 2010 (presented).
65. Padhi B. K., **Padhy P. K.**, Amit Prakash and Jain, V. K. A Fuzzy Based Environmental Noise Exposure Model to Study the Effects on Human Health Physiology. Specialty conference on Air Pollution and Health, AAAR-2010, San Diego, California, USA, March 22-26, 2010 (presented).
 66. Padhi B. K., **Padhy P. K.** and Jain, V.K. Carbonaceous Aerosol in the suspended particulate matter (SPM) in Urban and Rural Areas in India. Specialty conference on Air Pollution and Health, AAAR-2010, San Diego, California, USA, March 22-26, 2010 (presented).
 67. Padhi B. K., **Padhy P. K.**, Amit Prakash and Jain, V. K. Biomarkers of Inflammation in Biomass Combustion Smoke Induced Oxidative Stress Specialty conference on Air Pollution and Health, AAAR-2010, San Diego, California, USA, March 22-26, 2010 (presented).
 68. Padhi B.K., **Padhy P.K.**, Amit Prakash and Jain V.K. Physiochemical and redox activity of size-segregated urban air particles. Urban Environmental Pollution, UEP-2010, Boston, USA, June 20-23, 2010 (accepted).
 69. Padhi B.K., **Padhy P.K.**, Jain V.K. and Ghosh R. Impact of indoor air pollution on maternal and child health: A case study in India. ISES-ISEE-2010, Seoul, South Korea, 28th August-1st September, 2010 (presented).
 70. Saha, D. C. and **Padhy, P. K.** Effects of stone mining and crushing industry on environment and people. International Seminar on Environment and Indigenous People. Organised by Lutheran World Service India Trust at Baptist Mission, AJC Bose Road, Kolkata, February 14-18, 2011 (Invited Lecture).
 71. Participated the National Seminar on Science and Nature: Tagore's vision and its relevance, Organized by Siksha-Bhavana, Visva-Bharati during 12-13th March 2011.
 72. Rout, T. K., Masto, R. E., Ram, L. C., George, J. and **Padhy, P. K.** Characterizations of dust fall in Jharia and associated epidemiological health survey. Paper presented in All India Seminar on Mine Production and Safety held in Institute of Engineering, CIMFR, Dhanbad, 26-27th August 2011.
 73. **Padhy, P. K.** Effects of stone crushing industry on forest vegetation. Paper presented in the Indian Science Congress, 2012, held at KIIT, Bhubaneswar during 3-7th January 2012.
 74. Kumar, M. and **Padhy, P. K.** Assessment of heavy metal profile of the Subarnarekha River (India) by indexing and multivariate statistical techniques. Paper presented in the Indian Science Congress, 2012, held at KIIT, Bhubaneswar during 3-7th January 2012.
 75. Nayek, S. and **Padhy, P. K.** Study of Pollution Exposure to Roadside Shopkeepers and Vendors in Santiniketan-Bolpur Area. Paper presented in the Indian Science Congress, 2012, held at KIIT, Bhubaneswar during 3-7th January 2012.
 76. **Padhy, P. K.** Air pollution and food security: an Indian context. Paper presented in the Advances in Agricultural Research towards Food Security and Environmental Sustenance, organized by Palli Siksha Bhavana, Visva-Bharati during 1-3 September 2012.
 77. **Padhy, P. K.** Climate change, water resources and food production: Some highlights in the context of India, Invited Lecture in the *DST Inspire Programme*, Visva-Bharati, December 12, 2012.
 78. Kumar, M. and **Padhy, P. K.** Assessment of impact of anthropogenic activities on the geochemical distribution of heavy metals: Application of index analysis approach and

environmetrics. Paper presented in the Indian Science Congress, 2013, held at Calcutta University, Kolkata during 3-7th January 2013.

79. **Padhy, P. K.** Effects of stone crushers' pollution on plant morphology and biochemistry. Paper presented in the National Seminar on Ecology, Environment and Development (NASEED-2013), organized by Sambalpur University during January 25-27, 2013.
80. Nayek, S., Porel, K., Hazra, D. and **Padhy, P. K.** Air pollution profile of the semi-urban Santiniketan-Bolpur-Sriniketan region, West Bengal, India, Paper presented in the National Seminar on Ecology, Environment and Development (NASEED-2013), organized by Sambalpur University during January 25-27, 2013.
81. Kumar, M., Kumar, B. and **Padhy, P. K.** Spatial assessment and characterization of the Subarnarekha river water through index analyses approaches and chemometrics, Paper presented in the National Seminar on Ecology, Environment and Development (NASEED-2013), organized by Sambalpur University during January 25-27, 2013.
82. Karmakar, D. and **Padhy, P. K.** Assessment of water quality of Damodar River in Asansol-Raniganj industrial belt, West Bengal, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
83. Manoj, K. and **Padhy, P. K.** Assessment of impact of anthropogenic activities on geochemical distribution of heavy metals: Application of index analyses approaches and environmetrics, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
84. Bhattacharyya, R., Manoj, K. and **Padhy, P. K.** A critical analysis of forest areas and human-wildlife conflicts in northern West Bengal, India, and some possible mitigation measures with respect to conflict scenarios, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
85. Rabha, R. and **Padhy, P. K.** Solid household fuels and their smoke constituent: A Review, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
86. Dey, S. and **Padhy, P. K.** Selection of plant species for plantation in polluted areas using air pollution tolerance index, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
87. Nayek, S. and **Padhy, P. K.** Respiratory morbidity of women familiar of using biomass fuel in cooking, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
88. Ghosh, S. Manoj, K. and **Padhy, P. K.** Hydro-chemical characterisation of water bodies in Santiniketan-Bolpur-Sriniketan area, West Bengal through graphical and multivariate statistical techniques, Paper presented in the "National Seminar on Echoes of Silent Spring: Human Impact on Environment", Organized by Department of Environmental Studies, Visva-Bharati, Santiniketan on 9th March, 2013.
89. **Padhy, P. K.**, Status of air pollution and its impact on two different forest ecosystems of Birbhum, West Bengal, Paper presented in the "National Seminar on Challenges in

Agriculture, Environment and Rural Development in West Bengal Since Independence”, Organized by Department of Economics and Politics, Visva-Bharati 15 – 16th March, 2013.

90. Nayek, S. and **Padhy, P. K.** Particulate load in rural kitchen from biomass fuel burning, Paper presented in the “National Seminar on Environmental Issues: Protection, Conservation and Management”, Organized by Department of Environmental Studies, Visva-Bharati in collaboration with IPHE, Kolkata during 22-23rd November 2013.
91. Manoj, K. and **Padhy, P. K.** Water quality evaluation of Suswa River system, the Ganges basin: Application of univariate, bivariate expressions and multivariate statistical approaches, Paper presented in the “National Seminar on Environmental Issues: Protection, Conservation and Management”, Organized by Department of Environmental Studies, Visva-Bharati in collaboration with IPHE, Kolkata during 22-23rd November 2013.
92. Rabha, R. and **Padhy, P. K.** Solid biomass fuel use in India and its effects on health: A review, Paper presented in the “National Seminar on Environmental Issues: Protection, Conservation and Management”, Organized by Department of Environmental Studies, Visva-Bharati in collaboration with IPHE, Kolkata during 22-23rd November 2013.
93. Karmakar, D. and **Padhy, P. K.** Physico-chemical characterization of water quality of Damodar River, India, Paper presented in the “National Seminar on Environmental Issues: Protection, Conservation and Management”, Organized by Department of Environmental Studies, Visva-Bharati in collaboration with IPHE, Kolkata during 22-23rd November 2013.
94. **Padhy, P. K.**, Indoor air pollution: A major environmental and public health concern, Invited Lecture in the *DST Inspire Programme*, Visva-Bharati, during 13-17th January, 2014.
95. **Padhy, P. K.**, Effects of air pollution on forest resources and its possible management: A case study of Lalpahari Forests, Birbhum, Paper presented in the “National Seminar on Agriculture and Bio-Security in Changing Scenario” Organized by the Department of ASEPAN, Palli Siksha Bhavana, Visva-Bharati during 1-3 February, 2014.
96. Nayek, S. and **Padhy, P. K.** Reduced Lung Performance in Rural Women exposed to Kitchen Biomass Smoke. Paper presented in the 101st Indian Science Congress (Section 7, Page 123), held at University of Jammu, Jammu during February 3 to 7, 2014.
97. Manoj, K. and **Padhy, P. K.** Classification and characterization of a South Asian river: Quality indices and graphical illustrations. Paper presented in the 101st Indian Science Congress (Section 7, Page 77) held at University of Jammu, Jammu during February 3 to 7, 2014.
98. Bhattacharya, R., Manoj, K. and **Padhy, P. K.** Hydrogeochemical evaluation and multivariate statistical analyses of groundwater of the steel city Durgapur, India. Paper presented in the 101st Indian Science Congress (Section 7, Page 119) held at University of Jammu, Jammu during February 3 to 7, 2014.
99. Ramansu Goswami, Shibnath Mazumder, **Pratap Kumar Padhy** Effect of acute and chronic arsenic exposure on growth, structure and virulence of *Aeromonas hydrophila* isolated from fish, Paper presented in the “International Conference on Environmental Biology and Ecological Modelling (**ICEBEM – 2014**)” Organized by the Dept of Zoology, Visva-Bharati, Santiniketan during February 24 to 26, 2014.
100. **Padhy, P. K.**, Assessment of indoor air quality status in the rural tribal homes of eastern parts of India, Paper presented in the “International Conference on Environmental Biology

- and Ecological Modelling (**ICEBEM – 2014**)” Organized by the Dept of Zoology, Visva-Bharati, Santiniketan during February 24 to 26, 2014.
101. **Padhy, P. K.**, Evaluation of indoor air pollution effects on respiratory health among exposed community in West Bengal, National Seminar on Research Frontiers in Man-nature Interface, Organized by the Department of Geography, Visva-Bharati & Foundation of Practising Geographers, Kolkata during 1-2 March, 2014.
 102. Suraj Ghosh and P. K. Padhy (2015). Respiratory health assessment of school going children of Bolpur and Durgapur area using Spirometry, International Seminar on Human Development and Sustainability: Challenges and Strategies for Asian Countries, Organized by the Department of Social Work, Visva-Bharati during Jan 16-18, 2015.
 103. Kumar, M. and Padhy, P. K. (2016). Canal-top solar power plants in Gujarat (India): An innovative way to harness renewable energy, International Conference on Renewable Energy, Extension and Outreach, Organized by the Department of Environmental Studies, Visva-Bharati, during 19-20th March, 2016.
 104. Ghosh, S. and **Padhy, P. K.** (2016). Pulmonary function test in Healthy School Children of 9 to 13 years age: Comparative study between Durgapur and Bolpur, International Conference on Renewable Energy, Extension and Outreach, Organized by the Department of Environmental Studies, Visva-Bharati, during 19-20th March, 2016.
 105. Rabha, R. and **Padhy, P. K.** (2016). Effects of wood use on lung functions of women in Assam, India, International Conference on Renewable Energy-Extension & Outreach held at Visva-Bharati, Santiniketan on 20-21 March, 2016.
 106. Karmakar, D. and **Padhy, P. K.** (2016). “Effects of air pollution on plant biomass, a renewable energy resource, International Conference on Renewable Energy: extension and outreach, Department of Environmental Studies, Visva- Bharati, Santiniketan, during March 20-21, 2016.
 107. Nayek, S. and **Padhy, P. K.** (2016). Deterioration of women’s health due to cooking using traditional solid bio-energy, International Conference on Renewable Energy: extension and outreach, Department of Environmental Studies, Visva- Bharati, Santiniketan, India-731235. Dated-March 20-21, 2016.
 108. Karmakar, D. and **Padhy, P. K.** (2016). Response of air pollution to biochemical parameters in neem (*Azadiracta indica*) trees of Barjora forest, Bankura. National Symposium on Recent Trends in Agriculture and Allied Sciences for Better Tomorrow (NSRTAS-2016) Visva-Bharati, Sriniketan, West Bengal, during December 4, 2016.
 109. Majee, C. K., Ali, S.Y. and **Padhy, P. K.** (2016). Impact of atmospheric dust on allometry of Tulsi plant (*Oscimum sanctum*). Paper presented in Recent Trends in Agriculture and Allied Science for Better Tomorrow (NSRTAS-2016). Organized by Department of Animal Science, Palli-Siksha Bhavana, Visva-Bharati and The Society of Bio-resource, Environment and Agriculture Research, Santiniketan, during 4th December 2016.
 110. **Padhy, P. K.** (2017). Air pollution versus climate change: A hindrance for achieving sustainable development goals. International Conference on Climate Change and Sustainable Development (ICCCSD-2017). Organized jointly by GM University, Sambalpur and Odisha State Open University, Odisha, during 18-19th March 2017.
 111. **Padhy, P. K.** (2017). Participated the National Seminar on “*Rastriya Samgosthi: Sahitya, Sanskriti ebom Vigyan*” organized by Hindi Vigyan Sahitya Parishad’ (HVSP) of Bhabha Atomic Research Centre (BARC), Trombay, Mumbai in association with Visva-Bharati, during 17-18 November 2017.

112. Majee, C. K., Mondal, S. and **Padhy, P. K.** (2017). Effects of air pollution on *Moringa oleifera* Lam., a medicinal plant: A comparative study between Durgapur and Santiniketan, West Bengal, India. *National seminar on Environmental Pollution, Biodiversity Conservation and Climate Change: Issues and Challenges*. Organised by Department of Environmental Science and Department of Zoology, Nistarini College, Purulia, W.B., India in association with Scientific and Environmental Research Institute, Kolkata, during 8-9th September, 2017.
113. Majee, C. K. and **Padhy, P. K.** (2017). Impact of atmospheric dust on Morphology of Kalmegh (*Andrographis paniculata*): King of bitters. *2nd Regional Science and Technology Congress (Western Region), 2017*. Organised by The University of Burdwan, Burdwan and Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal, during 16-17th November, 2017.
114. Nayek, S. and **Padhy, P. K.** (2017). Daily personal exposure to inhalable particulates during cooking with solid bio-fuels in a poor rural Indian community. Third International Conference on “*Mother Earth: Environmental Crisis & Sustainable Strategies*”. Organised by Department of Environmental Science, The University of Burdwan, Burdwan during 11-13th January, 2018.
115. Chowdhury, M., Ghosh, S. and **Padhy, P. K.** (2017). Seasonal variation of ambient particulate matter and heavy metals at a semi urban area of Bolpur, West Bengal. *2nd Regional Science and Technology Congress (Western Region), 2017*. Organised by The University of Burdwan, Burdwan and Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal, during 16-17th November, 2017.
116. Karmakar, D. and **Padhy, P. K.** (2017). Measurement of carbon sequestration potential of some dominant tree species at Barjora forest for the development of shelter belt at Barjora, Bankura. *National seminar on Environmental Pollution, Biodiversity Conservation and Climate Change: Issues and Challenges*. Organised by Department of Environmental Science and Department of Zoology, Nistarini College, Purulia, W.B., India in association with Scientific and Environmental Research Institute, Kolkata, during 8-9th September, 2017.
117. Ghosh, S., Rabha, R., Chowdhury, M. and **Padhy, P. K.** (2017). Predicted equations of the pulmonary function of school going children using spirometry Data. *2nd Regional Science and Technology Congress (Western Region), 2017*. Organized by The University of Burdwan, Burdwan and Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal, during 16-17th November, 2017.
118. Deepa Kumari, Mazumdar, P., **Padhy, P. K.** and Jaehong Shim (2017). Simultaneous removal of Cong red and Cr (VI) in aqueous solution by using Mn powder extracted from battery waste solution Oral presentation in the *International Symposium on Sustainable Urban Environment*. Organized by Tezpur University, Assam, India, during 23-24th June 2017.
119. Deepa Kumari, **Padhy, P. K.**, Begum, N. A. and Kumar, M. (2018). Application of dried plant biomass as novel biosorbent for removal of cadmium and lead from aqueous solution. Poster presented in *National Symposium on Recent Advances in Chemistry Research*. Organized by Department of Chemistry, Visva-Bharati, Santiniketan, on 11th March 2018.
120. Deepa Kumari, **Padhy, P. K.**, Begum, N. A. and Kumar, M. (2018). Removal of cadmium from natural water systems by using Burmese grape leaf extract, a natural biosorbent.

- Poster presented in the *National Conference on Frontier Areas of Research and Applications using Electron Microscopy*. Organized by Siksha Bahavana, Visva-Bharati and Palli Siksha Bhavana, Visva-Bharati, Santiniketan, on 16th March 2018.
121. Mondal, Shilpi; Singh, Gurdeep; **Padhy, P. K.** (2018). A comparative study on the ambient air quality status of industrial town Durgapur and Dhanbad coal mining areas. Paper presented in the *National Conference on Biogeochemical Cycles and Climate Change*, Organized by IIT (ISM) Dhanbad, during 10-11th August, 2018.
 122. Majee, C. K. and **Padhy, P. K.** (2018). Air pollution abatement potential of four medicinally important plants in Santaldih, Purulia, West Bengal, India. Poster presented in the 'International Conference on Advancement in Science and Technology (ICAST-2018)' organized by Indian JSPS Alumni Association in association with Department of Physics, Visva-Bharati, Santiniketan during 3 - 4th September, 2018.
 123. Chowdhury, M. and **Padhy, P. K.** (2018). Evaluation of Respiratory Health Status of Rural Tribal Women Exposed to Biomass Fuels Burning using Spirometry. International Conference on Advancement in Science & Technology (ICAST- 2018), Dept. of Physics, Visva-Bharati, Santiniketan during 3 - 4th September, 2018.
 124. Chowdhury, M. and **Padhy, P. K.** (2018). The Effects of Biomass Burning on Lung Functions in Rural Tribal Women: A Comparative Study between Biomass Users and Liquefied Petroleum Gas Users. 3rd Regional Science & Technology Congress, Sidho Kanho Birsha University, Purulia, West Bengal during 20-21st December, 2018.
 125. Chowdhury, M., Ghosh, S. and **Padhy, P. K.** (2018). Effects of Biomass Burning on Lung Functions in Rural Tribal Women in Kaliganj Village, Santiniketan. National Seminar on "Approaches towards Sustainable Development", A. K. Dasgupta Centre for Planning and Development, Visva-Bharati on 28th January, 2019.
 126. Deepa Kumari, **Padhy, P. K.**, Begum, N. A. and Das, S (2019). An effective approach to enhance antioxidant activity of Curry leaves in aqueous system. Oral presentation in the Workshop cum National Seminar on "Trends in Modern Biology- Techniques and Applications. Organized by the Department of Zoology, Visva-Bharati, Santiniketan, during 23 – 24th March 2019.
 127. Deepa Kumari, **Padhy, P. K.**, Begum, N. A. and Kumar M. (2019). Sustainable removal of Lead and Cadmium from Water using Curry leaf Powder: A low cost Bio-based water purification perspective. Poster presentation in the National Symposium on 'Sustainable utilization of Plants and Microbes'. Organized by the Department of Botany, Siksha Bhavana, Visva-Bharati, Santiniketan, on 28th March 2019.
 128. Chowdhury, M., Ghosh, S. and **Padhy, P. K.** (2019). Indoor air pollution associated with solid biomass fuel use in rural kitchen. Oral presentation in the 4th Regional Science & Technology Congress, The University of Burdwan, Bardhaman, during 9-10 December, 2019.
 129. **Padhy, P. K.**, (2020). Environment: Perception of India versus World. Invited talk through Webinar at Prist University, Thanjavur-613403, Tamilnadu, on 5th June 2020.
 130. **Padhy, P. K.**, (2020). Role of Biodiversity in Human Welfare and its Sustainability Aspects. Invited Talk in the Two day International Webinar on Biodiversity and Sustainable Development in Human Welfare, Organized by IQAC of Bijoy Krishna Girls' College, Howrah, in collaboration with West Bengal Biodiversity Board, during 29-30th July 2020.

131. Ghosh, B., Nayek, S. and **Padhy, P. K.** (2020). Assessment of respiratory morbidity from tobacco smoking in young adult students, Paper presented in the Fourth International conference on the theme, "Mother Earth: Nurture the Nature to Have a Better Future", August 27 to 29, 2020, organized by the Department of Environmental Sciences, The University of Burdwan, Burdwan.
132. **Padhy, P. K.**, (2020). Air pollution and its effects on human health and wellbeing. Resource Person in a National Webinar, Organized by the Department of Chemistry, Anadapur College, Anandapur, Keonjhar, Odisha on 19th December, 2020.
133. Rout, A. and **Padhy, P. K.** (2022). A review on comparative study of PM₁ and PM_{2.5} impact on human health, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
134. Noor-E-Azam and **Padhy, P. K.** (2022). A review on analytical methods for oxygenated polycyclic hydrocarbons (OPAHs) in airborne particulate, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
135. Ghosh, B. and **Padhy, P. K.** (2022). Study of ambient air pollution and its impacts on male adult population of urban, industrial and semi-urban areas, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
136. Singha, S. and **Padhy, P. K.** (2022). A Review on the assessment of bioremediation potential of plants and microbes, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
137. Ghosh, B., Nayek, S. and **Padhy, P. K.** (2022). Measurement of oxidative stress causing potential of the airborne particulate matters and consequent health effects, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
138. Chowdhury, M. and **Padhy, P. K.** (2022). Household air pollution exposure from solid biomass fuels and associated health risks on the Santal tribe, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
139. Shaikh, R., **Padhy, P. K.** and Ahmad, A. (2022). Synthesis of reduced graphene oxide nanoparticles hybrids filter for removing fine particulate matter, Paper presented in the International Conference on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.
140. Ghosh, Rupsa, Ghosh, B., Maharathy, T. K., Datta, A. & **Padhy, P. K.** (2022). Particulate air pollution and neurotoxicity: A review, Paper presented in the International Conference

on Air Quality and Human Health (SPARC-MoE, GoI sponsored) organized by the Department of Environmental Studies, Siksha Bhavana, Visva-Bharati, Santiniketan, West Bengal during 22nd – 24th September, 2022.

141. **Padhy, P. K.** (2022). Resource Person in the Staff Capacity Building Program on Climate Change, organized by the Lutheran World Service India Trust, DSSQC - Birbhum Unit, Suri, Birbhum during 3-4th December, 2022.
142. Shaikh, R. and **Padhy, P. K.** (2022). Synthesis of reduced graphene oxide nanoparticles hybrids filter for removing fine particulate matter, Paper presented in the National Conference on Green Technologies for Sustainable Future, organized by the Department of Environmental Science, GITAM (Deemed to be University), Visakhapatnam during 8th – 9th December, 2022.
143. Rout, A. and **Padhy, P. K.** (2023). Particulate matter pollution and human health, Paper presented in the International Conference on Emerging Technology for Environmental Sustainability, organized by the Department of Environmental Sciences, Fakir Mohan University, Balasore, Odisha during 24th – 25th February, 2023.
144. **Padhy, P. K.** (2024). Environmental Pollution and Climate Change. Invited Talk in the Two-day Awareness programme on “Mission LiFE (Life Style For Environment): Waste to Wealth” organized by Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati in association with ICAR during 9-10th May, 2024.
145. **Padhy, P. K.** (2024). Traditional water controlling techniques as a viable alternative alongside new technologies and systems for achieving sustainable water management. Invited Talk as a Resource Person in the one week online Short-Term Programme on Water Management and Traditional Knowledge System of UGC- Malaviya Mission Teacher Training Centre (Formerly HRDC), University of Allahabad, on 22.10.2024.
146. Rout, A. and **Padhy, P. K.** (2024). Spatiotemporal Variation in Air Quality Index in Eastern Coastal Port Cities of India, Paper presented in the International Conference on Coastal Zone Environment & Livelihood Challenges (CZELC-2024), organized by Fakir Mohan University, Balasore, Odisha during 27th and 28th November 2024.
147. Singha, Shubhasree and **Padhy, P. K.** (2024). Assessment of Air Pollution Tolerant Road Side Shrub Species with Isolation and Characterization of Heavy Metal Resistant Rhizospheric Bacteria from The Industrial Area of Durgapur, Paper presented in the International Conference on Plant Biotechnology for Sustainable Future (ICPBSF-2025), organised by the Department of Biotechnology, St. Xavier’s College, Burdwan during 29th and 30th January 2025.
148. **Padhy, P. K.** (2025). Environment and its Management: Role of Traditional Practices in India. Invited Talk as a Resource Person in the Refresher Course in Environmental Studies and Disaster Management, Organized by UGC- Malaviya Mission Teacher Training Centre (Formerly HRDC), Utkal University, on 03.03.2025.

iv). Reports

1. Varshney, C. K., Singh, U.R. and **Padhy, P. K.** (1995). Rapid Environmental Impact Assessment of the Sub-Projects on Deweeding and Biological Control through Aquaculture under OECF Special Assistance for Conservation and Management of Lake Bhopal (Bhoj Wetland). Project report submitted to Government of Madhya Pradesh, Bhopal.

Chairing Session in a Conference/Workshop:

1. Chaired a Session of the International Conference on Evidence Synthesis (Theme: Research to Policy) organized by PGIMER, Chandigarh during 22nd – 25th February, 2024.
2. Chaired a Special Lecture on “*Role of Youth in Conservation & Climate Action*”, organized jointly by the Centre for Journalism and Mass Communication, Visva-Bharati and Viksit Bharat Cell, Visva-Bharati at the Conference Hall, Central Library, Visva-Bharati on 29th April, 2024.
3. Chaired a Technical Session in the “National Seminar on Education for Sustainable Development: Building a Better World”, Organized by the Department of Education, Visva-Bharti, Santiniketan, during 15-16th February 2019.
4. Chaired a Technical Session in the “National Seminar on Education for Sustainable Development: Building a Better World”, Organized by the Department of Education, Visva-Bharti, Santiniketan, during 15-16th February 2019.
5. Chaired a Technical Session in the National Seminar on Waste Management of Local Self Government (Municipalities and Panchayats), Organized by PSV, Visva-Bharti, Santiniketan and IPHE, India during 16-17th March 2018.
6. Chaired **Two sessions** (one Oral & one Poster) in the Environmental Science category of the 21st West Bengal State Science and Technology Congress, 2014 (WBSSTC-2014), Jointly organized by the University of Burdwan and the Department of Science & Technology, Government of West Bengal during 20-21st February 2014.

Organizing Conference/Seminar/Workshop:

1. One-day “Panel Discussion on “**Role of Development Communication in Effective Climate Action**” was organized by the Centre for Journalism and Mass Communication, Visva-Bharati, in collaboration with Department of Environmental Studies, Visva-Bharati at the Conference Hall, Central Library, Visva-Bharati on 30th April, 2024.
2. Three day “**International Conference on Air Quality and Human Health**” was organized by the Department of Environmental Studies, Visva-Bharati during 22-24th September 2022. The programme was funded by SPARC-MHRD (Prof. P. K. Padhy, PI), Government of India. Acted as Organizing Secretary.
3. Three day “**International Workshop on Tools and Techniques in Air Quality and Health Impacts Assessment**” was organized by the Department of Environmental Studies, Visva-Bharati during 23-25th November 2019. The programme was funded by SPARC-MHRD (Prof. P. K. Padhy, PI), Government of India. Acted as Organizing Secretary.
4. Two day “**International Conference on Renewable Energy Extension and Outreach**” was organized by the Department of Environmental Studies, Visva-Bharati during 19-20th March 2016. The programme was funded by Visva-Bharati and SERB, Government of India. Acted as Jt. Organizing Secretary.
5. Two day “**International Workshop on Climate Studies and Emerging Issues**” was organized by the Department of Environmental Studies, Visva-Bharati during 14-15 March, 2015 in collaboration with Department of Geography, Visva-Bharati. Member

6. Two day “**National Seminar on Environmental Issues: Protection, Conservation and Management**” was organized by the Department of Environmental Studies, Visva-Bharati during 22-23 November, 2013 in collaboration with Institution of Public Health Engineers (IPHE), India. Acted as Convener.
7. One-day “**National Seminar on Echoes of Silent Spring: Human Impact on Environment**” on 9th March, 2013 to commemorate the 50th year publication of “Silent Spring”. Member.
8. Centre for Environmental Studies (previous name of our department), Visva-Bharati took active part in organizing “**National Seminar on Science and Nature: Tagore’s vision and its relevance**”, which was organized by Siksha-Bhavana, Visva-Bharati during 12-13th March 2011.
9. Three day “**International Conference on Global Climate Change**” was jointly organized by Centre for Environmental Studies and Integrated Science Education and Research Centre, during 19-21st February 2010. Member
10. One-day “**Workshop on National Carbon Tetra-Chloride (CTC) phase-out plan**”, GTZ support industries in collaboration with National CTC Phase-out Plan, German Technical Co-operation (GTZ) on 10th February 2009. Member
11. Two-day “**Film Festival on Environment**” during 2-3rd February 2009 in association with Toxics Link, New Delhi.
12. One-day “**National Workshop on Conservation and Preservation of Natural Resources**” on 15th March 2009 jointly with Integrated Science, Siksha-Bhavana. Member.
13. Two-day “**Regional Workshop on Environmental Engineering**” during 19-20th January 2008 in collaboration with Institution of Public Health Engineers (IPHE), India. Organizing Secretary.

Extension Activities:

1. Acted as Programme Officer, NSS, Sikha Bhavana Unit during August 2001 to December 2006.
2. Acted as In-Charge of the Book Bank, Siksha Bhavana, Visva-Bharati during April 2007 to June 2019.
3. Acted as Teacher-In-Charge cum Escort for the Study Tour of departmental students to different places of India on several occasions (5 nos.).
4. Acted as a Resource Person at Luthran International Institute, Suri, Birbhum, West Bengal for a training programme on different aspects of environment on 19th December, 2009.
5. Acted as a Jury member for a debate competition on the topic, “Increase in population is a stress for the Natural Environment” for selecting students from Visva-Bharati for National level competition at New Delhi.
6. Pratap Kumar Padhy: Resource Person, Climate change, water resources and food production: Some highlights in the context of India, *DST Inspire Programme*, Visva-Bharati, December 12, 2012.

7. Acted as Rapporteur for Natural Resource Management & Livelihoods Section of the 5th Youth Science Congress organized by Visva-Bharati during 6-9th December 2013.
8. Resource Person, Indoor air pollution: A major environmental and public health concern, *DST Inspire Programme*, Visva-Bharati, 13-17th January, 2014.
9. Chaired **Two sessions** (one Oral & one Poster) in the Environmental Science category of the 21st West Bengal State Science and Technology Congress, 2014 (WBSSTC-2014), Jointly organized by the University of Burdwan and the Department of Science & Technology, Government of West Bengal during 20-21st February 2014.
10. Resource Person, Air Pollution and We. A talk delivered at the Rotary Club of Bolpur Santiniketan, Bolpur on 10th February, 2015.
11. Joint Organizing Secretary, International Conference on Renewable energy – Extension and Outreach, March 19th- 20th 2016, Department of Environmental Studies, Visva-Bharati, Santiniketan.
12. Invited for chairing a Technical Session in the National Seminar on Waste Management of Local Self Government (Municipalities and Panchayats), Organized by PSV, Visva-Bharti, Santiniketan and IPHE, India during 16-17th March 2018.
13. Invited for chairing a Technical Session in the “National Seminar on Education for Sustainable Development: Building a Better World”, Organized by the Department of Education, Visva-Bharti, Santiniketan, during 15-16th February 2019.
14. Delivered a lecturer on “What role can we play in mitigating global environmental problems?” at Luthran International Institute, Suri, Birbhum, West Bengal during November 2007.