

### *Curriculum Vita'e*

**Name** : Prof. Pratap Kumar Padhy  
**Position Held** : Professor & Former HOD  
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### **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: 13<sup>th</sup> November, 1999 to 12<sup>th</sup> November 2011.
2. Associate Professor: 13<sup>th</sup> November 2011 – 12<sup>th</sup> November 2014
3. Professor: 13<sup>th</sup> November 2014 onwards.

**Research Experiences:** More than 33 years.

#### **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 **SO<sub>2</sub>, O<sub>3</sub>, NO<sub>x</sub>, 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:** More than 27 years

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, 16<sup>th</sup> July, 2020 – 31<sup>st</sup> March, 2026.
2. HOD, Department of Environmental Studies, 1<sup>st</sup> April, 2018 to 30<sup>th</sup> September, 2018.
3. HOD, Department of Environmental Studies, 4<sup>th</sup> July, 2013 to 16<sup>th</sup> July, 2017.
4. In-Charge, Centre for Environmental Studies, 10<sup>th</sup> August, 2009 to 8<sup>th</sup> September, 2009.
5. In-Charge, Centre for Environmental Studies, 9<sup>th</sup> March 2007 to 22<sup>nd</sup> November, 2007.

### **Laboratory Worked/Working with**

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

1. **Air Pollution 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. Awarded President of India Medal for General Proficiency from JNU for the year 1995-1996.
2. Honorary appointment to the Research Board of Advisors by the American Biographical Institute.
3. Qualified National Eligibility Test (NET, CSIR-UGC) in 1996.
4. Senior Research Fellow (SRF), UGC, July 1995 – July, 1998
5. Post-doctoral Fellow (SRF), Imperial College, London (ODA Project) July 1998 - November 1999.
6. Junior Research Fellow, UGC, July 1993 - July 1995.
7. Qualified Graduate Aptitude Test in Engineering (GATE-93).
8. Topper in Botany (Honours) during Graduation.

### **Membership of the International Learned Bodies**

1. Life Member (L17802) of the "**Indian Science Congress Association**", Calcutta, India.
2. Life Member of the **Orissa Vigyan Academy**, Bhubaneswar.
3. Member of the "**American Chemical Society (ACS)**", Washington, D.C., USA during the period of 1998-1999.
4. Member of a Wildlife Club called "**ARANYAK**" affiliated to WWF-India, New Delhi.

### **Country Visited**

United States of America, Thailand, Bhutan

### Details of Ph.D. Thesis and M.Sc. Project Supervised:

- 1) No. of Post-Doctoral fellows guided/guiding: **03/0**
- 2) No. of Scholars Awarded Ph.D. degree: **19 [15 + 04 (HOD Supervisor)]**
- 3) No. of Ph.D. Scholars supervising: **Seven (3 to be submitted soon).**
- 4) No. of M.Sc. Projects Supervised/Supervising: **92 (Eighty-eight/Four).**

### 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 – February, 2021) (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 2016). 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).

### List of Publications:

#### i) Research Paper Published

1. Ghosh, B., De, Munmun and **Padhy, P. K.** (2026). India's air pollution burden (2019–2023): spatial-temporal trends, emissions, weather effects, and adult health risks across state and city. *Water, Air, and Soil Pollution*, 237, 701, 1-29.
2. Ghosh, Buddhadev, Chowdhury, M., Ghosh, S., Rabha, R., Chatterjee, A., Niyogi, S., Patra, P. K. and Hecker, M. (2026). Airborne particulate-bound metal exposure, haematological responses, and associated non-carcinogenic and carcinogenic risks in adult male residents of urban and industrial regions of West Bengal, India. *Exposure and Health*, 18, 17, 1-18. <https://doi.org/10.1007/s12403-026-00757-0>.
3. Ghosh, Buddhadev, De, A., Seth, M., Ghosh, K., Sarkar, O., Das, S., Mondal, S., Ali, D., De, M., Sultana, R., Das, D. and **Padhy, P. K.** (2026). Evaluating the national burden of PM<sub>2.5</sub> in India: a comprehensive study of spatiotemporal distribution at state and city levels, non-carcinogenic health hazards, and premature mortality. *Environmental Monitoring and Assessment*, 198(1), 43.
4. Chowdhury, M., Chatterjee, A. and **Padhy, P. K.** (2025). Impact of chronic wood smoke exposure on hematological and antioxidant parameters in biomass-using

- tribal women of eastern India. *Indian Journal of Clinical Biochemistry*, <https://doi.org/10.1007/s12291-025-01385-2>
5. 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*, 25, 3, 485-507. February, 2025. 10.2166/ws.2025.030
  6. 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. <https://dx.doi.org/10.37622/IJLR/17.1.2024.17-27>
  7. 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>
  8. 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. <https://doi.org/10.61505/evidence.2024.2.3.89>
  9. 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. <https://doi.org/10.1007/s44274-024-00082-w>
  10. 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>
  11. 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<sub>2.5</sub> and health risk assessment in Kolkata, India: Evaluation of non-carcinogenic health hazards and premature mortality, *Urban Climate*, 56, 102005. July 2024. <https://doi.org/10.1016/j.uclim.2024.102005>
  12. 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. <https://doi.org/10.1016/j.envc.2024.100891>.
  13. 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>.

14. 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>.
15. 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>.
16. 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.
17. 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](https://doi.org/10.1007/s10661-023-11573-3). The impact factor of *Environmental Monitoring and Assessment* is 3.1 and belongs to Springer.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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
26. 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 1<sup>st</sup> August 2018). DOI: 10.1080/03630242.2018.1452834. IF: 1.307.
  27. 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.
  28. 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
  29. 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
  30. Ghosh, S., Rabha, R., Chowdhury, M. and **Padhy, P. K.** (2018). Source and chemical species characterization of PM<sub>10</sub> 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
  31. Nayek, S. and **Padhy, P. K.** (2018). Approximation of personal exposure to fine particulate matters (PM<sub>2.5</sub>) during cooking using solid biomass fuels in the kitchens of rural West Bengal, India. *Environmental Science and Pollution Research (in press)*. DOI: 10.1007/s11356-018-1831-7.
  32. Rabha, R., Ghosh, S. and **Padhy, P. K.** (2018). Effects of biomass burning on pulmonary functions in tribal women in North-Eastern India. *Women and Health (in press)*. DOI: 10.1080/03630242.2018.1452834.
  33. 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.
  34. 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.
  35. 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.
  36. Manoj, K., **Padhy, P. K.** (2015). Environmental perspectives of pond ecosystems: Global issues, services and Indian scenarios. *Current World Environment*, 10, 3, 848-867.
  37. 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.
38. 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.
  39. 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 5<sup>th</sup> July 2014.
  40. 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.
  41. 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.
  42. 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.
  43. 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).
  44. 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.
  45. 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.
  46. 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.
  47. 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).
  48. 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).
  49. 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).
  50. 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.

51. **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.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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).
59. 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).
60. 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).
61. 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.
62. 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.
63. **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.
64. 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.

65. **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.
66. 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.
67. 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.
68. 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.
69. **Padhy, P. K.** and Varshney, C. K. (2005). Isoprene emission from tropical tree species, *Environmental Pollution*, 135, 1, 101-109.
70. **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.
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