



Curriculum Vitae

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Department of Biotechnology

Maharaja Sriram Chandra Bhanja Deo University

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Nationality: **Indian**; Marital Status: **Married**;

Born on **20-12-1968**; Category: **General**;

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Objective: To exhibit my talents in a globally competitive environment on challenging assignments that shall yield the twin benefits of the job satisfaction and a steady-paced professional growth

Summary: Proficiency in techniques involving microbial isolation, characterization and maintenance of pure culture. Hands on experience in organic differentiation, micropropagation, cell suspension etc. Good knowledge of cyanobacterial application as biofertilizer, biochemical and limnological estimation. Major strengths include:

- **Microbial** isolation, characterization and maintenance of pure culture.
- **Cyanobacterial** isolation, characterization, maintenance of axenic culture, Mass multiplication and utilization as **biofertilizer**.
- **Limnological** estimation of Physicochemical and Biological parameters.
- **Biochemical** estimation of protein, Carbohydrate, Lipid, Chlorophyll, Carotenoid, Nitrogen fixation.
- **Tissue Culture** involving organic differentiation, micropropagation, cell suspension, single cell culture, protoplast isolation.
- Good knowledge and experience in **Molecular Biology** involving genomic DNA isolation, plasmid DNA isolation, restriction digestion, isolation of RNA, competent cell preparation and transformation.
- Excellent presentation and communication skills

Education: 1997 – Utkal University – Bhubaneswar (Orissa, India)**Doctor of Philosophy** in Botany

Thesis Title: Toxicity of Furadan (Carbofuran) to Nitrogen-Fixing Blue-Green Algae (Cyanobacteria) of Local Rice Fields

1991 – Utkal University – Bhubaneswar (Orissa, India)**Master of Science** in Botany, First class with 70.3%**1989 – Utkal University – Bhubaneswar (Orissa, India)****Bachelor of Science (Hons)** in Botany, First Class Distinction with 65.3%**1986 – CHSE – Orissa****+2 Science**, Second Class with 55%**1984 – BSEB – Patna (Bihar)****Matriculation**, First Class with 74.3%**Research:****Doctoral thesis: Title: Toxicity of Furadan (Carbofuran) to Nitrogen-Fixing Blue-Green Algae (Cyanobacteria) of Local Rice Fields**

The objective of this work is to screen out pesticide tolerant diazotrophic cyanobacterial species of rice fields for mass multiplication and subsequent application as biofertilizer. Initially twenty two species are selected for screening of pesticide tolerance and out of this, two species of *Anabaena* (*A. Fertilissima* and *A. Variabilis*) are chosen for detailed study. Furadan (Carbofuran 3%G and 75DB) was taken as the test pesticide, because it is predominantly used in rice fields to kill rice pests and also used in mass multiplication tanks of cyanobacteria to eradicate pests. The detail study parameters undertaken are growth, chlorophyll-a content, carotenoid content, cell protein content, heterocyst frequency, amino acid content and total nitrogen content. The toxicity of pesticide on the test organisms were studied at different conditions like the short time exposure, pH, light, inoculum size, sugar and hormone. From repeated experiments on screening test, it is found that the cyanobacteria which possess sheath have more tolerance capacity to pesticide than the sheathless form. This is because of the fact that the sheath is acting as a barrier which is impervious to the test chemical. Further, at different pH conditions of the medium it was found that, the toxicity of Furadan was ameliorated significantly at alkaline pH range than the acidic pH range by the test organisms. The toxic effect of Furadan was considerably removed when the experimental organisms were incubated under high light intensity as compared to low light intensity. The population size of cyanobacteria also altered the toxicity of Furadan. The exogenous sugars and hormones alleviate the toxic effect of the pesticide on these non-target organisms. In conclusion, it can be said that, various factors like the field conditions, the field application rate of the pesticide and the sensitivity of a particular population size of the organism towards a particular pesticide dose, should be taken into consideration while evaluating the pesticide toxicity to rice field cyanobacteria.

Thesis Supervisor: Prof. S. P. Adhikary

Professor and Head (Retd.)

Centre for Biotechnology

Viswa Bharati University, Santiniketan.

Former Vice-Chancellor, Fakir Mohan

University, Balasore

Thrust Area of Research

i) Our Algal Biotechnology laboratory at MSCB University (Erstwhile North Orissa University) is actively engaged in isolation microalgae and cyanobacteria across Odisha coast, maintained in unialgal condition, optimizing there growth condition, studying there protective mechanism (biochemical & molecular) to salinity, heavy metals, P^H , UV irradiation etc. In addition to this, antimicrobial, antioxidant and anticancer study is also being carried out with an objective to isolate novel bioactive molecules for several commercial exploitation in food, fodder and pharmaceutical industries and to set up a **Microalgal Repository Unit**.

ii) Further our group is also engaged in Isolation of Microalgae and Cyanobacteria from different rice fields in and around Mayurbhanj district, established a germplasm conservation unit, optimizing there growth condition, interaction with agrochemicals, studying there nitrogen fixing ability with a target to use them as **Biofertiliser**.

iii) Additionally our Research group is engaged in Collecting Lichens from different floristic zones of Odisha and in particular from Similipal Biosphere Reserve which is in close proximity to the University, study their distribution pattern, phytochemical constituents, antimicrobial, antioxidant and anticancer activity. Further, our group also develops expertise to isolate the phycobiont component from Lichens found in different protected areas in Odisha and to isolate bioactive compounds for commercial applications and to establish a **Lichen Herbarium Unit**.

Publications:

Journals

1. **B. Rath** and S. P. Adhikary (1994). "Relative Tolerance of Several Nitrogen-Fixing Cyanobacteria to Commercial Grade Furadan (Carbofuran, 3%)", ***Indian journal of experimental biology.***, Vol. 32, pp. 213-215.
ISSN: 0019-5189, IF-1.295, UGC-No.20769
2. N. Swain, **B. Rath** and S. P. Adhikary (1994). "Limnological Investigation of Two Temple Tanks of Puri-India", ***Journal of Indian Botanical Society.*** Vol. 73, pp. 105-109.
ISSN: 0019-4468.
3. N. Swain, **B. Rath** and S. P. Adhikary (1994). "Growth Response of the Cyanobacterium *Microcystis aeruginosa* to herbicides and pesticides", ***Journal of Basic Microbiology.(Germany)*** Vol. 34, pp. 197-204.
ISSN: 1521-4028, IF-1.198, UGC-No.21565
4. **B. Rath** and S. P. Adhikary (1995). "Toxicity of Furadan to Several N_2 Fixing Cyanobacteria from the Rice Fields of Coastal Orissa", ***Tropical Agriculture (Trinidad, UK)***, Vol. 72, pp. 80-83.
ISSN: 0041-3216

5. **B. Rath** and S. P. Adhikary (1996). "Effect of pH, Irradiance and Population Size on the Toxicity of Furadan (Carbofuran, 75 DB) to Two Different Species of *Anabaena*", ***Biologia Plantarum (Czech Republic)***, Vol. 38, pp. 563-570.
ISSN: 0006-3134, Impact Factor-1.692. UGC-No.14682
6. H. Padhi, **B. Rath** and S. P. Adhikary (1997). "Tolerance of Several Species of Rice Field Cyanobacteria to NaCl", ***Biologia Plantarum (Czech Republic)***, Vol. 40(2), pp. 261-268.
ISSN: 0006-3134, Impact Factor-1.692. UGC-No.14682
7. R.R. Mishra, H.N. Thatoi, **B. Rath**, R.K. Mishra and R.C. Mohanty (2007). "Physico-chemical analysis of River and Aquaculture Pond Water from Bhitarkaniaka Mangrove Ecosystem of Orissa", ***Research Journal of Biotechnology*** Vol. 2 (2), pp.14-19.
ISSN: 0973-6263, IF-0.174.
8. **B. Rath**, D. Rath and B. Dhal (2007). "Toxicity of Furadan (carbofuran, 3%G) on rice field cyanobacteria *Nostoc Commune*". ***Indian Journal of Environment & Ecoplanning***. Vol. 14 (3) pp. 725-728.
ISSN: 0972-1215.
9. R.R. Mishra, **B. Rath** and H.N. Thatoi (2008). "Water Quality Assessment of Aquaculture Ponds Located in Bhitarkanika Mangrove Ecosystem, Orissa, India", ***Turkish Journal of Fisheries and Aquatic Sciences***, Vol.8, pp-71-77.
ISSN: 1303-2712, IF-1.07, UGC-No.35210.
10. R.R. Mishra, T. K. Dangar, **B. Rath** and H.N. Thatoi (2009). "Characterization and evaluation of stress and heavy metal tolerance of some predominant Gram negative halotolerant bacteria from mangrove soils of Bhitarkanika Orissa,India". ***African Journal of Biotechnology*** Vol. 8 (10), pp. 2224-2231.
ISSN: 1684-5315, IF-0.573.
11. S. Bal, R.R. Mishra, **B. Rath**, H.K. Sahu and H.N. Thatoi (2009). "Characterisation and extracellular enzyme activity of predominant marine *Bacillus* sp. isolated from Orissa coast, India". ***Malaysian journal of microbiology*** Vol 5(2), pp.87-93.
ISSN: 2231-7538, UGC-No.5770
12. I. Priyadarshani, H.N. Thatoi and **B. Rath** (2011). "Antibacterial properties of extracts in cyanobacteria isolated from coastal region of Orissa,India". ***International journal of current research and review***. Vol.3(3) pp..81-87.
ISSN 0975-5241.
13. D. Sahu, I. Priyadarshani and **B. Rath** (2011). "Modifyng effect of Indole-3-AceticAcid on Furadan Toxicity on two species of rice field Cyanobacteria." ***International journal of current research***,.Vol.3(11),pp.299-303.
ISSN 0975-8330
14. I. Priyadarshani, D. Sahu and **B. Rath** (2011). "Microalgal Bioremediation: Current Practices and Perspectives" ***Journal of Biochemical Technology***. Vol 3(3), pp.299-304.
ISSN: 0974-2328, IF-0.96

15. **B. Rath** (2011). "Nanofood for Healthier life" *Agrobios Newsletter*, Vol.IX (12), pp.8-9.
ISSN: 0972-7027
16. Priyadarshani, D. Sahu and **B. Rath** (2012). "Algae in Aquaculture" *International journal of health sciences and research* Vol.2 (1), pp.108-114.
ISSN: 2249-9571.
17. Indira Priyadarshani and **Biswajit Rath** (2012). "Algal Bloom" *Agrobios News Letter*.
Vol.X(08), pp.17-18.
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18. Indira Priyadarshani and **Biswajit Rath** (2012). "Algaculture"; **Science Reporter (NISCAIR)** Vol.49 (12), pp.53-55.
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23. **Biswajit Rath** and Indira Priyadarshani (2012). "Algal Toxins –An Emerging Concern to Aquaculture" *Journal of Biotechnology and Biotherapeutics* Vol 2(10), pp.1-9, 2012.
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24. D. Sahu, I. Priyadarshani and **B. Rath** (2012). "Cyanobacteria- As Potential Biofertilizer" *CIB Tech Journal of Microbiology* Vol. 1 (2-3), pp.20-26.
ISSN: 2319-3867
26. I. Priyadarshani, N. Thajuddin and **B. Rath** (2012). "Salinity induced changes in biochemical parameters of four species of Cyanobacteria collected from Odisha coastline, India". *International Journal of Advanced Life Sciences* Vol.4, pp.28-35.
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27. Priyadarshani and **B. Rath** (2012). "Effect of Heavy Metals on Cyanobacteria of Odisha Coast" *Journal of Microbiology and Biotechnology Research*. Vol.2 (5), pp.665-674.
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28. Indira Priyadarshani and **Biswajit Rath** (2012). "Commercial and industrial application of microalgae-a review". *Journal of algal biomass utilization*. Vol.3 (4), pp.89-100.
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29. **Biswajit Rath** (2012). "Microalgae: Nature's promising tool for Sequestration of CO₂". *Anvesa*, (research journal of Fakir Mohan University), Vol. 7,(2), pp.82-91.
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33. D. Sahu, A. K. Bastia and **B. Rath** (2015). "Toxicity of Organophosphorus pesticides on ricefield Cyanobacteria". *International Journal of Geology, Agriculture and Environmental Sciences*, Vol. 3 (6) pp.6-10.
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38. **Biswajit Rath**, Satyabrata Dash, Bijayananda Sahoo and Surjendu Kumar Dey (2017) "Application of Microalgae in wastewater treatment". *Anvesa* (Interdisciplinary Research Journal of Fakir Mohan University) Vol. 12 (1&2), pp.31-44.
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40. **Biswajit Rath** and Sonalin Rath (2018). "Bioremediation of industrial effluents using marine cyanobacteria of Odisha Coast", *African Journal of Biotechnology* Vol. 10(10) DOI: 10.5897,2018 ISSN: 1684-5315
41. Patra J, **Rath, B** and Dhal N. K (2018). "Bioethanol production from Banana pseudostem by simultaneous saccharification and fermentation process using *S. cerevisiae*". *Asian Jr. of Microbiology, Biotechnology and Environmental Sciences* Vol. 20(3) pp.305-311. ISSN: 0972-3005, UGC-No.8799
42. Jyoshnamayee Patra' Subhashree Pattnayak, Nabin kumar Dhal and **Biswajit Rath** (2018). "Bioconversion of Banana Pseudostem to Bioethanol" *Indian journal of environmental protection*, 38(8) pp.687-691. ISSN: 0253-7141, UGC- No. 20768
43. Jyoshnamayee Patra, Arpita Pati, Nabin Kumar Dhal and **Biswajit Rath** (2018). "Assessing feasibility of Ethanol production from Agricultural wastes: A step towards waste management and sustainable utilization" *Research journal of chemistry and environment*. Vol-22 (8), pp.14-18. ISSN: 2248-9649, UGC-No.10451
44. Rupali Rajaswini, Sasmita Panda, **Biswajit Rath**, Sashibhushan Dash (2018). "Clinicopathological study of Cervical Cancer in Acharya Harihar Regional Cancer Centre, Cuttack" *Journal of Advance Nanobiotechnology* Vol. 2(5), pp.1-8. ISSN: 2581-3234
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46. Satyabrata Dash, Sabyasachy Parida and **Biswajit Rath** (2019) "Antimicrobial Activities of Some Selected Marine Cyanobacteria Isolated from Bay of Bengal of Odisha Coast" *International Journal of Pharmacy and Biological Sciences*, Vol.9 (3) pp.196-200. ISSN: 2321-3272, UGC- No.46322, IF-0.88
47. J.K. Sahu, S.K. Dash, B. Nayak, P. Pradhan and **B. Rath** (2020) "Combine effect of recommended dose of commercial preparation of neem (Neemet Plus) and various concentration of press mud on growth, chlorophyll-a and nitrogenase activity of several species of cyanobacteria" *Indian Hydrobiology*, Vol. 19(1&2), pp.241-248. ISSN: 0971-6548, UGC-CARE LIST-II

48. S. Panda, Manoj K. Dash, Pravat K. Thatoi, J. Dandapat and **B. Rath** (2021) "Oxidative stress correlates well with markers of metabolic syndrome in clinically hypothyroid cases: a hospital based study in a remote tribal district" **RUDN Journal of Medicine**. Vol.25(1):pp.55-65. doi: 10.22363/2313-0245-2021-25-1-55-65
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51. Satyabrata Dash, Sabyasachy Parida, Bijayananda Sahoo and **Biswajit Rath** (2022) "Potential antimicrobial activity of cyanobacteria *Oscillatoria boryana* and *Oscillatoria pseudogeminata* isolated from Odisha coast, India" **Bioscience Biotechnology Research Asia**, 19(1), pp.173-181.
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66. Shubham Pradhan, Satyabrata Dash, Bijayananda Sahoo and Biswajit Rath (2025). "Assessment of lichen metabolites as possible natural antioxidant and antimicrobial agents". *The Journal of Phytopharmacology*, 14(6):476-492. doi: www.phytopharmajournal.com
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Book:

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2. "Green Technology: An innovative solution for Environmental Sustainability", (2025). S. K. Samantarai, **B. Rath**, J. Rout, S. Das, D. Acharya and S.K. Sahu. DOI: <http://doi.org/10.28921/GTISES.1.2025> ISBN: 978-93-93602-40-8

Edited Book:

1. H. K. Sahu, **B. Rath**, B. K. Mohanta and D. Nayak (2024) "Past, Present and Future of Similipal" Newredmars Education Pvt Ltd. doi :10.28921/nrme.book.PPFS.2024.1.246 ISBN:978-93-93620-94-1
2. H. K. Sahu, **B. Rath**, B.K. Mohanta and D. Nayak, S Rath, A.K. Mallik and R.K. Mishra (2025) "Biodiversity Conservation and Biresource Utilisation for sustainable Development" Newredmars Education Pvt Ltd. doi:<http://doi.org/10.28921/BCBUSDHA.261.2025> ISBN:978-93-93620-90-3

3. **B. Rath**, S. K. Nayak, S. K. Sahu and G. Dhangdamajhi, G. Dora and R. Pradhan (2025) “Suvenir Alumni meet-2025, Department of Biotechnology” Newredmars Education Pvt Ltd. doi :<http://doi.org/10.28921/nrmc.book.AM2025.1.247> ISBN:978-93-93620-74-3

Chapter in Books

1. **B. Rath** and I. Priyadarshani (2010). “Microalgae and its Potential Applications in biotechnology.” **Microbial Biotechnology**. edited by Mishra, B,B and Thatoi,H.N, APH publishing corporation, New Delhi, pp.66-89. Vol.I, ISBN 978-81-313-0849-3
2. **Biswajit Rath** (2016). Study on bioprospecting cyanobacteria of Odisha, India, ICER/176/LS/O/16, 8th International Congress of Environmental Research, Luebeck, Germany, Jerad Publications, Under aegis of Global earth Society for Environmental Energy and Development, pp.43. ISBN: 978-81-909379-8-6
3. Jena, H., **Rath, B**, Halder, S.K. and Mondal, K.C., (2017).“Structural, Nutritional and Antimicrobial composition of Royal Jelly”. **Recent Advances in Biotechnology**. Ed. V. Rai and P.Kumar. *Shree Publishers & Distributors*, New Delhi-110 002,Vol.1,pp.72 - 84. ISBN: 978-93-84863
4. Satyabrata Dash, Sabyasachy Parida, Bijayananda Sahoo and **Biswajit Rath** (2022) “The promising future of microalgae as biofuels and valuable bioproducts” in:“**Microalgae: Next-generation feedstock for biorefineries**”,ed:Dr.Pradeep Verma,*springer* publications,vol.1,pp.29-42,2022. doi: <https://doi.org/10.1007/978-981-19-0793-7> ISBN: 978-981-19-0792-0
5. Sabyasachy Parida, Satyabrata Dash, Bijayananda Sahoo, Subham Pradhan, Keshab Chandra Mondal and **Biswajit Rath** (2022) “Algal Biomass: Potential Feedstock for Value Added Molecules” edited book “**Prospects and Potential of Algal Biomass**” by D. Ghosh, AAPS-Taylor & Francis-CRC Press (accepted, in press)
6. Satyabrata Dash, Shubham Pradhan, Bijayananda Sahoo, Sabyasachy Parida and **Biswajit Rath** (2025) “The potential of Algae from marine sources for future large-scale application to meet food, feed and environmental sustainability issues” by Mehariya, Kumar, Bhatia & Karthikeyan. **Algal Biorefinery: A Sustainable Solution for Environmental Applications** (Elsevier), [http/ doi.org/10.1016/B978-0-443-23967-0.00001-2](http://doi.org/10.1016/B978-0-443-23967-0.00001-2). ISBN: 978-0-443-23697-0
7. Shubham Pradhan, Bijayananda Sahoo, Satyabrata Dash and **Biswajit Rath** (2025) “Bio Prospective lichens from Similipal Biosphere Reserve” in *Biodiversity Conservation and Biresource Utilisation for sustainable Development* by H.K.Sahu, B.Rath, B.K.Mohanta and D.Nayak, S Rath, A.K.Mallik and R.K.Mishra, doi :<http://doi.org/10.28921/BCBUSDHA.261.2025> ISBN:978-93-93620-90-3

Conference Proceedings:

1. **B. Rath** and S. P. Adhikary, "Toxic Effect of Commercial and Analytical Grade Furadan on the Growth and Nitrogen Fixation on Two Species of *Anabaena*", *In Proc. Symposium on Recent Advances in Phycology*, CAS in Botany, Madras Univ. Eds., V. N. Raja Rao, July 11-15, 1994.
2. **B. Rath** and S. P. Adhikary, "Growth Response of Two Species of *Anabaena* to Commercial and Analytical Grade Furadan", *In Proc. Indo-German Conference at CCS Haryana Agricultural University, Hisar*, Eds. S. K. Arora, R. K. Behl, P. Tauro, U. J. Joshi, Vol. III, pp. 151-155. 1995.
3. I. Priyadarshani and **B. Rath**. "Effect of different culture media on growth and pigment content on marine cyanobacteria of Orissa Coast". *In proc. Int conf on Algal biomass, resource and utilization*, KIA, Chennai, Eds. V. Krishnamurthy, pp.117-122, 2010.
4. I. Priyadarshani and **B. Rath** and S.K. Dey "Microalgae: A potential source of biofuel for the next generation " *In proc. national seminar on Biofuel: Its promises and prospects in fuel security*, F.M. University, Balasore, Eds. S.K. Dey, pp.60-67, 2011.
5. Sabyasachi Parida, Satyabrata Dash, and **Biswajit Rath**, "Biotechnological potential marine microalgae and cyanobacteria-a review", proceedings of MBB, editor. Dey, SK, Fakir Mohan University, 2018.
6. S. Dash, S. Parida and **B. Rath**, "Antimicrobial activity of certain marine cyanobacteria from Talasari coast, Odisha", in: **Biotechnology for Sustainable Utilization of Bioresources** ed. HN Thatoi and SK Nayak, Astral International Pvt. Ltd, Daya Publishing House, New Delhi, 37:399-408, 2019. ISBN: 978-93-88982009(HB)
7. Satyabrata Dash, Sabyasachy Parida, Bijayananda Sahoo, Tapan Kumar Panigrahi and **Biswajit Rath**. Potential antimicrobial activity of marine Cyanobacteria isolated from Balasore coast, Odisha, ed: H N Thatoi, *In tech publication*, 37: 237-247 (2023).
8. Shubham Pradhan, Satyabrata Dash, Bijayananda Sahoo and **Biswajit Rath**. Estimation of phytochemicals and evaluation of antioxidant and antimicrobial potential of lichens from Similipal Biosphere Reserve. *Past Present and Future of Similipal*, 9:169-186 (2024).
9. Bijayananda Sahoo, Shubham Pradhan, Satyabrata Dash, sabyasachi Parida and **Biswajit Rath**. Distribution of lichens in various floristic zone of Similipal Biosphere Reserve. *Past Present future of Similipal*, 10:187-210 (2024).

Popular Articles:

1. **Biswajit Rath** (2007) "Cyanobacteria as biofertilizer for Rice". **The Banani**, North Orissa University Magazine, pp.90- 91,
2. Harekrushna Jena and **Biswajit Rath** (2014) "When our Own Hairs become our Enemy" **Science Horizon (Odisha Bigyan Academy)**, Vol.7, pp.30-32.
3. **Biswajit Rath** (2015) "Pesticides and Health Hazards" **Sujala Suphala**, Annual Seminar Bulletin, Department of Environmental Science, Fakir Mohan University.

4. Jena, H. and **Rath, B** (2015). "Microbiology Quiz". *Science Reporter (CSIR-NISCAIR)*, Vol.52 (2), pp.59
ISSN: 0036-8512.
5. Rath, B, and Jena, H (2015). "Ozone Depletion: Causes and Consequences". *Science Horizon, (Odisha Bigyan Academy)*, Vol. 5 (2), pp.29-34.

Seminar/conferences attended and presented papers

International Conference (Outside the country)

1. Title: "Study on Biotechnological potential Cyanobacteria of Odisha Coast"
Mode of presentation: Oral
Name & Venue: Asian Plant Science Conf.(Society for Applied Biotechnology),
Lumbini, **Nepal**.
Date: 1-3 Nov. 2014
2. Title: "UV-B induced biochemical changes on cyanoacteria of Odisha coast"
Mode of presentation: Oral
Name & Venue: International Multidisciplinary research Conference (International Benevolent Research Foundation) at Asian Institute of Technology, Bangkok,
Thailand.
Date: 19-22 Nov., 2018.
3. Title: "Biotechnological Potential marine Cyanobacteria isolated from Odisha, India"
Mode of presentation: Oral
Name & Venue: International Conference on Science Technology and Management,
Singapore.
Date: 2nd June, 2019.
4. Title: "Algal Biotechnology-Hypes and Hopes"
Mode of presentation: Oral
Name & Venue: Institute of Fundamental and Applied Research, National Research University (TIAME), **Tashkent, Uzbekistan**.
Date: 16 - 17May, 2024

International Conference (Inside the country)

1. Title: "Toxic Effect of Commercial and Analytical Grade Furadan on the Growth and Nitrogen Fixation on Two Species of *Anabaena*",
Mode of presentation: Oral
Name & Venue: "International Symposium on Recent Advances in Phycology in Connection with T.V. Deslkachary's 75th Birth Anniversary", at Centre of Advance Study in Botany(CAS), University of Madras.
Date: 11-15 July, 1994
2. Title: "Effect of exogenous sugars on the amelioration of Furadan toxicity to two different species of *Anabaena*".
Mode of presentation: Poster
Name & Venue: International Conf. On Current trends in Algal Bioresource utilization, Assam University, Silchar, India.
Date: 4 - 6 Dec. 2006

3. Title: "A preliminary study on Biotechnological potentiality of Algae isolated from coastal region of Orissa"
 Mode of presentation: Oral
 Name & Venue: International Conf. on recent advances in contemporary Biology, Environmental issues and sustainable development, S.K.M. University, Dumka, Jharkhand.
 Date: 29-30 Sept. 2007
4. Title: "Effect of different culture media and light intensities on growth and pigment content of two marine cyanobacteria of Orissa coast"
 Mode of presentation: Oral
 Name & Venue: International Conf. on Algal biomass resources and utilization, Krishnamurthy Institute of Algology, Chennai,
 Date: 27-30 July, 2009
5. Title: "Light and Aeration induced changes in Biomass & protein content of Marine cyanobacteria"
 Mode of presentation: Poster
 Name & Venue: 53rd Annual Conference of Association of Microbiologists of India (AMI) and International conf. on Microbial World: Recent Innovations and Future Trends, KIIT University, Bhubaneswar.
 Date: 22-25 Nov. 2012
6. Title: "Microalgae: Nature's CO₂ Scrubber"
 Mode of presentation: Oral
 Name & Venue: International Conf. on Environment and Ecology, ICEE-2017, St. Xavier's college, Ranchi.
 Date: 27-29 March, 2017

National Conference

1. Title: "Toxicity of Furadan on Diazotropic Cyanobacteria of local rice fields"
 Mode of presentation: Oral
 Name & Venue: "XVI Indian Botanical Society" Rani Durgabati University, Jabalpur, M.P
 Date: 3-5 Dec., 1993.
2. Title: "Growth Response of Two Species of *Anabaena* to Commercial and Analytical Grade Furadan".
 Mode of presentation: Oral
 Name & Venue: Natural Resource Management focus Plant Microbe Interaction at CCS Haryana Agricultural University, Hisar.
 Date: 11-13 Dec., 1995.
3. Title: "Modifying Effect of Exogenous Sugars on the Toxicity of Furadan (Carbofuran, 75DB) to two Different Species of *Anabaena*"
 Mode of presentation: Oral
 Name & Venue: National Symposium on Environmental Biotechnology and Biodiversity Conservation (30th Annual Conference of OBS), Sambalpur, Orissa, India,
 Date: 24-25 Dec., 2005.

4. Title: "Enumeration and Characterisation of Microbes from Aquaculture Pond and Mangrove Ecosystem of Bhitarkanika, Orissa", India,
Mode of presentation: Oral
Name & Venue: 7th Asia Pacific Marine Biotechnology Conference, National Institute of Oceanography, Goa, India
Date: 2-5 Nov., 2006
5. Title: "Effect of Furadan on open-air cultivation of *Anabaena variabilis*".
Mode of presentation: Oral
Name & Venue: National Seminar on Microbes in Pharmaceuticals, Food and Agriculture,
Vidyasagar University, Midnapore, India,
Date: 20-21 Dec., 2006
6. Title: "Study on water quality of Aquaculture Ponds in Bhitarkanika Mangrove Forests of Odisha".
Mode of presentation: Oral
Name & Venue: National Conference on Technology for Sustainable Utilisation of Natural Resources, TechSUNR, JITM School of Biotechnology, Paralakhemundi, Orissa, India,
Date: 24-25 Feb., 2007
7. Title: "Antibacterial properties of extracts in Cyanobacteria isolated from coastal region of Odisha"
Mode of presentation: Oral
Name & Venue: National Symposium on vistas in Algal Research. Krishnamurthy Institute of Algology, Chennai
Date: 22-23 Sept., 2007
8. Title: "Effect of Hormones on the toxicity of Furadan on two species of rice field Cyanobacteria".
Mode of presentation: Oral
Name & Venue: National Symposium on Algae in agriculture and food industry. Krishnamurthy Institute of Algology, Chennai
Date: 20-21 Sept., 2008
9. Title: "Response to different concentration of NaCl by two cyanobacteria of Odisha coast"
Mode of presentation: Oral
Name & Venue: National Symposium on Algae in agriculture and food industry. Krishnamurthy Institute of Algology, Chennai
Date: 20-21 Sept., 2008
10. Title: "Antibacterial properties of selected marine cyanobacteria from Odisha coast".
Mode of presentation: Oral
Name & Venue: 33rd Annual Conference of Orissa Botanical Society, Dept. of Botany, North Orissa University, Baripada.
Date: 10-11 Jan., 2009
11. Title: "Bioprospective marine cyanobacteria from Odisha coast"
Mode of presentation: Oral
Name & Venue: Living system in post genomic era, Dept. of Bioscience and Biotechnology, Fakir Mohan University, Balasore
Date: 20-21 Dec., 2011

12. Title: "Effect of UV-B Radiation on two species of Cyanobacteria from Odisha Coast"
Mode of presentation: Oral
Name & Venue: 99th Indian Science Congress, Section XII, New Biology, KIIT University, Bhubaneswar,
Date: 3-7 Jan., 2012
13. Title: "Effect of UV-B radiation on Cyanobacteria of Odisha coast"
Mode of presentation: Oral
Name & Venue: UGC sponsored National Seminar on Phytoresources Utilisation and Conservation, Department of Botany, North Orissa University, Baripada
Date: 24-25 March, 2014
14. Title: "Biotechnological potential cyanobacteria isolated from Odisha coast"
Mode of presentation: Oral
Name & Venue: Recent Trends in stress biology, Dept. of Bioscience and Biotechnology, Fakir Mohan University, Balasore
Date: 26-27 Feb., 2014
15. Title: "UV protective cyanobacteria isolated from Odisha coast"
Mode of presentation: Oral
Name & Venue: Natural Disaster and its mitigation (UGC sponsored), Dept. of Environmental Science, Fakir Mohan University, Balasore
Date: 15-16 March, 2014
16. Title: "Antibacterial activity and biomolecular composition of four marine cyanobacteria from Odisha coast"
Mode of presentation: Oral
Name & Venue: National Symposium on "Emerging trends in Biotechnology: Present scenario and future dimensions", P.G. Department of Biotechnology, Utkal University, Bhubaneswar, India
Date: 29-30 March, 2014
17. Title: "Light and Aeration induced changes in Biomass and Protein content of Cyanobacteria from Odisha coast"
Mode of presentation: Oral
Name & Venue: 17th Odisha Bigyan Congress, S 'O' A University, Bhubaneswar,
Date: 5-6 Dec., 2014
18. Title: "Diversity of microalgae and cyanobacteria across Odisha coast"
Mode of presentation: Oral
Name & Venue: "Biodiversity Assessment, Monitoring and Conservation: Application of Biotechnological Tools" & 39th Annual Conference of OBS ,RPRC, Bhubaneswar.
Date: 22-23 Feb., 2015
19. Title: "Development of green synthesis of nanoparticles to mitigate fish pathogens in aquaculture"
Mode of presentation: Oral
Name & Venue: UGC sponsored National Seminar on "Current approaches in Life Sciences", Dept. of Zoology, M.P.C(A) College, Baripada
Date: 21-22 March ,2015.

20. Title: "Ozone Depletion-A warning of Global Warning"
Mode of presentation: Oral
Name & Venue: UGC sponsored National Seminar on "Plant science and Human welfare", Dept. of Botany, M.P.C (A) college, Baripada.
Date: 27-28 March, 2015
21. Title: "Green Synthesis of Metal and Metal Oxide Nanoparticles for Controlling Microbial Pathogens"
Mode of presentation: Oral
Name & Venue: UGC-SAP sponsored National Seminar on "Challenges and practices of Biodiversity conservation with special reference to Herpetofauna", Dept. of Zoology, North Orissa University, Baripada.
Date: 20-21 Nov., 2015
22. Title: "Antioxidant Potential Microalgae"
Mode of presentation: Oral
Name & Venue: National Seminar on "Science and Technology for Indigenous development in India" ISCA (Bhubaneswar Chapter), KIIT University, Bhubaneswar
Date: 9-11 Dec., 2015.
23. Title: "Cyanobacteria and its novel applications - A preliminary study"
Mode of presentation: Oral
Name & Venue: National Seminar on "Role of Microalgae in developing a sustainable society (RMDSS-2015, 2nd Carbon sequestration seminar-2015), CV Raman College of Engineering, BPUT, Bhubaneswar
Date: 17th Dec., 2015.
24. Title: "Metal based nanoparticles.....and antimicrobial studies"
Mode of presentation: Oral
Name & Venue: National seminar on Microbial Biotechnology-Prospects & Applications, OUAT, Bhubaneswar
Date: 25-26 Dec., 2015
25. Title: "Biotechnological exploitation of Microalgae"
Mode of presentation: Oral
Name & Venue: 40th conference of Orissa Botanical Society, F.M. University, Balasore
Date: 9-10, Feb., 2016
26. Title: "Marine Microalgal Biotechnology-The Way Forward",
Mode of presentation: Oral
Name & Venue: National Conference on "Marine Bioresources of East Coast of India and their Bioprospecting", F.M. University, Balasore
Date: Feb. 10-12 Feb., 2016.
27. Title: "Marine Microalgal Diversity across Odisha Coast"
Mode of presentation: Oral
Name & Venue: Biodiversity Assessment and Wildlife Management" School of Wildlife and Remote Sensing, North Orissa University, Baripada.
Date: 18-19 March, 2016

28. Title: "Conservation of Biodiversity- Facts and Feasibility"
Mode of presentation: Poster
Name & Venue: Conservation of Eastern Ghats, PG Dept.of Zoology in association with GrACE, Utkal University, Bhubaneswar.
Date: 16-17 April, 2016
29. Title: "Antimicrobial activity of Cyanobacteria from Odisha Coast"
Mode of presentation: Oral
Name & Venue: 18th Odisha Bigyan 'O' Paribesh Congress, OUAT, Bhubaneswar,
Date: 3 - 4 Dec., 2016
30. Title: "Cyanbacteria-A potential source of novel bioactive compounds".
Mode of presentation: Oral
Name & Venue: UGC sponsored National Seminar on "Physico chemical characterization of soil: Approaches and Sustainability" Seemanta Mahavidyalaya, Jharpokharia,
Date: 9-10 Dec., 2016
31. Title: "Comparative study on effect of UV-B radiation on marine and freshwater Cyanobacteria from Odisha",
Mode of presentation: Oral
Name & Venue: National Seminar on "Science and Technology for National development in India" ISCA (Bhubaneswar Chapter), KIIT University, Bhubaneswar
Date: 12-13 Dec., 2016
32. Title: "Versatility of Microalgal Biotechnology"
Mode of presentation: Oral
Name & Venue: National conference on "Bioprospecting in Life Sciences Research for Human welfare& 41st Annual conf. of OBS" School of Life Sciences, Sambalpur University, Burla.
Date: 24-26 Dec., 2016
33. Title: "Biological pretreatment technology-a future key for Bioethanol production".
Mode of presentation: Oral
Name & Venue: 104th Indian Science Congress, Section XII, New Biology, S.V. University, Tirupati, New Biology, II-P-14 pp-149
Date: 3-7 Jan. , 2017
34. Title: "Algal Biotechnology"
Mode of presentation: Oral
Name & Venue: National Seminar on "Biotechnology for Sustainable Utilization of Bioresources (BSUB), Department of Biotechnology, North Orissa University, Baripada
Date: 17-19 Feb.2017
35. Title: "Microalgae in Waste Water Treatment"
Mode of presentation: Oral
Name & Venue: "Role of Microalgae in Waste Water Treatment", MDRC, S'O'A University, Bhubaneswar
Date: 21st Feb., 2017

36. Title: "Bioactivity of microalgae in Odisha coast"
Mode of presentation: Oral
Name & Venue: UGC sponsored National Seminar on "Animal Science Research for Mankind", Dept .of Zoology, North Orissa University, Baripada
Date: 24-25 March, 2017
37. Title: "Steam Explosion Pretreatment technology for Ethanol Production: Orange peel Wastes"
Mode of presentation: Oral
Name & Venue: National seminar on National Development Through Sciences and Technology, ISCA-Srinagar chapter pp- held on University of Kashmir, Srinagar
Date: 25-26 Sept., 2017
38. Title: "Bioethanol production from Agricultural waste an alternative approach for energy crisis"
Mode of presentation: Poster
Name & Venue: 19th Odisha Bigyan "O" Paribesh Congress, KIIT University, Bhubaneswar.
Date: 25-26 Nov., 2017
39. Title: "Bioethanol production from Jackfruit waste"
Mode of presentation: Poster
Name & Venue: National Seminar on Reaching the Unreached Through Sciences and Technology, ISCA Bhubaneswar chapter and KIIT Deemed to be University, Bhubaneswar.
Date: 17-18 Dec., 2017
40. Title: "Exploring pretreatment of agricultural biomass for Bioethanol Production"
Mode of presentation: Poster
Name & Venue: 87th Annual session of The National Academy of Science, India, at Pune University, Pune.
Date: 8-10 Dec., 2017
41. Title: "Antioxidant Activity of Cyanobacteria Isolated from Chilika Lake, Odisha"
Mode of presentation: Poster
Name & Venue: 20th Odisha Bigyan 'O' Paribesh Congress, NISER Campus, Khordha
Date: 17-18 Nov., 2018
42. Title: "Bioethanol production from Banana pseudostem by simultaneous saccharification and fermentation (SSF) process using *S. cerevisiae*"
Mode of presentation: Poster
Name & Venue: 106th Indian Science Congress, Lovely Professional University, Punjab.
Date: 3-7 Jan, 2019
43. Title: "Antimicrobial activity of the marine cyanobacterial extracts against selected pathogens"
Mode of presentation: Poster
Name & Venue: National Seminar on "Future India: Science & Technology", ISCA Bhubaneswar and KIIT Deemed to be University, Bhubaneswar.
Date: 1-2 Feb., 2019

44. Title: "Exploring Pre-treatment of Agricultural Wastes for Bioethanol Production"
Mode of presentation: Oral
Name & Venue: National Conference on Green Technology for Clean Environment, Biofuel & Bioprocessing Research Centre, ITER, SOA Deemed to be University, Bhubaneswar.
Date: 20th May, 2019
45. Title: "In vitro evaluation of antimicrobial and antioxidant activity of some selected cyanobacterial extracts against human pathogens"
Mode of presentation: Poster
Name & Venue: National Seminar on "Science & Technology: Rural Development", ISCA Bhubaneswar chapter and KIIT Deemed to be University, Bhubaneswar.
Date: 13-14 Dec., 2019
46. Title: "Microalgae: A source of Bioprospective molecules"
Mode of presentation: Poster
Name & Venue: "Green Technology for Environment and Management" on 44th Annual Conference of Orissa Botanical Society, Dept. of Botany, North Orissa University, Baripada.
Date: 22-23 Jan 2020
47. Title: "Evaluation of antimicrobial and phytochemical potential of Lichens collected from Similipal Biosphere Reserve, India, Odisha"
Mode of presentation: Poster (Offline)
Name & Venue: National Seminar on "Overcoming the Challenges: Role of Science & Technology", 22nd Odisha Bigyan "o" Paribesh Congress, Ravenshaw University, Cuttack.
Date: 20-21 Nov., 2021
48. Title: "Applications of Algal Biotechnology"
Mode of presentation: Poster
Name & Venue: National Seminar on "Development of Microbial Biotechnology in the Pre and Post Independent Era of India", Department of Microbiology, Vidyasagar University
Date: 21st Jan., 2022
49. Title: "Radiation Transport and Applications"
Mode of presentation: Participated (online)
Name & Venue: International SPARC e-Workshop", IIT, Bhubaneswar
Date: 21-22 Jan., 2022
50. Title: "Evaluation of antimicrobial activity of filamentous cyanobacteria from Odisha coast, India"
Mode of presentation: Poster
Name & Venue: National Seminar on "Science & Technology in combating climate change", 23rd Odisha Bigyan "o" Paribesh Congress, Sambalpur University, Burla, Sambalpur.
Date: 26-27 Nov. 2022

51. Title: “Production of Feather Hydrolysate and use of promising N₂ reach fertilizer for rice cultivation”
Mode of presentation: Poster
Name & Venue: National Seminar on “Microbial Diversity and Applications”, Department of Microbiology, Raja Narendralal Khan Women’s College (Autonomous), Midnapore, West Bengal
Date: 17-18 Feb.2023
52. Title: “Microalgal Biotechnology: Aspects and Prospects”
Mode of presentation: Poster
Name & Venue: National Seminar on “Science & Technology for Sustainable World”, ISCA Bhubaneswar chapter and KIIT Deemed to be University, Bhubaneswar.
Date: 14-15 March, 2023
53. Title: “ Diversity of Lichens in Similipal”
Mode of presentation: Oral
Name & Venue: “National Conference on “Past, present and future of Similipal”, Centre for Similipal Studies, Maharaja Sriram Chandra Bhanja Deo University, Baripada (Organizing Secretary)
Date: 22-23 July, 2023
54. Title: “Evaluation of antimicrobial activity of filamentous cyanobacteria from Odisha coast, India”
Mode of presentation: Poster
Name & Venue: National Seminar on Overcoming the Challenges: Role of Science & Technology”, 24th Odisha Bigyan “O” Paribesh Congress, Berhampur University, Berhampur.
Date: 18-19 Dec.2023
55. Title: “Microalgal Biotechnology-Current scenario and future prospects”
Mode of presentation: Oral
Name & Venue: National Seminar on Algal Biodiversity, Biotechnology and Sustainable Applications, Department of Botany, Berhampur University, Berhampur, Odisha
Date: 20 – 21 Aug, 2024
56. Title: “Bioprospecting activity of marine microalgae for commercial applications”
Mode of presentation: Oral- Invited Talk
Name & Venue: 25th Odisha Bigyan O’ Paribesh Congress, IMMT, Bhubaneswar
Date: 29-30 Nov 2024
57. Title: “Marine microalgae-Role in Blue Biotechnology towards sustainable solution”
Mode of presentation: Oral- Invited Talk
Name & Venue: National Conference on “Microbial technology for Health, Environment and Employment”, Dept. of Microbiology, Vidyasagar University, Midnapore, WB
Date: 07-09 March 2025

State level conference

1. Title: Education in Present scenario: Prospects and Challenges
Mode of presentation: Oral
Name & Venue: “U.G.C. Sponsored Seminar on Education during 50 years of Independence, Problems and Prospects” at Kharashrota Mahavidyalaya, Singhpur, Jajpur, Odisha.
Date: 17th Jan., 1998
2. Title: Higher Education: Quality Index
Mode of presentation: Oral
Name & Venue: “National level Seminar on “Problems relating to Learning Achievement and Quality of Higher Education” at Kharashrota Mahavidyalaya, Singhpur, Jajpur, Odisha.
Date: 28-29 March, 1999.
3. Title: Ethnobotanical studies in Similipal and its Importance
Mode of presentation: Oral
Name & Venue: UGC sponsored state level seminar on the need of ethnobotanical studies of Similipal in the District of Mayurbhanj, Odisha, B. B. College, Baiganbadia, Mayurbhanj.
Date: 1-2 Feb., 2012.

University/Regional level conference

1. Title: “Diversity of Marine Cyanobacteria of Odisha Coast”
Mode of presentation: Oral
Name & Venue: INDO-US workshop on Conservation of Biodiversity in Similipal Biosphere Reserve, North Orissa University, Baripada.
Date: 14-15 Nov., 2005
2. Title: “Growth response of Cyanobacteria in different culture media”
Mode of presentation: Oral
Name & Venue: National workshop on Similipal Biosphere Reserve: Interdisciplinary Perspectives, North Orissa University, Baripada.
Date: 4-5 Sept., 2006
3. Title: “Freshwater algae and their Utilization”
Mode of presentation: Oral
Name & Venue: “Postgraduate Department of Biotechnology, Utkal University, Bhubaneswar”
Date: 18-19 March., 2007
4. Title: “Microalgal technology-A way forward”
Mode of presentation: Oral
Name & Venue: “Emerging Green technologies and Advances in Computing” MITS school of Biotechnology, Bhubaneswar
Date: 13th Feb., 2015

Faculty Development Programme (FDP) attended

1. Title: “Marine Research and Aquaculture”
Venue: Department of Biotechnology, School of Bio & Chemical Engineering, Sathyabama Institute of Science and Technology, Chennai
Date: 22-28th July, 2020
2. Title: “Small Molecules-Strategies and Sophistication”
Venue: Jeppiaar Research Park, Centre for Ocean Research with Ministry of Earth science & Earth Science and Technology Cell
Date: 3-9 Aug., 2020
3. Title: “Synthetic Biology”
Venue: AICTE Training and Learning (ATAL) Academy, Bharathiar University, Coimbatore
Date: 14-18 Dec., 2020
4. Title: “Research Methodology and Project Writing”
Venue: Rama Devi Women’s University
Date: 7-11 July, 2021
5. Title: “Recombinant DNA Technology”
Venue: CG Bhakta Institute of Biotechnology, Uka Tarsadia University, Bardoli, Gujarat
Date: 17-28 Dec, 2021
6. Title: “Role of Biotechnology in mitigation of pollution and restoration of Environment”
Venue: School of Engineering & Technology, GIET University, Gunupur
Date: 11-17 Jan, 2022
7. Title: “Genome Engineering and Technology”
Venue: AICTE Training and Learning (ATAL) Academy, Central University of Kerala
Date: 17-21 Jan., 2022
8. Title: “Advanced Integrated Tools for Research in Marine Biology and Biotechnology”
Venue: Centre for Ocean Research, Sathyabama Institute of Science and Technology (Deemed to be University)
Date: 25-29 April, 2022
9. Title: “Advanced Tools in Assessment of Marine Biodiversity and Pollution Monitoring (ATAMBPM)”
Venue: Centre for Ocean Research Col. Dr. Jeppiaar Research Park, Sathyabama Institute of Science and Technology (Deemed to be University) in association with Ministry of Earth Science – Earth Science And Technology Cell (MoES-ESTC)
Date: 12-17 Sept, 2022

10. Title: “Plants and Algae: From Basic Biology to Advanced Biotechnology”
 Venue: Centre for Ocean Research Col. Dr. Jeppiaar Research Park, Sathyabama Institute of Science and Technology (Deemed to be University) in association with Earth Science Technology Cell, Ministry of Earth Science.
 Date: 07-11 Nov., 2022
11. Title: “Research Writing and Publication Process”
 Venue: Centre for Research and Training (CRT), National Foundation for Entrepreneurship Development (NFED), Coimbatore, Tamil Nadu, India
 Date: 23-25 June, 2023
12. Title: Malaviya Mission Teacher Training Programme (MMTTP)
 “NEP-2020 ORIENTATION AND SENSITIZATION PROGRAMME”
 Venue: Malaviya Mission Teacher Training Centre, Guru Nanak Dev University, Amritsar, Punjab.
 Date: 25-12-2023 to 03-01-2024
13. Title: Malaviya Mission Teacher Training Programme (MMTTP)
 “NEP-2020 ORIENTATION AND SENSITIZATION PROGRAMME”
 Venue: Seethallaxmi Ramaswami Collge (Autonomous), Tiruchirapalli
 Date: 25-12-2023 to 03-01-2024

Invited Talk

1. Title: Biotechnology-Aspects and Prospects
 Venue: Seemanta College, Jharpokhria
 Date: 3rd March, 2011.
2. Title: Bioremediation–Scope and Limitations,
 Venue: Gopabandhu Science College, Athagarh
 Date: 22nd Feb., 2013.
3. Title: Biotechnological Approaches for Biodiversity Conservation (Chief Speaker)
 Venue: Meghasani College, Nutdiah, Udala
 Date: 1st-2nd May, 2015.
4. Title: Advances in Biotechnology
 Venue: Baripada College, Baripada
 Date: 3rd Feb, 2016
5. Title: Water Treatment Technology
 Venue: Dept. of Biotechnology, Utkal University
 Date: 6th April, 2016
6. Title: Modern Techniques in Life Sciences
 Venue:” M.P.C (A) College, Baripada
 Date: 11-12th July, 2016

7. Title: Global Warming – A global Warning
Venue: North Orissa University, Baripada.
Date: 11th Aug., 2016.
8. Title: Global Warming – A global Warning
Venue: Govt. Womens College, Keonjhar
Date: 12th Aug., 2016.
9. Title: Biotechnology: Green Revolution to Gene Revolution
Venue: Betnoti College, Betnoti, Mayurbhanj.
Date: 11th Nov., 2016
10. Title: Biotechnology in Sustainable Soil management–A Clean and Green Approach
Venue: Seemanta College, Jharpokhoria, Mayurbhanj
Date: .9th Dec., 2016.
11. Title: Biotechnology -An effective tool for mankind
Venue: Dept. of Zoology (Refresher Course) Utkal University.
Date: .6th Feb., 2017.
12. Title: Biotechnology –Aspects and Prospects
Venue: B.B. College, Baiganbadia, Mayurbhanj,
Date: .11th Feb., 2017.
13. Title: Biodiversity and It's Conservation
Venue: Kaptipada College, Nuasahi
Date: .5th June, 2023
14. Co-ordinated Intellectual Property Awareness Program under National Intellectual Property awareness Mission (NIPAM), Intellectual Property office Govt.of India, 18th Aug.,2023.

Professional Experience:

Research Experience:

JRF (UGC), Utkal University-Bhubaneswar, Orissa, India

Period: 01-08-1992 to 31-07-1994

Field of Research: Phytoplankton Bloom Control in Temple Tanks of Puri and Bhubaneswar

Host: Dr. S. P. Adhikary, Department of Botany

SRF (CSIR), Utkal University-Bhubaneswar, Orissa, India

Period: 01-08-1994 to 31-07-1997

Field of Research: Toxicity of Pesticides on Diazotrophic Cyanobacteria of Rice Fields

Host: Dr. S. P. Adhikary, Department of Botany

Teaching Experience:

1. Lecturer in Botany, Kalyanpur +2 Sc. College, Delang, Puri, Odisha, India
Period: 20-06-2000 to 23-11-2004.
2. Lecturer in Biotechnology, North Orissa University, Baripada, Odisha, India
Period: 24-11-2004 to 31-07-2012.
3. Lecturer in Biotechnology, Fakir Mohan University, Balasore, Odisha, India
Period: 28-09-2012 to 19-08-2014.
4. Reader in Biotechnology, North Orissa University, Baripada, Odisha, India
Period: 20-08-2014 to 19-08-2019
5. Associate Professor in Biotechnology, Maharaja Sriram Chandra Bhanja Deo University (Erstwhile North Orissa University), Baripada, Odisha, India
Period: 20-08-2019 to 19-08-2022
6. Professor in Biotechnology, Maharaja Sriram Chandra Bhanja Deo University (Erstwhile North Orissa University), Baripada, Odisha, India
Period: 20-08-2022 to Continuing

Training Programmes attended/organised:

1. **Central Institute of Freshwater Aquaculture**, Kaushalyaganga, Bhubaneswar, India
Training Course in Microbiology and Freshwater Aquaculture
Duration: 17-05-1994 to 23-05-1994
2. **National Facility for Marine Cyanobacteria (NFMC)**, Tiruchirapalli, India
Short Training on Research for Marine Cyanobacteria Utilization Program (STORMCUP-95)
Duration: 06-02-1995 to 18-02-1995
3. **Regional Research Laboratory (CSIR)**, Bhubaneswar, India
Training Program-Cum-Workshop on Large Scale Cultivation and Distillation of Aromatic and Spice Plants
Duration: 26-05-1998 to 29-05-1998
4. **Central Institute of Freshwater Aquaculture**, Kaushalyaganga, Bhubaneswar, India
Hands-on Training in Molecular Biotechnology
Duration: 16-05-2005 to 26-05-2005
5. **Department of Biotechnology, Utkal University**, Bhubaneswar, India.
AICOPTAX sponsored Workshop on Freshwater Algae and Their Utilisation
Duration: 18-03-2007 to 19-03-2007
6. **Imagenex India Pvt.Ltd.**, Bhubaneswar, India (Sister concern of IMGENEX, San Diego, USA)
Hands on Training in Proteomics, Genomics and Bioinformatics
Duration: 24-05-2007 to 08-06-2007
7. **Organising Secretary-** Hands on Training on “Molecular Biology and Immunology Techniques” jointly organised by Dept. of Biotechnology & Hi Media Laboratories Pvt. Ltd, Mumbai
Duration: 08-11-2017 to 10-11-2017

Orientation Course Attended:

Utkal University, Bhubaneswar, India, UGC Sponsored

Duration: 11-01-2006 to 07-02-2006

Refresher course Attended:

Refresher course by Science Academies i.e Indian Academy of Sciences (IAS), Bengaluru, Indian National Science Academy (INSA), New Delhi & The National Academy of Sciences India (NASI), Allahabad at Department of Botany, Bharathiar University, Coimbatore, Tamil Nadu.

Title: "Biotechnology techniques in Biodiversity Conservation"

Duration: Sept.10-24, 2018.

Thesis supervised (M.Sc/M.Tech/M. Phil./Ph. D/D.Sc./D. Litt)

M.Sc Thesis Supervised:

1. Name: Deepanita Rath Roll no. 46101N040019
Title: "Toxicity of Commercial Grade Furadan (Carbofuran, 3% G) on Heterocystous Cyanobacteria of Local Rice Fields"
Year of Award of degree: 2006 (North Orissa University)
2. Name: Anjan Kumar Mohanty Roll no. 16101N054015
Title: "Isolation and Characterisation of Algae from Coastal Region of Orissa and enumeration of their Biotechnological Potentiality"
Year of Award of degree: 2007 (North Orissa University)
3. Name: Minakshi Khillar Roll no. 16101N074015
Title: "Effect of light on amelioration of pesticide toxicity on two species of local rice field cyanobacteria."
Year of Award of degree: 2009 (North Orissa University)
4. Name: Swetalina Acharya Roll no. 16101N074001
Title: "Isolation of marine algae from mahanadi delta and study on their antibacterial property."
Year of Award of degree: 2009 (North Orissa University)
5. Name: Atanu Kumar Kundu Roll no. 16101N084017
Title: "Isolation of Cyanobacteria from Orissa coast and study on their Antibacterial & Antioxidant property."
Year of Award of degree: 2010 (North Orissa University)
6. Name: Rekha Marndi Roll no. 410LS2057
Title: "Impact of Ultraviolet radiation on Marine Microalgae."
Year of Award of degree: 2011 (NIT, Rourkela)
7. Name: Padmolochan Palei Roll no. 16101N094018
Title: "Effect of different light of pesticides on rice field Cyanobacteria"
Year of Award of degree: 2011 (North Orissa University)

8. Name: Anuradha Priyadarsini Sahoo Roll no. 16101N094024
Title:“Bioremediation of industrial effluents using marine Cyanobacteria of odisha coast”
Year of Award of degree: 2011 (North Orissa University)
9. Name: Amit Kumar Pal Roll no. 17201FB124008
Title:“ Impact of Ultra Violet Radiation on Marine Cyanobacteria of Odisha coast”
Year of Award of degree: 2014 (Fakir Mohan University)
10. Name: Subasini Sirika Roll no. 17201FB124012
Title:“ Comparative study on effect of UV-B Radiation on Marine and Freshwater Cyanobacteria of Odisha coast”
Year of Award of degree: 2014 (Fakir Mohan University)
11. Name: Dharitri Murmu Roll no. 17201FB124006
Title:“ UV-B induced changes on growth, pigment and protein content of two species of microalgae”
Year of Award of degree: 2014 (Fakir Mohan University)
12. Name: Bebirani Biswal Roll no. 16101N134002
Title:“ Effect of heavy metals on marine cyanobacteria from Odisha coast”
Year of Award of degree: 2015 (North Orissa University)
13. Name: Priyanka Giri, Roll no. 16101N134006
Title:“ Effect of ultraviolet radiation on marine cyanobacteria of Odisha coast”
Year of Award of degree: 2015 (North Orissa University)
14. Name: Manisha Das, Roll no. 16101N144003
Title:“ Antimicrobial activity of cyanobacteria isolated from Chandipur Coast,Odisha”
Year of Award of degree: 2016 (North Orissa University)
15. Name: Deeptimanjari Behera, Roll no. 16101N144016
Title:“Study on Antimicrobial activity of Cyanobacteria Isolated from Chilika lake, Odisha”
Year of Award of degree: 2016 (North Orissa University)
16. Name: Sulagna Panda,, Roll no. 16101N154021
Title:“ Effect of heavy metals on marine Cyanobacteria of Odisha coast”
Year of Award of degree: 2017 (North Orissa University)
17. Name: Madhusmita Prusty, Roll no. 16101N154019
Title:“Effect of ultraviolet radiation on marine and brackish water Cyanobacteria isolated from Odisha”
Year of Award of degree: 2017 (North Orissa University)
18. Name: Subhalaxmi Behera, Roll no. 16101N154001
Title:“Antimicrobial activity of Cyanobacteria isolated from Chilika lake, Odisha”
Year of Award of degree: 2017 (North Orissa University)
19. Name: Sonalin Rath , Roll no. 16101N164016
Title:“Bioremediation of industrial effluents using marine Cyanobacteria of odisha coast”
Year of Award of degree: 2018 (North Orissa University)

20. Name: Satyapragyan Tripathy , Roll no. 16101N164020
Title:“Effect of ultraviolet radiation on marine Cyanobacteria isolated from Odisha”
Year of Award of degree: 2018 (North Orissa University)
21. Name: Rupali Rajaswini Biswal, Roll no. 16101N164014
Title:“ Study of cervical cancer in respect to Different gynaecological parameters”
Year of Award of degree: 2018 (North Orissa University)
22. Name: Riasha Akhtar, Roll no. 1610N174001
Title:“Evalution of heavy metal bioremediation potential of Cyanobacteria isolated from Odisha coasts”
Year of Award of degree: 2019 (North Orissa University)
23. Name: Subhashree Priyadarsini Das, Roll no. 16101N174003
Title:“Antimicrobial and antioxidant activity of selected marine Cyanobacteria isolated from Chandipur, Odisha”
Year of Award of degree: 2019 (North Orissa University)
24. Name: Soumya Mohanty, Roll no. 16101N174015
Title:“Assessment of antimicrobial and antioxidant potential of Cyanobacteria isolated from Chilika, brackish water lagoon”
Year of Award of degree: 2019 (North Orissa University)
25. Name: Krishnakant Das, Roll no. 16101N174002
Title:“ Bioremediation of industrial effluents using Microalgae”
Year of Award of degree: 2019 (North Orissa University)
26. Name: Arundhati Behera, Roll No-16101N184001
Title: “Antioxidant activity of selected lichen species isolated from similipal”
Year of Award of degree: 2020 (North Orissa University)
27. Name: Manorama Das, Roll No-16101N184006
Title:“Evaluation of Antioxidant properties of two selected marine Cyanobacteria”
Year of Award of degree: 2020 (North Orissa University)
28. Name: Supriya Sheet, Roll No-16101N184027
Title:“ Antimicrobial activities of Lichens isolated from Similipal”
Year of Award of degree: 2020 (North Orissa University)
29. Name: Tilottama Tudu,, Roll No-16101N184029
Title:“ Antimicrobial properties of Cyanobacteria isolated from Chilika lake”
Year of Award of degree: 2020 (North Orissa University)
30. Name: Limisa Singh,, Roll No-16101N184027
Title:“Growth,Biochemical constituents and antioxidant activity of two Cyanobacteria isolated from Chilika”
Year of Award of degree: 2020 (North Orissa University)
31. Name: Priyanka Mallick,, Roll No-16101N184011
Title:“ Determination of Cytotoxic effects of BT-PT(IV) conjugate upon Cancer cells”
Year of Award of degree: 2020 (North Orissa University)

32. Name: Ashis Kumar Mishra Roll no. 16101N194012
Title: "Antioxidant potential cyanobacteria-A review"
Year of Award of degree: 2021 (MSCB University)
33. Name: Diptiman Upadhyay Roll no. 16101N194029
Title: "UV protection in Cyanobacteria-A review"
Year of Award of degree: 2021 (MSCB University)
34. Name: Sucharita Panigrahi Roll no. 16101N194017
Title: "Bioprospective microalgae possessing antimicrobial property-A review"
Year of Award of degree: 2021 (MSCB University)
35. Name: Debasmita Dhir Roll no. 16101N194008
Title: "Antimicrobial activities of Lichens-A review"
Year of Award of degree: 2021 (MSCB University)
36. Name: Megha Priyadarshini Roll no. 16101N194006
Title: "Antioxidant activities of Lichens-A review"
Year of Award of degree: 2021 (MSCB University)
37. Name: Archana Mandal Roll no. P2619004
Title: "Biofuels from Microalgae-A review"
Year of Award of degree: 2021 (MPC Autonomous college & MSCB University)
38. Name: Damayanti Tudu Roll no. P2619008
Title: "Bioremediation potential of Microalgae and Cyanobacteria-A review"
Year of Award of degree: 2021 (MPC Autonomous college & MSCB University)
39. Name: Abhilipsa Sahoo Roll No: P2620001
Title: Lichens: "Screening for potent antimicrobial and antioxidant agents"
Year of Award of degree: 2022 (MPC Autonomous college & MSCB University)
40. Name: Preetichhanda Giri Roll No: P2620010
Title: "Effect of marine cyanobacteria *Phormidium bohneri* and *Phormidium tenue* on pathogenic microbes revealed antimicrobial & antioxidant activity in vitro"
Year of Award of degree: 2022 (MPC Autonomous college & MSCB University)
41. Name: Radharani Swain Roll No: P2620012
Title: "Antimicrobial and Antioxidant activities of two species of brackish water cyanobacteria"
Year of Award of degree: 2022 (MPC Autonomous college & MSCB University)
42. Name: Kajal Behera Roll No: 16101N204005
Title: "Antioxidant and Antimicrobial studies of two lichen species growing in Maharaja Sriram Chandra Bhanja Deo University"
Year of Award of degree: 2022 (MSCB University)
43. 43. Name: Shubhasmita Garnaik Roll No: 16101N204012
Title: "Evaluation of antimicrobial and antioxidant properties of two selected marine cyanobacteria"
Year of Award of degree: 2022 (MSCB University)

44. Name: Jyotsnarani Parhi Roll No: 16101N204022
Title: "Assessment of antioxidant and antimicrobial activity of cyanobacteria from Chilika lake, Odisha"
Year of Award of degree: 2022 (MSCB University)
45. Name: Chinmay Ranjan Singh Roll No: 16101N204027
Title: "Biological activities of lichens Collected From Similipal Biosphere Reserve, Odisha, India"
Year of Award of degree: 2022 (MSCB University)
46. Name: Mithun Swain Roll No: 16101N204028
Title: "Comparative study on Bio-potential cyanobacteria isolated from Chandipur coast and Chilika lake"
Year of Award of degree: 2022 (MSCB University)
47. Name: Subhashree Nayak, Roll No. 16101N214017
Title: "Effect of UV-B radiation on Cyanobacteria isolated from Gopalpur coast, Odisha"
Year of Award of degree: 2023 (MSCB University)
48. Name: Suvangi Behera, Roll No. 16101N214006
Title: "Evaluation and Characterisation of Bioactive Metabolites from marine Microalgae Showing Antioxidant and Antimicrobial Activities"
Year of Award of degree: 2023 (MSCB University)
49. Name: Adyasa Das, Roll No. 16101N214024
Title: "Comparative Study on antioxidant activity of marine and brackish water cyanobacteria of Odisha"
Year of Award of degree: 2023 (MSCB University)
50. Name: Biswaranjan Panda, Roll No. 16101N214020
Title: "Evaluation and estimation of bioactive metabolites and analysis of Antimicrobial and Antioxidant potential of selected Lichens from Similipal Biosphere Reserve, Odisha"
Year of Award of degree: 2023 (MSCB University)
51. Name: Sambhunath Bala, Roll No. 16101N214005
Title: "Assessment of Antioxidant and Antimicrobial Potential of Lichens from Similipal Biosphere Reserve"
Year of Award of degree: 2023 (MSCB University)
52. Name: Prasmita Rath, Roll.No. 16101N214023
Title: "Distribution and Host relationship of Epiphytic Lichens of Maharaja Sriram Chandra Bhanja Deo University campus, Baripada, Odisha"
Year of Award of degree: 2023 (MSCB University)
53. Name: Abhijit Samal, Roll No. P2621001
Title: "Evaluation of Antioxidant Activity of Selected Lichens obtained from Similipal Biosphere Reserve"
Year of Award of degree: 2023 (MPC Autonomous college & MSCB University)

54. Name: Subhashree Rout, Roll No. P2621020
Title: "Assessment on Antioxidant activity of Cyanobacteria from Odisha Coast"
Year of Award of degree: 2023 (MPC Autonomous college & MSCB University)
55. Name: Subhasmita Behera, Roll no: 16101N22401
Title: "Comparative study of Bioactivities in lichens *Heterodermia diademata* and *Paramotrema tinctorum* collected from different region of Similipal Biosphere Reserve, Odisha"
Year of Award of degree: 2024 (MSCB University)
56. Name: Lelina Dash, Roll no; 16101N22403
Title: "Salinity induced concentration of Carotenoid in cyanobacteria isolated across Odisha Coast"
Year of Award of degree: 2024 (MSCB University)
57. Name: Aliva Mohapatra, Roll no: 16101N22407
Title: "Microalgal fatty acid for future commercial feed stocks and Biofuel Production"
Year of Award of degree: 2024 (MSCB University)
58. Name: Puja Giri, Roll no. 16101N234006
Title: "Comparative Evaluation of Phytochemicals and Antioxidant Activity of Brackish and Marine Water Microalgae"
Year of Award of degree: 2025 (MSCB University)
59. Name: Nitushree Jena, Roll no. 16101N234008
Title: "Heavy Metals Induced Changes in Pigment and Protein Content of Cyanobacteria Isolated from Odisha Coast"
Year of Award of degree: 2025 (MSCB University)
60. Name: Sejol Mishra, Roll no. 16101N234014
Title: "Isolation of the Photobiont from Lichen Symbiosis and Study on Their Biopotential Property"
Year of Award of degree: 2025 (MSCB University)
61. Name: Prakash Chandra Nayak, Roll no. 16101N234020
Title: "Biopotential Activity of Selected Lichens Species Collected From Similipal National Park"
Year of Award of degree: 2025 (MSCB University)
62. .Name: Susmita Pati, Roll no. 16101N234022
Title: "Comparative Study on Lipid Profile of Marine and Brackish Water Microalgae for Commercial Applications"
Year of Award of degree: 2025 (MSCB University)
63. Name: Simran Panda, Roll no. 16101N234025
Title: "In Vitro Evaluation of Antioxidant and Phytochemical Activity and Characterization of Bioactive Compounds from Marine Cyanobacteria"
Year of Award of degree: 2025 (MSCB University)

64. Name: Saswat Suman Panda, Roll no. 16101N234027
Title: “Screening and Isolation of UV-Protective Compounds from Lichens of Similipal National Park”
Year of Award of degree: 2025 (MSCB University)
65. Name: Banasmita Sahoo, Roll no. 16101N234031
Title: “Salinity induced Biochemical changes in Cyanobacteria of different habitats for Commercial Applications”
Year of Award of degree: 2025 (MSCB University)
66. Name: Gayatri Priyadarshani Singha, Roll no. P2623006
Title: “Isolation and Comparison of Pigments from Algal Partners of Lichen”
Year of Award of degree: 2025 (M.P.C (A) College & MSCB University)
67. Name: Prangya Manjari Behera, Roll no. P2623011
Title: “Antioxidant Activity and Phytochemical Analysis of Selected Marine Cyanobacteria of Odisha Coast”
Year of Award of degree: 2025 (M.P.C (A) College & MSCB University)
68. Name: Sushree Priyadarsini Mohanty, Roll no. P2623020
Title: “Quantification of Phytochemicals and In-Vitro Evaluation of Antioxidant Property from Lichens of Similipal Biosphere Reserve”
Year of Award of degree: 2025 (M.P.C (A) College & MSCB University)

M.Phil Thesis Supervised:

1. Name: Rosysmita Barik, Roll no. M16101N15001
Title: “Impact of Ultraviolet radiation on marine Cyanobacteria of Odisha coast”
Year of Award of degree: 2016(North Orissa University)
2. Name: Saswoti Panda, Roll no. M16101N16004
Title: “Antibacterial, Antioxidant activity, Phytochemical screening & UV induced biochemical changes on Cyanobacteria isolated from Chilika”
Year of Award of degree: 2017(North Orissa University)
3. Name: Julirani Tripathy Roll no. M16101N16007
Title: “Differential response to UV radiation and study on antibacterial and antioxidant activity of marine cyanobacteria from Odisha coast”
Year of Award of degree: 2017(North Orissa University)
4. Name: Sonaliprabha Dasmohapatra, Roll no. M16101N17002
Title: “Antibacterial and Antioxidant activities of cyanobacteria isolated from Odisha coast”
Year of Award of degree: 2018 (North Orissa University)
5. Name: Bikash Kumar Parida, Roll no. M16101N17006
Title: “Comparative study of UV induced changes in freshwater and marine cyanobacteria”
Year of Award of degree: 2018 (North Orissa University)

6. Name: Nabanita Hati, Roll no. M16101N18001
Title: “Bioprospective Cyanobacteria Isolated from Chilika Lake”
Year of Award of degree: 2019 (North Orissa University)
7. Name: Bijayananda Sahoo, Roll no.M16101N18007
Title: “Use of Cyanobacteria in Bioremediation of Industrial Effluents”
Year of Award of degree: 2019 (North Orissa University)
8. Name: Priyal Das, Roll no.M16101N19003
Title: “Antimicrobial potential Lichen species”
Year of Award of degree: 2021 (MSCB University)
9. Name: Shubham Pradhan, Roll no.M16101N20005
Title: “A systematic study of host specific epiphytic Lichen community versus host tree bark texture and evaluation of bioactive potential of predominant Lichens in the Maharaja Sriram Chandra Bhanja Deo University Campus, Baripada”
Year of Award of degree: 2022 (MSCB University)

M.Tech Thesis Supervised:

Name: Bimal Kumar Jena, Roll no. 372301FB12001
Title: “Effect of curcumin on PTU induced hypothyroid Rat spleen”
Year of Award of degree: 2014 (Fakir Mohan University)

Ph.D. Thesis Supervised: (Awarded)

1. Name: Jyoshnamayee Patra
Title: “Bioconversion of Agricultural wastes for Bioethanol Production”
Regd.no: Sc/BT/03/Ph.D/2016
Year of Award of degree: Notification No.5286/NOU (EC/Ph.D/2016)2019,
Date: 26/7/2019 (North Orissa University)
2. Name: Indira Priyadarshani
Title: “Isolation and Characterization of Bioactive compounds from Cyanobacteria of Odisha coast”
Regd.no: Sc/Life Sc./31/Ph.D/2007
Year of Award of degree: Notification No.923/NOU/Ph.D,
Date: 14/9/2020 (North Orissa University)
3. Name: Soumya Sucharita Mohanty
Title: “Nematode diversity occurrence in some economical crops of Mayurbhanj, Odisha, India with reference to their symptoms and biological control”
Regd.no: Sc/Life Sc./07/Ph.D/2015
Year of Award of degree: Notification.No.1554/MSCBU/Ph.D,
Date: 12/5/2023(MSCB University)

4. Name: Sabyasachy Parida
Title: "Evaluation of antimicrobial, antioxidant and anticancer activity of cyanobacteria isolated from Chilika Lake"
Regd.no: Sc/Life Sc/09/Ph.D/2016
Date of Notification: 25-02-2025
5. .Name: Brijesh Kumar Yadav
Title: "Bacteria Biofertilioser and its efficacy on pulses"
Regd.no: Sc/Life Sc/10/Ph.D/2016
Date of Notification: 25-02-2025

Ph.D. Thesis Supervised: (Submitted)

1. Name: Dr. Suchismita Panda
Title: Peroxisome proliferator- activated receptors: status and implications in thyroid dysfunctions
Regd.no: Sc/Life Sc/02/Ph.D/2017
Year of Award of degree: Continuing (North Orissa University)

Ph.D thesis Supervisor: (Continuing)

1. Name: Satyabrata Dash
Title: "Screening and evaluation of bioactive secondary metabolites in cyanobacteria of Odisha coast"
Regd.no: Sc/BT/01/Ph.D/2020
Year of Award of degree: Continuing (North Orissa University)
2. Name: Sanjeet Manna
Title: "Radiological impact assessment on Rats (*Rattus rattus*) collected from Uranium mining area at Jaduguda, India"
Regd.no: Sc/BT/03/Ph.D/2020
Year of Award of degree: Continuing (North Orissa University)
3. Name: Bijayananda Sahoo
Title: "Evaluation of Therapeutic potentials of Lichens from Similipal Biosphere Reserve"
Regd.no: Sc/BT/01/Ph.D/2021
Year of Award of degree: Continuing (MSCB University)
4. Name: Sumita Sahoo
Title: "Bioprocessing of poultry waste into an effective fertilizer"
Regd.no: Sc/BT/07/Ph.D/2021
Year of Award of degree: Continuing (MSCB University)
5. Name: Shubham Pradhan
Title: "Isolation of phycobionts from the lichens of different habitats of Odisha and study on their biopotential activities"
Regd.no: Sc/BT/07/Ph.D/2023
Year of Award of degree: Continuing (MSCB University)

Research Projects Undertaken:

1. Project Title: “Preliminary Studies on Impact of Chemically Treated Water Discharged from Aquaculture into Water Bodies in Bhitarkanika Mangrove Forests of Orissa” **Co-PI**
Funded by: Department of Forest, Govt. of Odisha
Period: Jul 2005-April 2006
Amount: Rs.20.000/-
Status: Completed
2. Project Title: “Impact of Prawn culture and Industrial Effluents in Mahanadi Delta Mangrove Forests of Odisha” **Co-PI**
Funded by: Department of Forest, Govt. of Odisha,
Period: Oct.2008-April 2009
Amount: Rs.50.000/-
Status: Completed
3. Project Title: “Study on Antibacterial activities of Algae isolated from coastal region of Orissa” **PI**
Funded by: University Grants Commission (UGC), New Delhi
Period: Feb.2009 - Jan.2011
Amount: Rs.70.000/-
Status: Completed
4. Project Title: “Survey and Isolation of Marine Microalgae from Odisha Coast and evaluation of their food and pharmaceutically important biomolecules” **PI**
Funded by: S&T Dept. Govt. of Odisha
Period: June, 2016-May, 2019
Amount: Rs.9, 47,000/-
Status: Completed
5. Project Title: “Study on Diversity of Lichens in Similipal Biosphere Reserve and Evaluation of their antimicrobial and antioxidant activity for Pharmaceutical applications” **PI**
Funded by: S&T Dept. Govt. of Odisha
Period: May, 2022-June,2025
Amount: Rs.9, 96,000/-
Status: Completed
6. Project Title: “Evaluation of natural products from Similipal Biosphere Reserve for Identification of Bioactive Compounds” **PI**
Funded by: UFIRP, MSCB University
Period: 2 years- September, 2024-continuing
Amount: Rs. 10,00,000/-
Status: Ongoing

Membership in Professional Societies:

1. Orissa Botanical Society (OBS)-Life Member-2005
2. Indian Botanical Society (IBS)-Annual Member-2004
3. Association of Microbiologists of India (AMI)-Annual Member-2010
4. National Environmental Science Academy (NESA) - Annual Member-2012
5. Seaweed Research and Utilization Association (SRUA) - Annual Member-2012
6. The Indian Science Congress Association (ISCA)-Life member-2015
7. Society for Biotechnologists (India)-Life member-2015-L557
8. Society for Applied Biotechnology (SAB)-Fellow and Life member-2014
9. Biotechnological Society of Nepal (BSN)-Life Member-2020
10. Indian Lichenology Society-Life Member,(No.189)-20/09/2019
11. Institute of Researchers-Life Member (LM092323)-2023
12. Indian Climate Congress- Life Member- LM-303(6/5/25)

Gene Sequences submitted in Genbank (NCBI) with accession numbers:

Microalgae: 10

<u>Name</u>	<u>Accession Number</u>
1. <i>Phormidium angustissium</i>	OQ162206
2. <i>Planktolyngbya limnetica</i>	OQ024879
3. <i>Phormidium molle</i>	OP998213
4. <i>Lyngbya aestuarii</i>	OP955788
5. <i>Phormidium tenue</i>	OP901958
6. <i>Nostoc punctiforme</i>	OP901956
7. <i>Lyngbya majuscula</i>	OP858899
8. <i>Lyngbya martensiana</i>	OP853105
9. <i>Oscillatoria pseudogeminata</i>	OQ513456
10. <i>Trebouxia gelatinosa</i>	OQ221159

Lichen: 20

<u>Name</u>	<u>Accession Number</u>
1. <i>Parmotrema perlatum</i>	OQ600642
2. <i>Parmotrema cetratum</i>	OQ600640
3. <i>Parmelia saxatilis</i>	OQ600632

4. <i>Parmeliopsis hyperopta</i>	OQ600633
5. <i>Lecanora campestris</i>	OQ600630
6. <i>Pyrenula nitida</i>	OQ146904
7. <i>Diorygma poitai</i>	OQ145327
8. <i>Lecanora thysanophora</i>	OQ145328
9. <i>Dirinaria applanata</i>	OP894119
10. <i>Parmotrema andinum</i>	OP894118
11. <i>Viridothelium virens</i>	OP880258
12. <i>Trypethelium virens</i>	OP879718
13. <i>Myriotrema clandestinum</i>	OP866267
14. <i>Dirinaria aegialita</i>	OP866266
15. <i>Sarcographa labyrinthica</i>	OP866265
16. <i>Nigrovothelium bullatum</i>	OP862886
17. <i>Canoparmelia pruinata</i>	OP861506
18. <i>Flavoparmelia caperata</i>	OP861478
19. <i>Graphis scripta</i>	OP861477
20. <i>Phaeographis dendritica</i>	OP819895

Skill:

Operating System: DOS, WINDOWS 2000-XP

Utility Package: MS-OFFICE

Honours/ Awards Received:

1. Graduate Aptitude Test of Engineering- **GATE-1992** with percentile score: **82.14**
2. **“Senior Research Fellowship (SRF)”** from Council of Scientific and Industrial Research (CSIR), Government of India for Pursuing Higher Studies (Ph.D), 1st Aug.1994- 31st July, 1997.
3. **“Fellow Award”** 2014 for Outstanding achievements and Contribution to the field of Microbial Biotechnology by Society for Applied Biotechnology (SAB)
4. **“Scientist of the Year-2016”** on 3rd International Conference on Environment and Ecology at St. Xavier’s College, Ranchi by International Foundation for Environment and Ecology, Kolkata & Confederation of Indian Universities, New Delhi, 27th-29th March, 2017.

5. **“Best Paper Award”** 2018 in the International Conference on Recent Trends in Health, Environment, Agriculture and Life Sciences at Asian Institute of Technology (AIT) Bangkok, Thailand, Nov. 19-22,2018.
6. **“Best Research Paper Presentation Award”** at the International Conference on Science, Technology and Management (ICSTM at Singapore, 2nd June, 2019.
7. **“Biodiversity Conservation Award 2019”** by International Foundation for Environment and Ecology, Kolkata on “6th International Conference on Environment and Ecology” at University of Allahabad, Prayagraj, UP, India by Confederation of Indian Universities, New Delhi & ISEE, Kolkata, ,24-26, Feb.2020.
8. **“Best Teacher Award-2022”** on “1st National Conference on Biotechnology for Better Tomorrow (NCBTBT)” Nagpur University by Microbiologists Society, India (MBSI), Jan. 22-24, 2022.
9. **“SAS Eminent Fellow Members (SEFM)”** by Scholars Academic and Scientific Society (an International Society for Academic and Scientific Integration), 16th May, 2022
10. **“Outstanding Educator & Scholar Award”** in the field of ‘Phycology & Biotechnology’ on 14th National Teachers’ Day Award-2023 (5th Sept.) by National Foundation for Entrepreneurship Development (NFED), Coimbatore, Tamil Nadu, India,5th Sept.2023
11. **“Distinguish Professor Award-2023”** in recognition to outstanding Professional and research achievement in the field of Biotechnology by Institute of Researchers, The research unit of ISPL, registered with Ministry of MSME, Govt. of India, 27th Oct.2023.
12. **“National Excellence Award 2024 in Algal Biotechnology”** in recognition to outstanding Research achievement in the field of ‘Algal Biotechnology’ in the National Seminar on Integrated Approach in Research & Development for Sustainable Future hosted at International Multidisciplinary Research Foundation (IMRF), Institute of Higher Education & Research Campus, Vijayawada, India, April 14th , 2024.
13. **“Dr. Sarvepalli Radhakrishnan Renowned Professor &Research Excellence Award 2024”** in recognition of the consistent superior performance in ‘Microbial Biotechnology’ on National Teachers Day 2024 & National Symposium on New Education Policy hosted at International Multidisciplinary Research Foundation (IMRF), Institute of Higher Education & Research, Vijayawada, India, 5th September ,2024.

14. **“Indo-Asian Best Teacher & Researcher Award-2025”** in recognition of the consistent superior performance in ‘Algal Biotechnology’ on the eve of National Teachers Day 2025 in the International symposium on ‘Inspiring the Next Generation of Learners’ hosted by international Centre for Professional Studies & Cultural Exchange , India
15. **“Intellectual Achievers of World Award-2026”** in recognition for outstanding contribution to Education by Friendship Forum, New Delhi

Administrative Responsibilities:

1. **Head of the course-** Dept. of Biotechnology, North Orissa University, 2009- 2012.
2. **Assistant Director-** Self Financing Courses, North Orissa University, 2009-2011.
3. **Reviewer-Book :** “The Elements of Immunology” by F.H. Khan (Pearson Edn)-2008.
4. **Member-Board of Studies (Biotechnology)-**North Orissa University.2004-cont.
5. **Member-Board of Studies (Biotechnology)-** Fakir Mohan University, 2013-2014.
6. **Member-SRC(Biotech.)-** North Orissa University, 2014-cont.
7. **Member-SRC (Life Science)-** North Orissa University,2014-cont.
8. **Associate Advisor,** Student’s Union, North Orissa University, 2014-2017
9. **Co-ordinator,** NET Coaching (UGC), 2014-2016
10. **Deputy Controller of Examination,** North Orissa University, 2015-18
11. **Head, Department of Biotechnology,** 1st June, 2017-31st May 2019
12. **Prof in charge of Placement and Career Counseling,** 2017-2020
13. **Member, Academic Council,** North Orissa University, 2017-19, 2023-continuing
14. **Member, Senate,** North Orissa University, 2017-19
15. **Deputy Director,** Student’s Welfare, North Orissa University, 2018-2020
16. **Vice President-PG Athletic Unit,** MSCB University, 2019-continuing.
17. **Officer in Charge (Store),** MSCB University, July, 2022- Aug., 2024.
18. **Public Information Officer (PIO),** MSCB University, Sept.2022-Sept.2023.
19. **Co-ordinator-NEP-2020,** 22nd Feb., 2024- continuing
20. **Head, Department of Biotechnology,** MSCB University,June, 2023- May, 2025
21. **Chairman,** SRC, Dept.of Biotechnology, MSCB University, 2024-cont.
22. **Expert-PhD Committee (Microbiology) -** Vidyasagar University, Midnapore
23. **Director R&D,** MSCB University, Aug.2025-cont.
24. **Coordinator,** Dept.of Odia, MSCB University, Oct.2025-cont.

Hobbies:

Listening to Soft music and Travelling

Language:

1. **Read:** English, Hindi, Oriya
2. **Write:** English, Hindi, Oriya
3. **Speak:** English, Hindi, Oriya and Bengali

References:

Upon Request



(Biswajit Rath)