

# Dr. Debnath Palit



## Designation

---

Principal,  
West Bengal Senior Education Service (WBSSES)

## Qualification

---

M.Sc. (Botany), Ph.D. (Botany) (*The University of Burdwan*)

## Experience

---

### Teaching Experience

(West Bengal Educational Service)

Undergraduate Level: 22 Years

Postgraduate Level: 16 Years

### Research Experience

24+ Years

## Contact

---

### Address:

Principal, Durgapur Government  
College, J.N. Avenue, Durgapur,  
Paschim Bardhaman, West  
Bengal-Pin Code: 713214

### Email:

dgcprincipal2021@gmail.com

## Institutions Served

---

- **Durgapur Government College**

Principal

West Bengal Senior Educational Service

(Feb 09, 2021 to till date )

Associate Professor & Head, Department of Botany

(Nov 17, 2016 to Feb 09, 2021)

Associate Professor/Assistant Professor

(Dec 03, 2008 to Aug 01, 2016)

- **Dr. APJ Abdul Kalam Government College**

Associate Professor of Botany

(Aug 3, 2016 to Nov 16, 2016)

- **Bidhannagar Government College**

Lecturer (Sr. Scale), Botany

(Aug 02, 2007 to Dec 02, 2008)

- **Darjeeling Government College**

(*Affiliated to North Bengal University*)

Lecturer, Botany

## Research Award

---

- Fellow of East Himalayan Society for Spermatophyte Taxonomy
- Recipient of "**Scientist Award**" in the International Scientist Award on Engineering Science and Medicine, March 29-30, 2022 held in Pondicherry India

## Research Interest

---

Ecology of Wetlands, Pit-lakes and Forest, Phyto- and Microbial remediation of coal mined generated wastelands, Air Pollution Control, Environmental Impact Assessment

## Research Publications

---

Research Publications in International and National Journals: 95 (Ninety Five)

Books Published: 5 (Five)

Book Chapters: 39 (Thirty Nine)

Conference Proceedings: 8 (Eight)

## Research Guidance

---

- **PhD.s (Degree Awarded): 6** (*under the affiliation of The University of Burdwan*)
- **PhD.s (Presently Registered): 8** (*under the affiliation of Kazi Nazrul University, Asansol*)
- **M.Sc. Dissertations: 23** (*The University of Burdwan, North Bengal University, Kazi Nazrul University*)

## Research Projects (Sponsored)

---

1. **Dr. Debnath Palit** (PI), "Eco-friendly technology for restoration mined wastelands in Raniganj Colliery areas", UGC Minor Research Project, Total Grant: Rs. 93500/- ; Tenure: 2009-2011.
2. **Dr. Debnath Palit** (PI), "Ecological and limnological investigations on wetlands of Bankura District: implications for promoting sustainable management and wise use of wetlands'. UGC Minor Research Project, Total Grant: Rs. 95000/- ; Tenure: 2013-2015
3. **Dr. Debnath Palit** (Co-PI), " Integrated Project on Conservation, Demonstration and Training on sustainable use of Medicinal Plants for up gradation of Livelihood of the poor families of backward classes in Bankati Gram Panchayat area, Burdwan District, West Bengal", Department of Science & Technology, Government of West Bengal, Implemented at The University of Burdwan; Total grant: Rs. 21,00,000/- Tenure: 2010-2014.
4. **Dr. Debnath Palit** (PI), "Ecological appraisal of pit lakes of Raniganj coal field (RCF), West Bengal, India: implications for conservation and sustainable use", Department of Science & Technology, Government of West Bengal, Total Grant: Rs. 29,17,533/- Tenure: 2014-2017.
5. **Dr. Debnath Palit** (PI), " Eco-restoration of wetlands in Birbhum district, West Bengal for sustainable use", Department of Environment, Government of West Bengal, Total Grant: Rs. 4,60,000/-; Tenure: 2010-2013.

## Guidance of PhD Scholars (Degree Awarded)

---

1. Santanu Gupta (*Awarded: 2016, The University of Burdwan*) Assessment of Ecological and Socioeconomic Valuation of Wetlands in Birbhum District, West Bengal, India for conservation and sustainable use,
2. Aparajita Mukherjee (*Awarded: 2016, The University of Burdwan*) Studies on the ecological and socio-economic services of wetlands to the rural people of Bankura district, West Bengal, India,
3. Debalina Kar (*Awarded: 2016, The University of Burdwan*) Phytoremediation of some selected wastelands in colliery belt of Raniganj, West Bengal, India,
4. Shiboram Banerjee (*Awarded: 2020, The University of Burdwan*) Air Quality Monitoring Using Available Plant Species of Durgapur Industrial Township, West Bengal,
5. Payel Majumder (*Awarded: 2020, The University of Burdwan*) Studies in microbial diversity through time of coal mine generated wastelands of West Bengal in understanding their role in soil reclamation.
6. Babli Garai (*Awarded: 2020, The University of Burdwan*) Succession of Plant Diversity based on selected pit lakes of Raniganj Coal fields, India,

## Guidance of PhD Scholars (Presently Registered)

---

1. **Nazma Khatun** (2021, *Registered: Kazi Nazrul University*) Phytoplankton Diversity and its relationship with environmental factors in pit-lake ecosystem
2. **Subhra Bandopadhyay** (2021, *Registered: Kazi Nazrul University*) Non-timber forest products and their utilization for sustainable livelihood development in some parts of Birbhum District, West Bengal, India
3. **Priyaranjan Mondal** (2021, *Registered: Kazi Nazrul University*) Macrophytes composition and their ecological roles in some selected pit lakes of Raniganj Coal Field Area, West Bengal, India
4. **Trinankur Bhattacharjee** (2021, *Registered: Kazi Nazrul University*) Vegetation dynamics in coal mine generated wasteland of Raniganj Coal Field Area, West Bengal, India
5. **Kajori Mondal** (2021, *Registered: Kazi Nazrul University*) Impact assessment of water and soil for sponge iron industries in Barjora Industrial Area, West Bengal
6. **Animesh Karmakar** (2021, *Registered: Kazi Nazrul University*) Mass cultivation of white sandalwoods (*Santalum album* L) for sustainable yield in Rarh Bengal, India
7. **Chittaranjan Naskar** (2021, *Registered: Kazi Nazrul University*) Potentiality of Dragon fruits (*Hylocereous lemairei* (Hook.) Britton and Rose) as an alternative cultivation in Southern parts of Sunderban, West Bengal, India
8. **Anamika Pandey** (2021, *Registered: Kazi Nazrul University*) Spatio temporal variability of air pollutants on selected tree species: implications for assessment of CO<sub>2</sub> mitigation potential

## Membership in State/National level bodies

---

- Life Membership of International Academy of Science and Research, Kolkata, India
- Member of Review committee in respect of rapid Socio-Economic and environmental impact studies by National Water Development Agency (Ministry of Water Resources, Government of India) for proposed Farakka-Sundarban Link Project
- Member of Review committee in respect of rapid Socio-Economic and environmental impact studies by National Water Development Agency (Ministry of Water Resources, Government of India) for proposed Ganga –Damodar - Subarnarekha Link Project.
- Life Member, National Environmental Science Academy, New Delhi
- Natural Member, East Himalayan Society for Spermatophyte Taxonomy, Department of Botany, North Bengal University, Siliguri, Darjeeling.
- Life Member, The Zoological Association of Burdwan, Sarat Pally, Burdwan
- Member, Under Graduate Board of Studies (UGBS) in Botany, Kazi Nazrul University, Asansol (2016-2019)
- Member, Governing Body and Finance Committee of Michael Madhusudan Memorial College, Durgapur, University Nominee from Kazi Nazrul University, Asansol
- Course Convener of Botany and Chief Coordinator of Botany, Kazi Nazrul University, Asansol
- Chairperson, Under Graduate Board of Studies (UGBS) in Botany, Kazi Nazrul University, Asansol (2020-2024)

## Administrative Experience

---

- **Principal, Durgapur Government College** (February 9, 2021 to till date)
  - ☞ *Institution received DBT STAR COLLEGE SCHEME in 2022 from the Department of Biotechnology, Government of India*
  - ☞ *Institution hosted the Regional Science and Technology Congress 2024 in association with Department of Science and Technology and Biotechnology, Government of West Bengal*
- **Officer-in-Charge, Durgapur Government College** (October 19, 2011 to August,20, 2013)
- **Centre -in-Charge, Netaji Subhas Open University Study centre** (PG Department of Zoology) at Durgapur Government College (October 19, 2011 to August,20, 2013)
- **Centre -in-Charge, Netaji Subhas Open University Study centre** (Bachelor Degree Programme and Post Graduate Programme) at Durgapur Government College (July 2012 to August 2013)
- **Coordinator, UGC- Career Oriented Programme (COP)** in Corporate Communication and Communicative English, (October 19, 2011 to August,20, 2013)
- **Head, Department of Conservation Biology**, Durgapur Government College (November 6, 2009 to December 03, 2014)
- **Head, Department of Botany**, Durgapur Government College (August, 2017 to February 2021)

## Research Publications

---

1. Chittaranjan Naskar and **Debnath Palit** (2024), Dragon fruits and strawberries in the same field, a new paradigm in the farming of Sundarban, West Bengal, India, *Journal of Advanced Zoology*. <https://doi.org/10.53555/jaz.v45i2.3901>
2. Anamika Pandey and **Debnath Palit** (2024) Air pollution in Durgapur, West Bengal : an assessment of the trees' potential to sequester carbon dioxide, *Indian Journal of Applied and Pure Biology* (**accepted**)
3. Anamika Pandey and **Debnath Palit** (2024) PM 2.5 pollution : evolution and seasonal variation in Durgapur, West Bengal and it's impact on plants, *Indian Journal of Applied and Pure Biology*, Vol. 39(2), Page No. 1089-1099
4. Animesh Karmakar, **Debnath Palit**, Jagatpati Tah (2024) Analysis of Sandalwood (*Santalum album L.*) Oil: A Brief Report from West Bengal, *Indian Journal of Applied and Pure Biology*, Vol. 39(2), Page No. 1132-1138
5. Priyaranjan Mondal, Arnab Banerjee, **Debnath Palit** (2023) Water quality of selected Pitlakes of Raniganj coal fields, West Bengal, India, *Indian Journal of Applied and Pure Biology*, Vol 38(3), Page No. 1563-1574
6. S. Banerjee, A. Banerjee, and **Debnath Palit** (2022). Morphological and biochemical study of plant species –A quick tool for assessing the impact of air pollution *Journal of Cleaner Production*. (Elsevier), Vol. 339, 130647. **Impact factor: 11.072** <https://doi.org/10.1016/j.jclepro.2022.130647>
7. Saikat Mondal, **Debnath Palit**, Niladri Hazra (2022) Study on composition and spatio-temporal variation of zooplankton community in coal mine generated pit lakes, West Bengal, India. *Tropical Ecology* (Springer) **Impact factor: 1.333** <https://doi.org/10.1007/s42965-022-00274-6>
8. Saikat Mondal, **Debnath Palit**, Niladri Hazra\*, Spatial pattern analysis of zooplankton and surface water of pit lakes (Raniganj coal field, India), *Water Science*, Pages 98-116 | Published online: 12 Jun 2023 <https://doi.org/10.1080/23570008.2023.2221069>
9. Saikat Mondal, **Debnath Palit**, Ecological assessment of pit lakes in Raniganj, India: Application of different indices and multivariate statistics, *Water Science*, Pages 57-70 | Published online: 23 May 2023, <https://doi.org/10.1080/23570008.2023.2215573>
10. S. Banerjee, A. Banerjee, and **Debnath Palit** (2021). Ecosystem services and impact of industrial pollution on urban health: evidence from Durgapur, West Bengal, India. *Environ Monit Assess* (Springer) 193, 744 (2021). <https://doi.org/10.1007/s10661-021-09526-9> **Impact factor: 2.513**
11. Barsali Banerjee, **Nivedita Acharjee\***, Debnath Palit (2023) Revealing the cyclization selectivity in intramolecular [3+2] cycloaddition reactions of allenic nitrones from the molecular electron density theory perspective, *Structural Chemistry* (Springer), (**IF = 1.795**) <https://doi.org/10.1007/s11224-023-02175-3>
12. Asmita Mondal, **Nivedita Acharjee\***, Debnath Palit (2023) Unveiling [3+2] cycloaddition reactions of pyridinium bis(methoxycarbonyl)methylides and pyridinium dicyanomethylides with cyclooctyne for indolizine synthesis from the molecular electron density theory perspective, *Structural Chemistry* (Springer), (**IF = 1.795**) <https://doi.org/10.1007/s11224-023-02193-1>
13. Saikat Mondal, Pinaki Chattopadhyay, Arnab Banerjee, **Debnath Palit\*** (2021) Ecological assessment of tree communities and pedological characteristics of coal mined generated wastelands of Ranigaunj Coal Field Area, West Bengal, India. *Vegetos* (Springer) <https://doi.org/10.1007/s42535-021-00305-y>.
14. Payel Majumder Ghosh, Debnath Palit (2021) Responses of microbial population using metagenomics of selective coal mine generated wastelands in ranigaunj coalfield, *Pollution Research*, 40(4):1403-1409.
15. Saikat Mondal, **Debnath Palit\***, Niladri Hazra (2021) Rotifer Diversity in Coal Mine Generated Pit Lakes of Raniganj Coal Field Area, West Bengal, India, *LIMNOFISH-Journal of Limnology and Freshwater Fisheries Research* 7(2): 115-127.

16. Saikat Mondal, **Debnath Palit\***, Pinaki Chattopadhyay (2020), Impact of Mining on Tree Diversity of the Coal Mining Forest Area at Raniganj Coal Field Area of West Bengal, India. *Ecology, Environment and Conservation*, 26 (Spl. Issue) S66-S72.
17. Saikat Mondal, **Debnath Palit\***, Pinaki Chattopadhyay (2020), Vegetation Analysis in Chora and Joyalbhanga Forest Area of Raniganj Coal Field, West Bengal, India. *Indian Journal of Ecology* , 47(3): 831-841.
18. S. Banerjee, **Debnath Palit** and A. Banerjee (2020) Variation of tree biochemical and physiological characters under different air pollution stresses. *Environmental science and Pollution research*. <https://doi.org/10.1007/s11356-020-11674-3>
19. Saikat Mondal, **Debnath Palit\*** (2019), Evaluation of water quality using water quality index of pit lakes, Raniganj coal field area, West Bengal, India. *Research Journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences*. <http://www.rjlbpcs.com/article-pdf-downloads/2019/28/656.pdf>
20. Saikat Mondal, **Debnath Palit\*** (2019), Inventory of Plant Species, Phytosociology and Species Diversity of Gunjan Ecological Park Pit Lake, West Bengal, India. *International Journal of Scientific Research and Reviews*, 8 (2), 1990-2006. [https://www.ijssr.org/down\\_82562.php](https://www.ijssr.org/down_82562.php)
21. Saikat Mondal , **Debnath Palit\***, Pinaki Chattopadhyay (2019), Species diversity and vegetation structure of coal mine generated wasteland of Raniganj Coal Field, West Bengal, India. *International journal of current research and review*. [https://www.ijcrr.com/uploads/2617\\_pdf.pdf](https://www.ijcrr.com/uploads/2617_pdf.pdf)
22. Siboram Banerjee, Arnab Banerjee, **Debnath Palit\*** (2018), Assessment of vegetation under air pollution stress in urban industrial area for green belt development in Durgapur, West Bengal, India. *International Journal of Environmental Science and Technology*, 16, 5827-5870. <https://link.springer.com/article/10.1007/s13762-018-1963-9>
23. **Debnath Palit\***, Saikat Mondal, Pinaki Chattopadhyay (2018), Analysing water quality index of selected pit-lakes of Raniganj Coal Field Area, India. *Environment and Ecology*, 36 (4A): 1167-1175.
24. **Debnath Palit\***, Debalina Kar, Ambarish Mukherjee (2018), Flowering and fruiting responses of the wetland macrophytes in Birbhum district, West Bengal, India. *The Asian Journal of horticulture*, 13(1):8-13.
25. **Debnath Palit\***, Debalina Kar, Ambarish Mukherjee (2017), Developmental perspective of wetlands in Birbhum district, West Bengal, India. *Indian Journal of Applied Research*, 7(6): 484-486.
26. **Debnath Palit\***, Debalina Kar, Sharmila Roy Choudhury, Aparajita Mukherjee (2017), Sediment characterization on pit-lake water body of Raniganj Coal Fields, West Bengal, India. *Indian Journal of Applied Research*, 7(10): 555-557.
27. **Debnath Palit\***, Debalina Kar, Sharmila Roy Choudhury, Aparajita Mukherjee (2017), Water Quality Assessment of Pit-Lakes in Raniganj Coalfields Area, West Bengal, India. *International Journal of Current Research and Review*, 9(11): 10-15.
28. **Debnath Palit\***, Debalina Kar, Ambarish Mukherjee (2017), Studies on Macrophyte Diversity in Lalbandh Wetland, Birbhum, West Bengal, India. *International Journal of Interdisciplinary and Multidisciplinary Studies.*, 4(2): 198-203.
29. **Debnath Palit\***, Debalina Kar (2017), A Study of physico-chemical characteristics of overburden dump soil in selected coal mining areas of Raniganj coal fields, West Bengal, India. *International Research Journal of Natural and Applied Sciences*, 4(6): 1-12.
30. **Debnath Palit\***, Debalina Kar, Ambarish Mukherjee (2017), Studies on Grass Flora in the Wetland of Birbhum District, West Bengal, India. *Journal of Plant Sciences*, 12: 59-67 <https://scialert.net/abstract/?doi=jps.2017.59.67>
31. Payel Majumder, **Debnath Palit\*** (2017), Isolation, Identification and Characterization of Bacteria of Coal Mine Soil at Sonapur Bazari of Raniganj Coalfield, West Bengal. *International Journal of Applied Environmental Sciences*, 12(6), pp. 1131-1140.
32. **Debnath Palit\***, Arnab Banerjee (2016), Traditional uses and conservative lifestyle of lepcha tribe through sustainable bio resource utilization – case studies from Darjeeling and north Sikkim, India. *International Journal of Conservation Science*, 7(3): 735-752.
33. **Debnath Palit\***, Aparajita Mukherjee, Debalina Kar, Sharmila Roy Choudhury , Babli Garai, Piyali Kar, P, Santanu Gupta (2016), Determinants of Pitlake Usage in Raniganj Coalfield Region, West Bengal: Implications for Sustainable Use. *International Journal of Innovative Research in Engineering & Management.*, 3(2): 72-79
34. Sanchita Banerjee, Debalina Kar, Arnab Banerjee, **Debnath Palit\*** (2016), Studies on limnology and macrophytes in selected water bodies of Durgapur, West Bengal, India. *American Journal of Innovative Research and Applied Sciences*, 2(4): 174-180.
35. Debalina Kar, **Debnath Palit\*** (2016), Natural occurrence of plant species on Bankola area of Raniganj Coalfield, West Bengal, India. *International Educational Scientific Research Journal*, 2(6): 37-38.
36. **Debnath Palit\***, Debalina Kar , Sharmila Roy Choudhury , Aparajita Mukherjee, Babli Garai, Piyali Kar (2016), Species Composition of Plant Communities in Pitlakes of Raniganj Coal Field, West Bengal, India. *International Journal of Current Research in Biosciences and Plant Biology*, 3(6): 82-86. <http://dx.doi.org/10.20546/ijcrbp.2016.306.010>
37. Debalina Kar, **Debnath Palit\*** (2016), Assessment of plant species assemblages with their distribution in an open cast mining area of Raniganj Coalfield, West Bengal, India. *International Journal of Scientific & Engineering Research*, 7(7): 443-452.
38. Siboram Banerjee, **Debnath Palit\***, Arnab Banerjee, (2016), Changing Strategies of Biochemical and Physiological Features of Selected Plant Species on Effect of Air Pollution in Eastern Steel City, Durgapur, India. *International Journal of Current Microbiology and Applied Sciences* , 5 (9): 733-741. <https://www.ijcmas.com/5-9-2016/Shiboram%20Banerjee.%20et%20al.pdf>
39. Minu Mishra, Arnab Banerjee, **Debnath Palit\*** (2016), Variation of Nutrient Level in Soil and Leaf Litter of Selected Tree Species: A Case Study. *International Journal of Ecology and Environment*, 31(2): 99-111. <http://www.ceser.in/ceserp/index.php/ijed/article/view/4325>

40. Payel Majumder, **Debnath Palit\*** (2016), Microbial Diversity of Soil in Some Coal Mine Generated Wasteland of Raniganj Coalfield, West Bengal, India. *International Journal of Current Microbiology and Applied Sciences*, 5(2): 637-641. <https://www.ijcmas.com/5-2-2016/Payel%20Majumder%20and%20Debnath%20Palit.pdf>
41. Aparajita Mukherjee, **Debnath Palit\***, Santanu Gupta (2015), Rare record on Plaintive Cuckoo (*Cacomantis merulinus*) from a fresh water wetland of Bankura district, West Bengal, India. *Zoosprint*, XXX (3): 19-21. <https://zoosprint.zooreach.org/index.php/zp/article/download/730/716>
42. Santanu Gupta, Aparajita Mukherjee, **Debnath Palit\*** (2015), Reporting of (Sand?) Martin Riparia (riparia?) From Durgapur Barrage, West Bengal, India. *Zoosprint*, 30 (7):6-9 <https://www.zoosprint.zooreach.org/index.php/zp/article/view/768/754>
43. Tripti Bouri **Debnath Palit\***, Ambarish Mukherjee (2015), Livelihood dependency of rural people utilizing non-timber forest product (NTFPs) in a moist deciduous forest zone, West Bengal, India. *International Journal of Advanced Research*, 3(4): 1030-1040. [http://www.journalijar.com/uploads/597\\_IJAR-4192.pdf](http://www.journalijar.com/uploads/597_IJAR-4192.pdf)
44. Tripti Bouri **Debnath Palit\***, Ambarish Mukherjee (2014) An investigation of plant communities in Basudha beat of Durgapur forest range, West Bengal, India. *International Journal of Current Microbiology and Applied Sciences* 3 (9): 596-607. <https://www.ijcmas.com/vol-3-9/Tripti%20Bouri.%20et%20al.pdf>
45. **Debnath Palit\***, Arnab Banerjee, (2014), The Diversity and Richness of Vegetation of Gaddikhana Forest Beat in Darjeeling Himalaya, West Bengal, India. *International Journal of Latest Technology in Engineering, Management & Applied Science*, III(X): 106-112. <https://www.ijltemas.in/DigitalLibrary/Vol.3Issue10/106-112.pdf>
46. **Debnath Palit\***, Arnab Banerjee, (2014), Inventory of Plant Species, Phytosociology, Species Diversity and Pedological characteristics of Rambhi Beat, Senchal East Zone Forest Range, Darjeeling, West Bengal, India. *Journal of Forest Science*, 30(4): 331-341.
47. Santanu Gupta, **Debnath Palit \*** (2014), A Contribution to the Fish faunal status in wetlands of Birbhum District, West Bengal, India. *Asian Academic Research Journal of Multidisciplinary*, 1(28): 40-53.
48. Santanu Gupta, **Debnath Palit \*** (2014), Biosurveillance of wetlands in Eastern India (Birbhum, West Bengal) for wise use. *International Journal of Science, Environment and Technology*, 3(6): 2136 – 2144. <http://www.ijset.net/journal/460.pdf>
49. Santanu Gupta, **Debnath Palit \***(2014), Preliminary Assessment of Designated Usages/ Effective Wetland Management Strategies (EWMS) in Wetlands of Birbhum District, West Bengal, India. *Journal of Environmental Science, Computer Science and Engineering & Technology*, 3(4): 1881-1894.
50. Debalina Kar, **Debnath Palit\*** (2014), Phyto-Diversity on Selected Coal Mine Areas of Raniganj Coalfields, India. *International Journal of Green and Herbal Chemistry*, 3(1): 049- 055. [https://www.researchgate.net/publication/333700910\\_PHYTODIVERSITY\\_OF\\_SELECTED\\_COAL\\_MINE\\_S](https://www.researchgate.net/publication/333700910_PHYTODIVERSITY_OF_SELECTED_COAL_MINE_S)
51. Santanu Gupta, **Debnath Palit\***. (2014), A study on wetlands in Birbhum district, West Bengal, India. *Journal of Applied Sciences in Environmental Sanitation*, 9(2):79-84.
52. Debalina Kar, **Debnath Palit\*** (2014), Perception Regarding Reclamation Strategies in Coal Mine of RCF in West Bengal - A Case Study from India: Implications for Future Development Perspectives in Wasteland Eco restoration. *Journal of Applied Technology in Environmental Sanitation*, 4(1): 1-6.
53. Debalina Kar, Arnab Banerjee, **Debnath Palit\*** (2014), Studies on Phyto-diversity of different types (OCP, PIT, INCLINED) of mines in Raniganj coalfield area, West Bengal, India. *Asian Academic Research Journal of Social Science and Humanities*. 1(19): 515-522.
54. **Debnath Palit\***, Aparajita Mukherjee, Santanu Gupta, Debalina Kar (2014), Water quality in the pit lakes of Raniganj coal field, West Bengal, India. *Journal of Applied Sciences in Environmental Sanitation*, 9(1): 1-6.
55. Partha Sarathi Basu , **Debnath Palit\***, Arnab Banerjee (2013), Assessment of Diversity and Resource Potential of Non-Timber Forest Product(NTFP) in Selected Sites of Bishnupur Forest Division of Bankura District, West Bengal, India, *New York Science Journal*, 6(5): 46-53.
56. Tripti Bouri, **Debnath Palit\***, Ambarish Mukherjee (2013), Phytosociology and Pedological characteristics of selected beats of Durgapur forest range, W.B, India. *Communications in Plant Science*, 3(3-4): 37-45. <https://doaj.org/article/4c891ba297f1469388ee3a527aec9bac>
57. Mousumi Garai, Debalina Kar, **Debnath Palit\***, Arnab Banerjee (2013), Phytosociological Assessment of Vegetation of Durgapur Government College Campus, Durgapur, West Bengal, India. *International Journal of Engineering Research and applications*, 3(6): 835-840. [http://www.ijera.com/papers/Vol3\\_issue6/EK36835840.pdf](http://www.ijera.com/papers/Vol3_issue6/EK36835840.pdf)
58. Santanu Gupta, **Debnath Palit\*** (2013), Effect of Limnochemical Variables on the Aquatic Macrophyte Composition in Wetlands of Birbhum District. *Pollution Research*, 32(4) : 737- 742. [http://www.envirobiotechjournals.com/article\\_abstract.php?aid=4766&iid=165&jid=4](http://www.envirobiotechjournals.com/article_abstract.php?aid=4766&iid=165&jid=4)
59. Santanu Gupta, **Debnath Palit\*** (2013), Inventory and characterization of wetlands in Birbhum district, West Bengal, India: implications for conservation. *Ecology, Environment and Conservation*, 19(4): 995-1000. [http://www.envirobiotechjournals.com/article\\_abstract.php?aid=4811&iid=166&jid=3](http://www.envirobiotechjournals.com/article_abstract.php?aid=4811&iid=166&jid=3)
60. Santanu Gupta, **Debnath Palit\***, Aparajita Mukherjee, Debalina Kar (2013), Inventory of Pit Lakes in Raniganj Coal Field, West Bengal India. *Journal of Applied Technology in Environmental Sanitation*, 3(1): 55-60.
61. Santanu Gupta, Aparajita Mukherjee, **Debnath Palit\***, Paromit Chatterjee, Indrani Biswas (2013), A Reporting on Wire Tailed Swallows (Hirundosmithii) winter visit to Durgapur Barrage, West Bengal, India. *Zoosprint*, 28(8): 22-24.
62. **Debnath Palit\***, Arnab Banerjee (2013), Species Diversity and Pedological Characteristics in Selected Sites of Senchal Wildlife Sanctuary, West Bengal, India. *Journal of Environment and Ecology*, 4(1): 111- 137.
63. **Debnath Palit\***, Debalina Kar, Priyanka Mishra, Arnab Banerjee, (2013), Assessment of Air Quality Using several

- Biomonitoring of selected sites of Durgapur, Burdwan District by Air Pollution tolerance index approach. *Indian Journal of Scientific Research*, 4(1): 149-152. [https://www.ijsr.in/upload/744301032CHAPTER\\_27.pdf](https://www.ijsr.in/upload/744301032CHAPTER_27.pdf)
64. Aparajita Mukherjee, **Debnath Palit\*** (2013), Appraisal of Use Pattern in Wetlands of Bankura, a Drought Prone Region from Eastern India. *Journal of Applied Technology in Environmental Sanitation*, 3(4): 141-146.
  65. **Debnath Palit,\*** Santanu Gupta, Arnab Banerjee, Aparajita Mukherjee (2013), Macro invertebrate Community-Environmental Interrelationship in Selected Lotic Ecosystem from Durgapur, West Bengal, India. *Journal of Applied Sciences in Environmental Sanitation*, 8(4): 231-236.
  66. **Debnath Palit,\*** Santanu Gupta, Arnab Banerjee, Aparajita Mukherjee (2013), Aquatic Macro invertebrate Diversity Based Bio monitoring of Selected Lotic Environments in Durgapur, West Bengal, India: Implications for Ecological Health Status Prediction. *Journal of Applied Technology in Environmental Sanitation*, 3(3): 117-122.
  67. Sharmila Roy Choudhury **Debnath Palit,\*** Arnab Banerjee (2013), Assessment of zooplankton diversity in relation to physico-chemical parameters of water in selected water bodies of Durgapur Industrial region, West Bengal, India. *Asian Journal of Water, Environment and Pollution*, 10(4): 99-115.
  68. Sanchita Banerjee, Debalina Kar, Arnab Banerjee, **Debnath Palit,\*** (2012), Utilization of some aquatic macrophytes in Borobandh-a lentic water body in Durgapur, West Bengal, India: Implications for socio-economic Up-liftment of local stakeholder. *Indian J. Applied & Pure Bio.* 27(1): 83-92.
  69. Shyamali Das, Sudin Pal, **Debnath Palit,\*** (2012), An Insight into the Physico-Chemical characteristics of Water and Soil along with Macrophyte Diversity in Kathgola Dighi: A Freshwater Wetland in Jalpaiguri District, West Bengal, India. *Journal of Biodiversity and Ecological Sciences*, 2(3): 189-195.
  70. **Debnath Palit,\*** Santanu Gupta (2012), Seasonal Changes in Limnological Parameters and Macrophyte Diversity Associated with Wetlands in Birbhum District, West Bengal, India. *Indian Journal of Plant Science*, 1(2-3): 97-115.
  71. **Debnath Palit,\*** Aparajita Mukherjee (2012), Studies on water quality and macrophyte composition in wetlands of Bankura district, West Bengal, India. *Indian Journal of Plant Science*, 1(2-3): 221-228.
  72. **Debnath Palit,\*** Debalina Kar, Santanu Gupta, Aparajita Mukherjee (2012), A comparative study of soil of different Coal Mines in RCF. *Indian Journal of Environmental Protection*, 32(6): 471-477.
  73. **Debnath Palit,\*** Sudin Pal (2012), An investigation on mural plant diversity in Darjeeling Government College campus and adjoining areas, Darjeeling, West Bengal. *NeBio*, III (2): 58-62.
  74. **Debnath Palit,\*** Sudin Pal, Soma Chanda (2012), Diversity and richness of plants in Darjeeling Himalaya with an eye on Gaddikhana forest beat, Senchal east zone forest range, Darjeeling. *Indian Journal of Forestry*, 35(1): 39-44.
  75. Debalina Kar, Arnab Banerjee, **Debnath Palit,\*** (2011) Assessment of Water Quality of Some Selected sites of Durgapur Industrial Belt, West Bengal, India through Distribution and Abundance of Larval Chironomidae in Relation with Physicochemical Characteristics of Water. *International Journal of Lakes and Rivers*, 4 (2): 177-198.
  76. **Debnath Palit,\*** Ambarish Mukherjee (2011), Characterization of Physico-chemical properties of water and soil in Lalbandh, a freshwater wetland in Birbhum District, West Bengal. *Ecology Environment and Conservation*, 17(3): 557-562.
  77. **Debnath Palit,\*** Sudin Pal, Joydeep Acharya (2011), Tea-Garden Weeds of Happy Valley Tea Estate, Darjeeling, West Bengal: Ecological and Economic Aspects. *Journal of Economic and Taxonomic Botany*, 35(2): 412-417.
  78. Gopal Goswami, Sudin Pal, **Debnath Palit,\*** (2010), Studies on the Physico-Chemical characteristics, Macrophyte Diversity and their Economic Prospect in Rajmata Dighi: A wetland in Cooch Behar District, West Bengal, India. *NeBIO*, 1(3): 21-27.
  79. Kundu, Sudin Pal, **Debnath Palit,\*** (2010), A contribution on the plant diversity in 6th Mile Beat, Senchal East Zone Forest Range, West Bengal, India. *Journal Swamy Botanical Club*, 27: 85-92.
  80. Sudin Pal, **Debnath Palit,\*** (2010), Traditional knowledge and bio resource utilization among Lepcha in North Sikkim. *NeBIO*, 2(1): 13-17.
  81. **Debnath Palit,\*** Mayukh Mukherjee, Pipasha Borah (2010), Warfare's: Our Decaying Climate. *Communique*, 4(1): 71-80.
  82. Nilu Tamang, **Debnath Palit,\*** (2010), An ethno botanical study on the Lepchas in North Sikkim. *Pleione*, 4(1): 63-68.
  83. Soma Chanda, **Debnath Palit,\*** (2009), Plant diversity indices and pedological characteristics of Ragiroom Beat, Senchal West Zone Forest Range, Darjeeling, West Bengal, India. *Pleione*, 3(1): 50-58.
  84. **Debnath Palit,\*** Shyamali Das, Papia Nandy Palit (2009), Studies on physico-chemical characteristics of soil and water in Kathgola Dighi, a wetland near Falakata, Jalpaiguri, West Bengal. *Indian Journal of Landscape Systems Ecological Studies*, 32(1): 1149-1154.
  85. **Debnath Palit,\*** Sulochana Gurung (2008), Some phytoremedies used traditionally by Gurungs in Darjeeling, West Bengal, India. *Pleione*, 2(2): 171-174.
  86. Papia Nandy Palit, **Debnath Palit,\*** (2008), Ecological investigation on wetlands of Birbhum District, West Bengal. *Indian Journal of Landscape Systems Ecological Studies*, 31(2): 112-117.
  87. Amarendra Nath Mahata, Madhusudan Mondal, **Debnath Palit,\*** Ambarish Mukherjee (2007), Trees for energy forests in wastelands of Bihar, Orissa and West Bengal. *Ecology Environment and Conservation*, 13(2): 439-445.
  88. **Debnath Palit,\*** Ambarish Mukherjee (2007), An inventory of wetlands in Birbhum District, West Bengal and their successional characteristics. *Environment and Ecology*, 25 (1): 173-176.
  89. **Debnath Palit,\*** Gautam Bala, Ambarish Mukherjee (2006), Sedges in wetlands of Birbhum District, West Bengal. *Flora and Fauna*, 12(2): 269-274.
  90. **Debnath Palit,\*** Gautam Gangly, Ambarish Mukherjee. (2002), Ecological studies on Ramnabagan Wildlife Sanctuary, Burdwan: 1-Biological Spectrum. *Science and Culture*, 68(5-6): 147-149.

91. **Debnath Palit**,\* Ambarish Mukherjee (2001), Angiosperm diversity in wetlands of Birbhum District, West Bengal. *Bulletin National Institute Ecology*, 11: 55-67.
92. **Debnath Palit**,\* Ambarish Mukherjee (2001), Foliar and pollen characters of *Solanum nigrum* L. and *Croton bonplandianum* Baill. in evaluation of purity of air. *Environment and Ecology*, 19(1): 182-185.
93. Kamal Bhattacharya, **Debnath Palit**,\* (2000), A census of Hydrophytes in Burdwan University campus. *Environment and Ecology*, 18(1): 150-155.
94. Sujit Mandal, Dipen Mondal, **Debnath Palit**,\* (2000), A preliminary survey of wetland plants in Purulia District, West Bengal. *Indian Journal of Applied and Pure Biology*, 18(2): 247-252.
95. Baishali Pal, **Debnath Palit**,\* Ambarish Mukherjee (2000), Plant diversity in mural habitats of Hooghly District, West Bengal. *Geobios*, 27(4): 177-180.

## Books

---

1. Debnath Palit, Mondal S and Banerjee A(2021) Ecology of wasteland and its biological reclamation –A Case study from Raniganj Coalfield Area, West Bengal (Agreement Completed- Cambridge scholar )
2. Debnath Palit (2013), Senchal Forest: Assessment of Phyto Diversity and Soil Status, ISBN: 978-3-659-44629-0, Lambert Academic Publishing.
3. Debnath Palit Debalina Kar, Aparajita Mukherjee, Santanu Gupta (2014), Pitlakes of Raniganj Coal Field, W.B, India. Inventory and Water Quality Status. GRIN Publishing. Munich, GmbH, ISBN: 978-3-656-62128-7.
4. Debalina Kar, Debnath Palit, Sudip Chatterjee (2013), Interrelationship between Chironomid, water and Soil: Bio monitoring assessment. Lambert Academic Publishing, ISBN: 978-3-659-48785-9.
5. Debnath Palit, Arnab Banerjee (2013), Bio monitoring and green belt development in Durgapur. Lambert Academic Publishing, ISBN-978-3-659-50467-9.

## Book Chapters

---

1. Arnab Banerjee, Manoy Kumar Jhariya, Surendra Singh Bargali and **Debnath Palit** (2023) Ecorestoration for Environmental Sustainability-An Introductory Framework in Ecorestoration for Sustainability, Edited by Arnab Banerjee, Manoy Kumar Jhariya, Surendra Singh Bargali and **Debnath Palit**, John Wiley & Sons. Scrivener Publishing, ISBN No: 9781119879718.
2. Debalina Kar, **Debnath Palit** (2023) Reclamation of Mined Soil in RCF Region—A Phytoremediation Approach, Ecorestoration for Environmental Sustainability-An Introductory Framework in Ecorestoration for Sustainability, Edited by Arnab Banerjee, Manoy Kumar Jhariya, Surendra Singh Bargali and **Debnath Palit**, John Wiley & Sons. Scrivener Publishing, ISBN No: 9781119879718.
3. Shiboram Banerjee, **Debnath Palit** (2022) Geospatial Techniques in Sustainable Forest Management for Ecorestoration and Different Environmental Protection Issues in Ecorestoration for Sustainability, Edited by Arnab Banerjee, Manoy Kumar Jhariya, Surendra Singh Bargali and **Debnath Palit**, John Wiley & Sons. Scrivener Publishing, ISBN No: 9781119879718.
4. Jayati Chakraborti, Saikat Mondal and **Debnath Palit** (2023) Agroforestry and Arthropod Diversity for Ecosystem Services In : *Agroforestry for Carbon and Ecosystem Management* Eds Jhariya et al 2023 . Academic press – Elsevier (in Press)
5. Nazma Khatun and **Debnath Palit** (2023) Wetland based Agroforestry: Carbon management towards In : *Agroforestry for Carbon and Ecosystem Management* Eds Jhariya et al 2023 . Academic press – Elsevier (in Press)
6. Shiboram Banerjee and **Debnath Palit** (2023) Application of Geospatial Technology for agroforestry Management In : *Agroforestry for Carbon and Ecosystem Management* Eds Jhariya et al 2023 . Academic press – Elsevier (in Press)
7. **Debnath Palit**, Saikat Mandal, Swarupa Das, Papiya Nandy Palit, Soumik Bhattacharya (2022), Assessment of Water Quality and Landscape Dynamics in Some Selected Pit Lakes of Andal Block, Paschim Bardhaman, West Bengal, India: A Geospatial Appraisal, In: Gouri Sankar Bhunia, Uday Chatterjee, K.C. Lalmalsawmzauva, Pravat Kumar Shit (Eds) *Anthropogeomorphology: Geography of the Physical Environment*, ISSN 2366-8865 ISSN 2366-8873 (electronic), <https://doi.org/10.1007/978-3-030-77572-8>, pp- 243, Springer
8. Saikat Mondal and **Debnath Palit** (2022), Challenges in Natural Resource Management for economic sustainability in "Natural Resources Conservation and Advances for Sustainability", Elsevier Academic Press, ISBN: 978-0-12-822976-7
9. Saikat Mondal and **Debnath Palit** (2022), Prospects and Implementation of nanotechnology in environment remediation and clean up" in "Natural Resources Conservation and Advances for Sustainability", Elsevier Academic Press, ISBN: 978-0-12-822976-7
10. Shiboram Banerjee, **Debnath Palit**, Arnab Banerjee (2022), Geospatial Mapping of SPM Load Under Urban Industrial Set-up, Durgapur, West Bengal, India, Through Q-GIS Application, In: Gouri Sankar Bhunia, Uday Chatterjee, K.C. Lalmalsawmzauva, Pravat Kumar Shit (Eds) *Anthropogeomorphology: Geography of the Physical Environment*, ISSN 2366-8865 ISSN 2366-8873 (electronic), <https://doi.org/10.1007/978-3-030-77572-8>, pp- 547, Springer



11. Saikat Mondal, **Debnath Palit (2021)**, Sustainable Utilization and Eco-Restoration of Wetlands: A Case Study from the Birbhum District of West Bengal, India: In: Rohini Prasad, Manoj Kumar Jhariya, Arnab Banerjee (Eds.) *Advances in Sustainable Development and Management of Environmental and Natural Resources (Economic Outlook and opinions, Volume 1*, 978-1-77491-036-8(hbk), 978-1-77491-037-5(pbk), pp-193, Apple Academic Press, USA
12. Madhabendra Sinha, Anjan Ray Chaudhury, **Debnath Palit (2021)**, FDI, Trade and CO2 Emissions in Asia-Pacific Economics, In: Rohini Prasad, Manoj Kumar Jhariya, Arnab Banerjee (Eds.) *Advances in Sustainable Development and Management of Environmental and Natural Resources (Economic Outlook and opinions, Volume 1*, 978-1-77491-036-8(hbk), 978-1-77491-037-5(pbk) Apple Academic Press, USA
13. Saikat Mondal, **Debnath Palit (2021)**, Ecological Intensification for Sustainable Agriculture and Environment in India. In: M.K. Jhariya, R. S. Meena and A. Banerjee, (Eds.) *Ecological Intensification of Natural Resources for Sustainable Agriculture*, ISBN: 978-981-33-4203-3, pp. 215-254. Springer. [https://doi.org/10.1007/978-981-33-4203-3\\_7](https://doi.org/10.1007/978-981-33-4203-3_7)
14. Saikat Mondal, **Debnath Palit (2021)** Agroecology for sustainable food system and Footprint mitigation In: A. Banerjee, R.S. Meena, M.K. Jhariya, and D.K. Yadav (eds.) **Agroecological Footprints Management for Sustainable Food System eBook ISBN 978-981-15-9496-0 Hardcover ISBN 978-981-15-9495-3** pp69-114 Springer.
15. Saikat Mondal, **Debnath Palit (2021)** Challenges in Natural Resource Management and Ecological Sustainability In: M.K. Jhariya, R.S. Meena, A. Banerjee, and S.N.Meena (eds.) *Recent advances in Natural resource management and conservation for environmental sustainability*. Elsevier, Page-29-59
16. Saikat Mondal, **Debnath Palit (2021)** Prospects and implementation of nano technology in Environmental remediation and cleanup. In: M.K. Jhariya, R.S. Meena, A. Banerjee, and S.N.Meena (eds.) *Recent advances in Natural resource management and conservation for environmental sustainability*. Elsevier, Page-271-287
17. Siboram Banerjee, **Debnath Palit. (2020)**, Role of higher plants for air pollution mitigation in urban industrial areas, In: A. Banerjee, M.K. Jhariya, D.K. Yadav and A. Raj (eds.) *Environmental and sustainable development through Forestry and other resources*. ISBN: 978-1771- 888110, pp. 101-136. Apple Academic Press. CRC Press, A Taylor & Francis Group .
18. **Debnath Palit**, Anjan Roy Chaudhury (2020), Contributions of pit lakes to the socio- economic status: a case study of the Raniganj Coal Field Area, In: *Environmental and sustainable development through Forestry and other resources*, ISBN: 978-1771-888110, pp. 167-194. Apple Academic Press. CRC Press, A Taylor & Francis Group.
19. Pallavi Chattopadhyay, Pinaki Chattopadhyay, **Debnath Palit (2020)**, Effect of environmental pollution on health and its prevention: an overview, In: A. Banerjee, M.K. Jhariya, D.K. Yadav and A. Raj (eds.) *Environmental and sustainable development through Forestry and other resources*. ISBN: 978-1771-888110, pp 229-266. Apple Academic Press. CRC Press, A Taylor & Francis Group.
20. Pinaki Chattopadhyay, Pallavi Chattopadhyay, **Debnath Palit (2020)**, Innovative approach to sustainable development and biodiversity conservation, In: A. Banerjee, M.K. Jhariya, D.K. Yadav and A. Raj (eds.) *Environmental and sustainable development through Forestry and other resources*. ISBN: 978-1771-888110, pp. 267-304. Apple Academic press. CRC Press, A Taylor & Francis Group.
21. Saikat Mondal, **Debnath Palit (2020)**, Prospects of Biotechnology for a Sustainable Environment, In: A. Banerjee, M.K. Jhariya, D.K. Yadav and A. Raj (eds.) *Environmental and sustainable development through Forestry and other resources*. ISBN: 978-1771-888110, pp. 305-344. Apple academic press. CRC Press, A Taylor & Francis Group.
22. Sidhartha Shankar Laha, Anjan Ray Chaudhury, **Debnath Palit (2020)** Economic Growth, Export and CO2 Emission in 61 Manufacturing Sector: A Study on BRICS Countries. In: Sengupta P.P (eds.) *Contemporary Issues on Globalization & Sustainable Development (Volume II)* ISBN: 978-81-947932-1-2 Pp 61-77. Serials publications Pvt. Ltd., New Delhi , India
23. **Debnath Palit** , Debalina Kar (2019), A contemplation on pit lakes of Raniganj Coal Field Area: West Bengal, India. In: M.K. Jhariya, A. Banerjee, R. S. Meena and D. K. Yadav (Eds.) *Sustainable Agriculture, Forest and Environmental Management*, ISBN: 978-981-13-6829-5, pp. 517-572. Springer.
24. Debalina Kar, **Debnath Palit. (2019)**, Phytoremediation- an advance approach for stabilization of coal mined wastelands. In: M.K. Jhariya, A. Banerjee, R. S. Meena and D. K. Yadav (Eds.) *Sustainable Agriculture, Forest and Environmental Management*, ISBN: 978-981-13- 6829-5, pp. 573-606. Springer.
25. Mondal, S. and **Palit, D. (2019)**, Effective Role of Microorganism in Waste Management and Environmental Sustainability. In: M.K. Jhariya, A. Banerjee, R. S. Meena and D. K. Yadav (Eds.) *Sustainable Agriculture, Forest and Environmental Management*, ISBN: 978-981-13-6829-5, pp. 485-516. Springer.
26. Debalina Kar, **Debnath Palit. (2019)**, Phytoremediation of Coal Mine Based Wastelands: An Approach in the Raniganj Coalfield (RCF). In: A. Banerjee, M.K. Jhariya, D.K. Yadav and A. Raj (eds.) *Agroforestry and Climate Change: Issues and Challenges* . ISBN: 978-1-77188, pp .239-278. Apple Academic Press. CRC Press, A Taylor & Francis Group.
27. **Debnath Palit (2018)** Evaluating Ecological and Socio-Economic Aspects of Wetlands: An Empirical Study. In: Sengupta P.P (eds.) *Contemporary Issues on Globalization & Sustainable Development (Volume I)* ISBN: 9789386611338 Pp 222-254. Serials publications Pvt. Ltd., New Delhi , India
28. Debalina Kar, **Debnath Palit (2017)**, Species composition and diversity of vegetation developing on an age series of coal mine spoil in an open cast coal field in Raniganj, India. In: D.K. Srivastava (Eds.) *Recent trends in Biological Research*, ISBN: 978-81-932209-0-0, pp. 389-402. Global Academic Society of India, Lucknow, India.

29. **Debnath Palit, Ambarish Mukherjee, Santanu Gupta (2016)**, Bio resources and Socio- economic developmental plans (SDPs) in wetland ecosystem – a case study. In G.K Saha (Eds.) *Indian Wetlands: Crisis and Option*. ISBN: 978-81-85211-98-5, pp.171-185. Astral International Pvt. Ltd. New Delhi, India.
30. **Debnath Palit (2015)**, Ecological appraisal of pitlakes of Raniganj Coal Field (RCF), West Bengal, India: Implications for conservation and sustainable use. In. S.A. Rahaman and K.Das (Eds.) *Globalization, Environment and Sustainable Development-Indian Perspectives*, ISBN: 978-93- 83458-03-5, pp. 28-37. Chandidas Mahavidyalaya, Birbhum, West Bengal.
31. **Debnath Palit, Arnab Banerjee (2015)**, Bio fertilizers-The future of Indian Agriculture. In P. Mallick and Mukherjee (Eds.). *Bio-fertilizer and Bio-manure for sustainable agriculture*. ISBN: 978-81-925800-7-4, pp. 132-153. Damodar Group, Burdwan.
32. **Debnath Palit, Arnab Banerjee (2012)**, Eco-literacy and Sustainable Living. In .C.Gurung and J.B, Bhandari (Eds.) *Eco-conservation And Sustainable Living*. ISBN: 9788184872163, pp. 85- 110.Narosa Publishing House, New Delhi.
33. **Debnath Palit (2009)**, Bioremediation of Environmental Degradation: A sustainable Approach for Eco restoration. In. Datta, J.K. and Ghosh, A.R. (eds) *Environment: Issues and Challenges*. Vol: 3, pp. 107- 114.Academic Staff College, The University of Burdwan.
34. **Debnath Palit, Ambarish Mukherjee (2007)**, Biosensors: an appraisal of its operation and applications. In. Misra and Juwarkar (eds.) *Environmental Biotechnology*. ISBN: 8131301850, pp. 55-82 A P H Publishing Corporation, New Delhi.
35. **Debnath Palit, Ambarish Mukherjee (2006)**, Resourceful aspects of the waste In: Misra, Kim and Saxena (eds.), *Environmental Issues and Options*. ISBN: 8170354315, pp. 49-75. Daya Publishing House, Delhi,
36. Ambarish Mukherjee, **Debnath Palit (2002)**, Wetland perspectives- contemplation. In: G. Tripathy and Y.C. Tripathy (ed.), *Bioresource and Environment*. ISBN: 9788180300080, pp .89-107. Campus Books International
37. Ambarish Mukherjee, **Debnath Palit (2002)**, Biodiversity perspectives –an envision of the scenario. In: G. Tripathy and Y.C. Tripathy (ed.), *Bioresource and Environment*. ISBN: 9788180300080, pp .304-316. Campus Books International.
38. Ambarish Mukherjee, **Debnath Palit (2002)**, Macrophyte diversity in wetland of Birbhum District, West Bengal. Economic Prospect. In: L.K. Dadhich and A.P.Sharma (eds), *Biodiversity, Strategies of Conservation*. ISBN: 817648315X, pp..245-263. APH Publishing Corporation, New Delhi.
39. Ambarish Mukherjee, **Debnath Palit (2001)**, Eco restoration of Mined Wasteland: An overview. In: A. K. Roy and S. K. Varma (eds), *Wasteland Management and Environment*. ISBN: 978817233236X, pp. 181-188. Scientific Publishers (India)

## Conference Proceedings

---

1. Debapriya Dutta, **Debnath Palit (2020)**, Study on floral composition of Dalurbandh :a freshwater pit lake in Raniganj Coal Felds, West Bengal, India. *Proceedings of International Biodiversity Congress (IBC 2018) Volume IV* | pp. 1-5
2. Santanu Gupta, **Debnath Palit, Ambarish Mukherjee (2014)**, Comprehensive restorative approach for conservation and management of wetlands in Birbhum district, West Bengal, India. In A.K. Sanyal, S.K Gupta, & S. Manna. *Biodiversity and Livelihood*. ISBN: 978-93-92258- 17-9
3. Aparajita Mukherjee, **Debnath Palit (2014)**. Studies on the livelihood dependency of local stakeholders on wetland bio resources in Bankura district, West Bengal, India. In A.K. Sanyal, S.K Gupta, & S. Manna. *Biodiversity and Livelihood*. ISBN: 978-93-92258- 17-9, pp. 401-409
4. Debalina Kar, **Debnath Palit (2014)**, Ecological appraisal of Pit lakes of Raniganj coal field (RCF), West Bengal, India: Implications for Conservation and Sustainable use. . In A.K. Sanyal, S.K Gupta, & S. Manna. *Biodiversity and Livelihood*. ISBN: 978-93-92258- 17-9, pp. 395-400
5. Partha Sarathi Basu, **Debnath Palit, Arnab Banerjee (2011)**, Joint Forest Management –a new vista towards natural forest management. *Indian Science News*. Pp. 135-142.
6. Aditi Pal, Arnab Banerjee, **Debnath Palit (2011)**, Precision Farming –a new vista towards natural resources management. *Indian Science News*. pp. 131-134.
7. Sanjib Das, **Debnath Palit (2012)**, Studies on plant species diversity and pedological characteristic of Rambhi Forest Beat, Senchal East Zone Forest Range, Darjeeling. In. G.G. Maiti and S. Mukherjee (Eds.) *Multidisciplinary Approaches in Angiosperm Systematics*. ISBN: 978-93-5067-867 -1, pp-532-540. Kalyani University, Kalyani.
8. Sulochana Gurung, **Debnath Palit (2007)**, Medicinal plant lore among Lepchas in Darjeeling District, West Bengal, India. Proc. National Symposium on Medicinal and aromatic plants for Economic Benefit of Rural People (MAPER) Pp 37-41. Ramakrishna Vivekananda Mission Institute of Advanced Studies, Kolkata.

## Guidance of M.Sc. Dissertation Projects

### *University of North Bengal*

Topic of Dissertation	Academic Session
Study of wall flora of Darjeeling Govt. College campus and adjoining areas	2002-2003
Ecological study of Tea Garden Weeds in Happy Valley Tea Estate Darjeeling	2003-2004
Phytosociology and soil characteristics in Senchal East Zone Forest Range, Darjeeling.	2004-2005
Vegetation vis-a-vis soil of Gaddikhana Forest Areas, Darjeeling.	2004-2005
Ecological study of Rajmata Dighi, a wetland in Cooch-behar District, West Bengal.	2004-2005
Ethno botanical study with special reference to some tribal communities in Darjeeling Hill areas.	2004-2005
Phytosociology and pedological characteristics of forest soils of Rambhi Forest Beat, Senchal East Zone Forest Range, Darjeeling.	2005-2006
Ecological study on the plant diversity and influence of vegetation on the properties of soil in Rangirum Forest Beat, Senchal West Zone Forest Range, Darjeeling.	2005-2006
Ecological study on Chatterjee Dighi, a wetland in Falakata, Jalpaiguri	2006-2007
Ethnobotanical implications of plants among Lepchas in East Sikkim.	2006-2007
Eco-taxonomic study on <i>Polygonum</i> in different altitudes ranging from tropical to temperate realms.	2006-2007
Environmental Impact assessment from a copper mining industry in Roogpu, Sikkim.	2006-2007

### *The University of Burdwan*

Topic of Dissertation	Academic Session
The Effect and Evaluation of Toxicity of Municipal sewage Water on Colonization Rate and Community Structure of Zooplankton : A Microcosm Study	2007-2009
Seasonal & Temporal Variation of Entomofaunal Diversity with Reference to Different Light Condition	2007-2009
People's Dependency on Bioresources A Socio-Economic Survey in Durgapur Subdivision of West Bengal	2007-2009
The diversity of Aquatic Macro invertebrates as an indicator of water quality and ecosystem health: A case study for Durgapur, West Bengal, India.	2008-2010
A study on the avifaunal diversity of Satragachi wetland (Ramsar site) West Bengal India.	2008-2010
Comparative study on the aquatic macrophyte diversity in lentic and lotic ecosystem from urban areas of Durgapur, West Bengal, India	2008-2010
A preliminary study on the aquatic macro invertebrate diversity in different lentic and lotic environments from Durgapur, West Bengal, India	2008-2010
A study on the zooplankton diversity in relation to physicochemical parameters of different lentic and lotic environments from Durgapur, West Bengal, India.	2008-2010

### *Kazi Nazrul University*

Topic of Dissertation	Academic Session
Composition, diversity and economic prospects of plants in and around Dalurbandh, a fresh water Pit lake in Raniganj Coal Field Areas (RCF), West Bengal	2017-2018
Floristic composition and vegetation structure in Roopganj Forest Beat, Durgapur Forest Range, Burdwan Forest Division, West Bengal	2018-2019
Assessment of vegetation structure and estimation of Carbon storage potential of dominant species in Pardaha Natural Forest, Durgapur Forest Division, West Bengal	2018-2019