CURRICULUM VITAE

Dr. MRUTYUNJAY JENA

Assistant Professor (Stage-III)

ADDRESS:

Algal Biotechnology and Molecular Systematic Lab.

Post Graduate Department of Botany, Berhampur University, Bhanja Bihar, Berhampur-760007, Odisha, India Email: mrutyunjay.jena@gmail.com

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Homepage: http://www.geocities.ws/mjena/

Google Scholar: https://scholar.google.co.in/citations?hl=en&user=kmj82sgAAAAJ

Research gate: https://www.researchgate.net/profile/Mrutyunjay-Jena
Scopus: https://www.scopus.com/authid/detail.uri?authorld=57208283756

Orcid: https://orcid.org/0000-0003-2157-4292

> QUALIFICATIONS

- M.Sc. (Botany), Utkal University, 2003
- Ph.D. (Botany)-Utkal University, 2009

> WORK EXPERIENCE

TEACHING & RESEARCH	(M.Sc., M.Phil.& Pre-Ph.D.	Teaching): 12 vrs., Continuing
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Assistant Professor	Post Graduate Department of	03.08.2011 to 02.08.2015
(Stage-I)	Botany, Berhampur University	
Assistant Professor	-do-	03.08.2015 to 02.08.2020
(Stage-II)		
Assistant Professor	-do-	03.08.2020 to continuing
(Stage-III)		

> RESEARCH (Doctoral and Post-Doctoral): 8.11 yrs.

Research Associates	CCUBGA, Indian Agricultural	December, 2010 to July, 2011
(Indo-Denmark,	Research Institute, New Delhi-	
DST, GoI Project)	110012, India	
DAAD (German Academic Exchange Service) -Fellowship	Leibniz Institute of Freshwater Ecology and Inland Fisheries, Stechlin-Neuglobsow, D-16775, Germany	June, 2008 to March, 2010
SRF	Departments of Botany and	January, 2005 to May, 2008
MoEF &CC, Govt. of India	Biotechnology, Utkal University,	
AICOPTAX-Project	Bhubaneswar	

JRF Departments of Botany and December, 2003 to December,

MoEF &CC, Govt. of India Biotechnology, Utkal University, 2005

AICOPTAX-Project Bhubaneswar

ACHIEVEMENTS/AWARDS/FELLOWSHIPS

- DAAD-(German Academic Exchange Service) Fellowship, 2008
- Post-Doctoral Fellowship at CCUBGA, I.A.R.I, New Delhi, funded by Dept. of Science and Technology Govt. India and Govt. of Denmark, 2010.
- Post-Doctoral Fellowship at Department of Green Life Science, Sangmyung University, Jongno-gu, Seoul, Korea, supported by Dept. of Science and Technology, Govt. of Korean Republic, 2011.
- **Dr. D. S. Kothari Postdoctoral Fellowship** awarded by University Grant Commission (UGC), Govt. of India, 201

AREAOF RESEARCH

Algal Taxonomy, Algal Biochemistry & physiology, Algal biotechnology
 Natural Product and therapeutics

CITATIONS AND IMPACT FACTORS OF PUBLICATIONS

- ➤ Google Scholar Citation: 1074, h-index: 22; i10-index: 36
- ➤ Total Impact Factors (Thomson Reuters) of publications: 154.492
- > Impact factors (Thomson Reuters) publications of 2022-23: 64.675

>	PUBLICATIONS: 66		
	Research Articles	Book Chapters	Books/Monographs/Manuals
	60	05	01
	12 (Communicated and Under review)	05 (Communicated/ U	Inder review) -

> DETAILS OF THE PUBLICATIONS

2023

- **60**. Bhuyan PP, Nayak R, Patra S, Abdulabbas HS, **Jena M**, Pradhan B. 2023. Seaweed-Derived Sulfated Polysaccharides; The New Age Chemopreventives: A Comprehensive Review. *Cancers* **2023**, *15*(3), 715; https://doi.org/10.3390/cancers15030715 **MDPI** (**IF: 6.575**)
- **59**. Vishwakarma R, Dhar DW, **Jena M**, Shukla M.2023. Pigment composition analysis of selected green microalgae through multivariate analysis and their potential as high value nutraceuticals. **Vegetos** https://doi.org/10.1007/s42535-022-00562-5 **Springer**

58. Bhuyan PP, Pradhan B, Nayak R, Jena M, Hansdah B, Bastia AK 2023. Taxonomic enumeration of sub-Arial cyanobacterial flora of Similipal Biosphere Reserve, Odisha. *Ecology*, *Environment and Conservation* 2023: S70-S80 (Scopus-index)

2022

- **57.** Karjee PK, Nayak R, Pradhan B, **Jena M*** 2022. Antibacterial Activity of Microalgal Extracts: A Review of the Natural Drug Discovery. *Research journal of Berhampur University*. 4: 1-7.
- **56**. Bhuyan PP, Behera SK, Bhakta S, Pradhan B, **Jena M**, Hansdah B, Bastia AK. 2022 Subaerial algal flora of Similipal biosphere reserve, Odisha, India. *J. Indian Bot. Soc.* 102 https://doi: 10.5958/2455-7218.2022.00052.3
- 55. Bhuyan PP, Sahoo E, Bhakta S, Pradhan B, Jena M, Bastia AK 2022. In vitro antioxidant and antibacterial activity of *Scenedesmus obliquus* collected from Similipal biosphere reserve, Odisha, India. J. Indian bot. Soc. 102 (3): 218-228. https://doi: 10.5958/2455-7218.2022.00049.3
- **54**. Srivastava A, Rikhari D, Pradhan B, Bharadwaj KK, Gaballo A, Quarta A, **Jena M**, Srivastava S, Ragusa A* 2022. An Insight into Neuropeptides Inhibitors in the Biology of Colorectal Cancer: Opportunity and Translational Perspectives. Appl. Sci. 12, 8990. https://doi.org/10.3390/app12188990 **MDPI (IF: 2.838)**
- **53**. Pradhan B, Bhuyan PP, Nayak R, Patra S, Behera C, Ki JS, Ragusa A, Lukatkin AS*, **Jena M*** 2022. Microalgal Phycoremediation: A Glimpse into a Sustainable Environment. *Toxics* 10: 525 https://doi.org/10.3390/toxics10090525 **MDPI (IF: 4.472)**
- **52.** Pradhan B, *Pa*tra S, Nayak R, Swain SS, Jit BP, Behera C, Ragusa A, Ki JS, **Jena M*** 2022. Low-dose priming of gamma radiation enhanced Cadmium tolerance in *Chlamydomonas reinhardtii* by modulating physio-biochemical pathways. *Environmental Science and Pollution Research*. 29:80383-80398 **Springer** https://doi.org/10.1007/s11356-022-21374-9 (**IF: 5.190**)
- **51**. Karjee PK, Nayak R, Pradhan B, Behera AK, Parida S, **Jena M*** 2022. Algal Vegetation of Reservoirs of Ganjam, Odisha, India. *Ecology, Environment and Conservation*, 2022(4): 327-337 (**Scopus-index**)
- 50. Pradhan B, Nayak R, Bhuyan PP, Patra S, Behera C, Sahoo S, Ki JS, Quarta A, Ragusa A, Jena M* 2022. Algal Phlorotannins as Novel Antibacterial Agents with Reference to the Antioxidant Modulation: Current Advances and Future Directions. *Marine drugs*, 20: 402. https://doi.org/10.3390/md20060403 MDPI (IF: 6.085)

- **49.** Bhyuan PP, Nayak, N, **Jena M**, Pradhan P, 2022 Convoluted role of cyanobacteria as biofertilizer: An insight of sustainable agriculture. *Vegetos* https://doi.org/10.1007/s42535-022-00415-1 **Springer**
- **48.** Jit BP, Pattnaik S, Arya R, Dash R, Sahoo SS, Pradhan B, Behera PK, **Jena M**, Sharma A, Agrawal PK, Behera RK, 2022. Phytochemicals: A potential next generation agent for radioprotection *Phytomedicine* 106: 154188 https://doi.org/10.1016/j.phymed.2022.154188 **Elsevier (IF: 6.656)**
- 47. Pradhan B, Nayak R, Patra S, Bhuyan PP, Behera PK, Mandal AK, Behera C, Ki JS, Ali MD*,
 Jena M* 2022. A State-of-the-art Review on Fucoidan as an antiviral agent to combat viral infections. *Carbohydrate Polymers*. 291 (1): 119551.
 https://doi.org/10.1016/j.carbpol.2022.119551 Elsevier (IF. 10.723)
- 46. Pradhan B, Patra S, Dash SR, Satapathy Y, Nayak S, Mandal AK, Jena M* 2022. In Vitro Antidiabetic, Anti-Inflammatory and Antibacterial activity of marine alga *Enteromorpha compressa* collected from Chilika lagoon, Odisha, India. *Vegetos* 35: 614–621 DOI: 10.1007/s42535-022-00359-6 Springer
- 45. Pradhan B, Nayak R, Patra S, Bhuyan PP, Das SR, Ki J-S, Adhikary SP, Ragusa A*, Jena M* 2022. Cyanobacteria and Algae-Derived Bioactive Metabolites as Abtiviral Agents: Evidence, Mode of action, and Scope for further Expansion; A Comprehensiv Review in Light of the SARS-CoV-2 Outbreak. Antioxidants, 11 (2): 354, https://doi.org/10.3390/antiox11020354 MDPI (IF: 7.675)
- 44. Jit BP, Pradhan B, Dash R, Bhuyan, PP, Behera C, Behera RK, Sharma A, Alcaraz M, Jena M* 2022. Phytochemicals: A Potential therapeutic modulators of radiation induced signaling pathways. *Antioxidants* 11 (1): 49 https://doi.org/10.3390/antiox11010049 MDPI (IF: 7.675)
- **43.** Pradhan B, Bhuyan PP, Behera PK, Behera C, Behera AK, Ki JS, **Jena M.*** 2022. Beneficial effect of seaweeds and seaweed-derived bioactive compounds: Current evidence and future prospective. *Biocatalysis and Agricultural Biotechnology*, 39: 102242. https://doi.org/10.1016/j.bcab.2021.102242. **Elsevier (Site Score: 5.9).**
- 42. Pradhan B, Maharana S, Bhakta S and Jena M* 2022. Marine phytoplankton diversity of Odisha coast, India with special reference to new record of diatoms and dinoflagellates. *Vegetos* 35: 330–344 DOI:10.1007/s42535-021-00301-2 Springer.
 2021
- **41.** Quarta A., Gaballo A, Pradhan B, Patra S, **Jena M**, Ragusa A 2021. Beneficial Oxidative Stress-Related Resveratrol Effects in the Treatment and Prevention of Breast Cancer. *Applied Sciences*.11 (22):11041. https://doi.org/10.3390/app112211041. **MDPI (IF: 2.838).**

- **40.** Marag PS, Dhar DW, Jaiswal P, Tiwari ON, Suman A, **Jena M** 2021. Characterization of cyanobacteria from Punjab rice varieties for plant growth promotion. *The Indian Journal of Agricultural Sciences* 91 (7):990-995 **Scopus Index**
- **39.** Patra S, Pradhan B, Nayak R, Behera C, Das S, Patra SK, Efferth T, **Jena M***, Bhutia SK*. 2021. Dietary polyphenols in chemoprevention and synergistic effect in cancer: Clinical evidences and molecular mechanisms of action. *Phytomedicine* 90: 153554 https://doi.org/10.1016/j.phymed.2021.153554. **Elsevier (IF: 6.656).**
- 38. Behera C, Pradhan B, Panda RR, Nayak R, Nayak S, Jena M* 2021. Algal Diversity of Saltpans, Humma (Ganjam), Odisha, India. *The Journal of the Indian Botanical Society* 101 (1&2):107-120. DOI:10.5958/2455-7218.2021.00019.X NAAS rating 3.51
- 37. Patra S, Nayak R, Patro S, Pradhan B, Sahu B, Behera B, Bhutia B*, Jena M* 2021. Chemical diversity of dietary phytochemicals and their mode of chemoprevention: A comprehensive review. *Biotechnology Reports* 30: e00633 (Published online 18 May 2021). https://doi.org/10.1016/j.btre.2021.e00633. Elsevier (Site Score 5.9)
- **36.** Patra S, Pradhan B, Nayak R, Behera C, Raut LD, **Jena M**, Efferth T, Bhutia SK. 2021. Chemotherapeutic efficacy of curcumin and resveratrol against cancer: Chemo-prevention, chemoprotection, drug synergism and clinical pharmacokinetics. **Seminars in Cancer biology**. 73: 310-320 https://doi.org/10.1016/j.semcancer.2020.10.010 **Elsevier (IF: 17.012)**
- **35.** Patra S, Pradhan B, Nayak R, Behera C, Panda KC, Das S, **Jena M***, Bhutia SK*. 2021 Apoptosis and autophagy modulating dietary phytochemicals in cancer therapeutics: current evidences and future perspectives. *Phytotherapy Research*: 35(8):4194-4214 DOI: 10.1002/ptr.7082 **Wiley (IF: 6.388)**
- **34.** Dash SR, Pradhan B, Behera C, Nayak R, **Jena M*** 2021. Algal Flora of Tampara Lake, Chhatrapur, Odisha, India. *The Journal of the Indian Botanical Society* **101** (1): 1-15. DOI:10.5958/2455-7218.2021.00008.5. NAAS rating **3.51**
- **33.** Pradhan B, Patra S, Behera C, Nayak R, Jit BP, Ragusa A*, **Jena M***, 2021. Preliminary Investigation of the Antioxidant, Anti-Diabetic, and Anti-Inflammatory Activity of *Enteromorpha intestinalis* Extracts. *Molecules* 26:1171.
 - https://doi.org/10.3390/molecules26041171 MDPI (IF: 4.927).
- **32.** Patra S, Mohapatra KK, Prakash PP, Panigrahi DP, Misra SR, Behera BP, Singh A, **Jena M**, Bhutia SK*. 2021. Intricate role of mitochondrial calcium signalling in mitochondrial quality control for regulation of cancer cell fate Intricate role of mitochondrial calcium signalling in mitochondrial quality control for regulation of cancer cell fate. *Mitochondrion* 57: 230-240. https://doi.org/10.1016/j.mito.2021.01.002. **Elsevier (IF: 4.534)**

- 31. Pradhan B, Patra S, Maharana S, Behera C, Dash SR, Jena M*. 2021. Demarcating antioxidant response against aluminum induced oxidative stress in *Westiellopsis prolifica* Janet 1941.
 International Journal of Phytoremediation 23 (3): 238-251. https://doi.org/10.1080/15226514.2020.1807906 Taylor & Francis (IF: 4.003)
- **30.** Pradhan B, Patra S, Dash SR, Nayak R, Behera C, **Jena M*.** 2021. Evaluation of the antibacterial activity of methanolic extract of *Chlorella vulgaris* Beyerinck [Beijerinck] with special reference to antioxidant modulation. *Future Journal of Pharmaceutical Sciences* 7: 17 https://doi.org/10.1186/s43094-020-00172-5. **Springer**
- 29. Pradhan B, Nayak R, Patra S, Jit BP, Ragusa A*, Jena M*. 2021 Bioactive metabolites from marine algae as potent pharmacophores against oxidative stressed -associated human diseases:

 A comprehensive review. Molecules
 26 (1)

 37 https://doi.org/10.3390/molecules26010037. MDPI (IF: 4.927)

 2020
- 28. Dash SK, Pandey JK, Jena M*, Biswal B. Effect of Heat Stress and the Recovery Potential of Heterocystous Cyanobacterium, *Anabaena iyengarii* Bharadwaja 1935. 2020. *Journal of Pure and Applied Microbiology*. 14 (4):2467-2476. DOI: 10.22207/JPAM.14.4.24 Scopus
- **27.** Dash S, Biswal B, **Jena M*** 2020. Influence of Physico-chemical factors on heterocytous cyanobacterial diversity thrive in the rice fields of Western Odisha. *Environment and Ecology* 38(4). 852-858. NAAS rating: **4.18**
- **26.** Behera C, Dash S, Prdhan B, **Jena, M*,** Adhikary SP. 2020. Algal Flora of Ansupa Lake, Odisha, India. *Nelumbo* 62 (2):207-220. DOI:10.20324/nelumbo/v62/2020/151834
- Pradhan B, Patra S, Behera C, Nayak R, Patil S, Bhutia SK, Jena M*. 2020. Enteromorpha compressa extract induces anticancer activity through apoptosis and autophagy in oral cancer. Molecular Biology Reports 47:9567-9578. https://doi.org/10.1007/s11033-020-06010-4. Springer (IF: 2.742)
- 24. Pradhan B, Patra S, Nayak R, Behera C, Dash SR, Nayak S, Sahu BB, Bhutia SK*, Jena M*. 2020. Multifunctional role of Fucoidan, sulfated polysaccharides in human health and disease: A journey under the sea in pursuit of potent therapeutic agents. *International Journal of Biological Macromolecules* 164: 4263-4278. https://doi.org/10.1016/j.ijbiomac.2020.09.019.Elsevier (IF: 8.025)
- 23. Mohanty S, Pradhan S, Patra S, Behera C, Nayak R, Jena M*2020. Screening for nutritive bioactive compounds in some algal strains isolated from coastal Odisha. *Journal of Advanced Plant Sciences* 10 (2): 1-8.
- **22.** Patra S, Panigrahi DP, Praharaj PP, Panda B, Bhola CK, Mahapatraa KK, Mishra SR, Behera BP, **Jena M**, Sethi G, Patil S, Patra SK, Bhutia, SK 2020. Bioactive Compounds from Marine Invertebrates: The Possible Pharmacophores Modulating Cell Death Pathway. *Molecular*

Biology Reports 47:7209–7228. https://doi.org/10.1007/s1103-020-05709-8 Springer (IF: 2.742)

- 21. Patra S, Bhol CS, Panigrahi DP, Praharaj PP, Pradhan B, Jena, M, Bhutia, SK 2020. Gamma irradiation promotes chemo-sensitization potential of gallic acid through attenuation of autophagic flux to trigger apoptosis in an NRF2 inactivation signalling pathway. Free Radical Biology and Medicine 160:111-124. https://doi.org/10.1016/j.freeradbiomed.2020.06.022, Elsevier (IF: 8.101)
- 20. Vishwakarm R, Wattal Dhar, D, Jena M, Shukla M 2020. Biochemical parameters and 18S rRNA gene sequence analysis amongst green microalgal strains from selected aquatic sites of Eastern India. Water Science and Technology 82 (6): 1205–1216. https://doi.org/10.2166/wst.2020.195, IWA (IF: 2.430)
- **19.** Pradhan B, Boral S, Patra S, Behera C, Nayak R, **Jena M*** 2020. Delineation of gamma irradiation (⁶⁰Co) induced oxidative stress by decrypting antioxidants and physiochemical responses of *Chlorella* sp. *Biocatalysts and Agricultural Biotechnology* 25: 101595. https://doi.org/10.1016/j.bcab.2020.101595, **Elsevier IF: 2.15** (**2.8*** **Site score**)
- **18.** Pradhan B, Patra S, Dash, S.R., Maharana, S., Behera, C. **Jena M*** 2020. Antioxidant responses against aluminum metal stress in *Geitlerinema amphibium*. *S.N. Applied Sciences* 2:800. https://doi.org/10.1007/s42452-020-2599-1 **Springer-Nature**
- **17.** Dash SR, Pradhan B, Behera C, **Jena M*** 2020. Algal Diversity of Kanjiahata Lake, Nandankanan, Odisha, India. *The Journal of the Indian Botanical Society* **99** (1 & 2):11-24. https://doi:10.5958/2455-7218.2020.00009.1
- 16. Patra S, Panda PK, Panigrahi DP, Praharaj PP, Bhola CK, Mahapatraa KK, Padhi P, Jena, M, Patil S, Patra SK, Bhutia SK 2020. *Terminalia bellirica* Extract induces Anticancer Activity Through modulation of apoptosis and Autophagy in oral Squamous Cell Carcinoma. *Food and Chemical Toxicology* 136: 11073. https://doi.org/10.1016/j.fct.2019.111073 Elsevier (IF: 5.572).

2016-2019

- **15.** Maharana S, **Jena M***, Misra MK 2019. Seasonal Variation of Physico-chemical Parameters of Chilika Lagoon, East Coast of India. *Indian Journal of Ecology* 46 (3): 643-647. (**Scopus**) NASS rating: **4.96**
- **14.** Patra S, Panigrahi DP, Praharaj PP, Bhol CS, Mahapatra KK, Mishra SR, Behera BP, **Jena**, Bhutia SK 2019. Dysregulation of histone deacetylases in carcinogenesis and tumor progression: a possible link to apoptosis and autophagy. *Cellular and Molecular Life Sciences* 76 (9): 1641–1652. https://doi.org/10.1007/s00018-019-03098-1 Springer (IF: 9.207)
- **13.** Maharana S, Pradhan B, **Jena M***, Misra MK 2019. Diversity of Phytoplankton in Chilika Lagoon, Odisha, India. *Environment and Ecology* 37 (3): 737-746.

2011-2015

- **12. Jena M**, Bock C, Behera C, Adhikary SP, Krienitz L 2014. Strain survey on three continents confirms the polyphyly of the genus *Pediastrum* (Hydrodictyaceae, Chlorophyceae), *Fottea*, *Olomouc* 14: 63-76. doi: 10.5507/fot.2014.005 (**IF: 2.429**)
- **11.** Adhikary SP, **Jena M** 2012. Algal diversity of Kaziranga national park and Majuli River island hot spots of Assam. *Nelumbo* (*Bull. Bot. Survey India*) 54:1-6. doi:10.20324/nelumbo/v54/2012/57436
- Jena M, Adhikary SP 2011. Algal diversity of Loktak lake, Manipur. Nelumbo (Bull. Botanical Survey of India) 53: 21-48. doi: 10.20324/nelumbo/v53/2011/57502.
 2005-2010
- Samad LK, Jena M, Adhikary SP 2008. Cyanobacteria in Biological crusts on soils and subaerial habitats from different regions of Orissa. *Bulletin of the Botanical Survey of India* 50: 51-56. doi: 10.20324/nelumbo/v50/2008/58219
- **8. Jena M,** Ratha SK, Adhikary SP 2008. Algal diversity of Rushikullya River, Orissa from origin till confluence to the sea. *Indian Hydrobiology* 11: 9-24.
- **7. Jena M,** Adhikary SP 2007. Chlorococcales (Chlorophyceae) of eastern and north-eastern states of India. *Algae* (Official journal of Korean Society of Phycology) 22:167-183. doi: https://doi.org/10.4490/algae.2007.22.3.167 (IF: 2.9)
- **6.** Ratha SK, **Jena M**, Ratha J, Adhikary SP 2007. Three ecotypes *Compsopogon coeruleus* (Rhodophyta) from Orissa state, east cost of India. *Algae* 22:87-93. doi: https://doi.org/10.4490/algae.2007.22.2.087 (**IF: 2.9**)
- 5. Jena M, Ratha SK, Adhikary SP 2006. Diatoms (Bacillariophyceae) from Orissa state and neighbouring regions, India. Algae 21: 377-392. doi: https://doi.org/10.4490/algae.2006.21.4.377 (IF: 2.9)
- **4. Jena M**, Ratha SK, Adhikary SP 2006. Desmids (Zygnematales, Chlorophyceae) of Orissa state and neighboring regions, India. *Algological Studies* 122:17-34. doi: 10.1127/1864-1318/2006/0122-0017.
- 3. Ratha, S.K., Jena, M. and Adhikary, S.P. 2006. Euglenophytes from Orissa state, east Cost of India. *Algae* 21: 61-73. doi: https://doi.org/10.4490/algae.2006.21.1.061 (IF: 2.9)
- **2. Jena, M**., Ratha, S.K. and Adhikary, S.P. 2006. Algal diversity of Similipal Biosphere Reserve, Orissa. *Indian Hydrobiology* 9: 103-113.

1. Jena, M., Ratha, S.K. and Adhikary, S.P. 2005. Algal diversity changes in Kathajodi River after receiving sewage of Cuttack and its ecological implications. *Indian Hydrobiology* 8: 67-74.

Book Chapters

- 1. Rath, J., **Jena, M**. and Adhikary, S.P. 2013. Biodiversity analysis of soil and freshwater algae of eastern and north-eastern regions of India. In. Eco- restoration and Biodiversity conservation. Eds. Gupta, A. and Mishra, G.P., Avishhkar Publishers, Distributors, Jaipur 302003, pp.32-54. (ISBN/ISSN 9788179104187/2013,34-54).
- 2. Pradhan B, Behera C, Nayak, R and **Jena, M*.** 2020. Use of Phytochemicals: A promising and eco-friendly approach for the management of mosquito vector populations. In: T.K. Barik (eds) Molecular Identification of Mosquito vectors and their management. pp. 51-58. doi:10.1007/978-981-15-9456-4_4 (*Springer Nature*).
- 3. Pradhan B, Jit BP, Maharana S, Ramchandani S, **Jena M***. 2022. Bio-nano interface and its potential application in Alzheimer's disease. In: M. Arakha, A.K. Pradhan and S Jha (eds) Bio-nano Interface Applications in food, healthcare and sustainability. Pp.209-224. https://doi.org/10.1007/978-981-16-2516-9_12. *Springer Nature*.
- 4. Nayak, R, Pradhan B, Patra S, Bhuyan, Behera C, Parida S, Behera AK, Mandal MK, Jena M*2023. Microalgal biofilm and their prospective application for wastewater treatment and biofuel production, In: S. Das and N A Kugwani (eds)Undestanding Microbial Biofilm Fundamentals to Applications. pp-147-164. Elsevier-Academic press, ISBN 978-0-323-99977-9
- 5. Pradhan, B, Nayak R, Patra S, Nayak R, Behera C, Dash SR., **Jena, M*.** 2023. Beneficial elements and status of ROS and RNS in plants: current evidences and future prospects. In D. Tripathi and D K Chauhan (eds) Beneficial Chemical Elements of Plants: Recent Developments and Future Prospects (Accepted) *Wiley*

*Corresponding author

> Book

 Adhikary, S.P., Jena, M. and J. Rath. 2009. Soil and freshwater algae of coastal Orissa, 2009 India. *Bibliotheca Phycologica*, Stuttgart, Germany, Band 115:166 Pp. (ISBN 978-3-443-60042-6).

> R	ESEARCH GUIDA	NCE			
	Programme of S	Study	Awarded	Thesis Submitt	ed Continuing
Resea	arch	Ph.D.	05	01	03
		M. Phil.	16	_	-
	ct work/	M.Sc.	23	_	08
Disse	rtation	111.50.			
_	h.D. Students (Aw				**
Sl. No	Name	Title of th	e Ph.D. Thesis	Supervisor/ Co-Supervisor	Year of award
1.	Sairendri	Studies on N	Microalgae	Supervisor	Awarded
	Moharana	of Chilika L	_		02.03.2020
		Exploration Biodiesel Pr		I	Notification no. 1069//EC- II(M.Phil./Ph.D.)/ 2020
2.	Sidhartha K. Dash	Diversity of Cyanobacter Fields of Wo Odisha and Photosynthe Efficiency U	ria in Rice estern Their etic	Supervisor	Date:07.03.2020 Awarded 09.06.2021 Notification no. 1761//EC- II(M.Phil./Ph.D.)/ 2021
3.	Biswajita Pradhan	Marine alga of Odisha C screening of Therapeutic	l Diversity oast and their	Supervisor	Awarded 29.07.2021 Notification no. 2146//EC-
4.	Soumya R. Dash	Algal Divers Freshwater l Odisha	•	Supervisor	II(M.Phil./Ph.D.)/ 2021 Date: 31.07.2021 Awarded 23.09.2021 2766//EC_II (M.Phil./Ph.D.)/2021 Dt. 23.09.2021
5.	Subrat K. Panigrahi	Studies on S value-added plants of So	medicinal	Co- Supervisor	Awarded 20.11.2021 3498//EC_II (M.Phil./Ph.D.)/2021 Dt. 29.11.2021
6.	Pratyush Kumar Karjee	Study of anti activity of so microalgae i from Ganjan Odisha	ome solated	Supervisor	Thesis submitted Dt. 28.04.2023

> M. P	M. Phil. Students = 16							
Sl.	Name	Title of the M.Phil. Thesis	Roll. No.	Year of award				
<u>No</u> 1.	Jyotirmayee Nayak	Effect of pH on growth and biochemical parameters of Chlamydomonas reinhardtii	5212	2012				
2.	Supriya Devi	Effect of salinity on the biochemical composition of microalga <i>Chlorella</i> vulgaris Beijerinck	5712	2012				
3.	Priyanka Naik	Physiochemical analysis of certain marine microalgae from Gopalpur-on-sea	4213	2013				
4.	Pabitra Sahoo	Effect of gamma irradiation on growth and morphology of soil cyanobacterium <i>Phormidium animale</i>	on growth and morphology of soil cyanobacterium					
5.	Soubhagya Subhadarsini Sahoo	Investigations on Antioxidant Properties of Certain Strains of Cyanobacteria	4413	2013				
6.	Bswajita Pradhan	Cyanobacteria isolated from Aluminium polluted sites of Nalco, Angul, Odisha	3214	2014				
7.	Kalpana Sing Deo	Effects of ultraviolet irradiation on biochemical properties of coccoid microalgae	3614	2014				
8.	Saumya Ranjan Dash	Algal Diversity of Kanjia Lake, Nandankanan, Odisha	4014	2014				
9.	Sarmistha Mohanty	Analysis of Nutritive Bioactive Compounds of Microalgae	115	2015				
10.	Pratyush Ku. Karjee	Screening of Antibacterial Activities of Cyanobacteria	215	2015				
11.	Jayalaxmi Sethi	Algal Flora of Tampara Lake, Chatrapur, Odisha	20116	2016				
12.	Rabindra Kumar Gouda	Effect of gamma irradiation on biochemical markers of	20516	2016				

		green alga Chlamydomonas reinhardi Dang.		
13.	Ronsni Rani Panda	Algal diversity in saltpans of Humma (Ganjam), Odisha	20616	2016
14.	Debasish Pati	Effect of cadmium toxicity on Nannochloropsis limnetica	117	2017
15.	Somnath Boral	Induction of Oxidative stress in <i>Chlorella</i> sp. by Ionizing radiation	518	2018
16.	Sneha Nayak	Screening of Phytochemicals and Antioxidant Properties of <i>Gracilaria corticata</i>	1919	2021

> RI	RESEARCH PROJECTS (Completed/Ongoing)							
Sl. No	Agency	<u>Per</u>	riod	Reference letter No.	Budget (In lakhs)	PI/ Co-PI	Status	
		From	To					
01	Odisha Forestry Sector Development Project OSDP, Bhubaneswar, Govt. of Odisha	2013	2015	Impact of JFM Pralakhemundy, DMU.	18.8	Со-РІ	Completed	
02	Science and Technology Department, Govt. of Odisha	2017	2020	Ref. lettter No. 1197/ST (Bio) - 02/2017 Bhubaneswar dated: 01.03.2017)	9.6	PI	Completed	
03	MoEF and CC, Govt. of India (AICOPTAX- Programme)	2018	2021	Reference letter F. No. 22018/19/2015- Ce (TAX), 18/January-2018)	21.73	PI	Completed	
04	Science and Technology Department, Govt. of Odisha	2022	2025	Ref. letter no.2149/ST/ST- SCST-MISC- 0045-2021 Bhubaneswar Dates 06.06.2022	9.96	PI	Ongoing	
05	Science and Technology Department, Govt. of Odisha	2023	2026	Ref. letter no. ST-BT-MISC- 0004-2023- 1706, Dt.31.03.2023	30	PI (Collab- orator)	Ongoing	

	(Collaborativ e Research Project Grants in Biotechnolog y for the year 2022-23)						
06	SERB, Govt. of India	2023	2026	SIR Project SUR/2022/0012 26 Dt. 08.05.2023	30	PI	Ongoing

> GENERATED FUNDS FROM FUNDING AGENCIES

For 2 days National Conference [NCBBBIET-2019]- as Convener

• DBT-GOVT. Of INDIA: 1.0 Lakh

• CSIR, Govt. Of India: 50 thousand

> RESEARCH CONTRIBUTION NEW TO SCIENCES

- New species (01 no.) : 1. *Soras*
- 1. Sorastrum pediastriforme Jena et C. Bock sp. nov.
- New combinations of species (05 nos.)
- 1. *Monactinus sturmii* (Reinsch) Jena et C. Bock comb. nov.
- **2.** Pseudopediastrum alternans (Nygaard) Jena et C. Bock comb. Nov
- **3.** *Pseudopediastrum brevicorne* (A. Braun) Jena et C. Bock comb. et stat. nov.
- **4.** Pseudopediastrum integrum (Nägeli) Jena et C. Bock comb. nov.
- **5.** *Pseudopediastrum pearsonii* (G.S. West) Jena et C. Bock comb. nov.

> No. OF NUCLEOTIDE SEQUENCE SUBMITTED IN NCBI: 29

NCBI Abscission no:

HM021304, HM021305, HM021323, HM021323, HM021322, HM021321, HM021325, HM021320, HM021300, HM021298, HM021301, HM021303, HM021299, HM021302, HM021311, HM021310, HM021306, HM021307, HM021309, HM021308, HM021312, HM021319, HM021318, HM021317, HM021316, HM021315, HM021314, HM021313

> NEW SYLLABUS/CURRICULA DESIGN

 M.Phil./Pre-PhD. (Botany), Berhampur University 2017, 2021; B.Sc. (Botany), Govt. of Odisha 2019, M.Sc. Botany, BU-2020

> EVENTS (CONFERENCES/SEMINARS/WORKSHOPS) ORGANIZED

- **1.** Organized two days Training program on Patents from 4th-5th May, 2023 at Berhampur University as a **Convener.**
- **2.** Organized a Workshop on "Awareness Generation on Workshop on Intellectual Property Rights" on 21st Feb. 2023 at Berhampur University as a **Convener**.
- **3.** Organized a Workshop on "Awareness Generation on Workshop on Intellectual Property Rights" on 17th December, 2021 as **Nodal Officer, IPR Cell**, Berhampur University.
- **4.** Organized two days International Virtual Conference on Current Status of Biosciences-2021 (ICCSB-2021) at P.G. Department of Botany, Berhampur University, from 30th 31st March, 2021, as **Co-Coordinator.**
- **5.** Organized two days National Conference on Recent Advances in Plant Sciences, Biotechnology and Bioinformatics, 2020 [RSPBB-2020] at P.G. Department of Botany, Berhampur University, from 22nd -23rd February, 2020 as **Co-Coordinator**
- **6.** Organized **Research Methodology Workshop** under World Bank Funded OHEPEE from 22nd to 24th December, 2019 as **Coordinator.**
- **7.** Organized 2 days **National Conference** on "Biodiversity, Biotechnology and Bioinformatics: Innovative and Emerging Trends-2019 [NCBBBIET-2019] at P.G. Department of Botany, Berhampur University, from 22nd-23rd February, 2019 as **Convener.**
- **8.** Organized **Research Methodology Workshop** under World Bank Funded OHEPEE from 12th -16th February, 2019 as **Coordinator.**
- 9. Organized International Conference on "Recent Trends of Chemical & Biological Science in Medicine, Natural product and drug Discovery (IC_RTCBSMNPDD-2017) at P.G. Department of Chemistry, Berhampur University, Bhanja Bihar, Odisha from 3rd to 5th March, 2017 as Organizing Secretary

> CONFERENCES, SEMINARS AND WORKSHOPS PARTICIPATED

1. Participated and delivered an **invited lecture** in the **National** Seminar on "The Current Trends in Plant Science" at Kendrapada Autonomous college, Odisha from 25-26, Feb. 2023.

- 2. Participated, delivered a **Keynote lecture** and **Co-chaired a technical session** in the 3rd International Workshop on "Biodiversity and Climate Change- Sustainable Development Perspective" at CORAL, IIT, Kharagpur from 16th -19th Feb. 2023.
- **3.** Participated and delivered an **Invited lecture** in the two days **international** conference on "Recent advances in Biological Sciences-2022 (RABS-2022) organized by Vikram Dev (Autonomous) College, Jeypore, Koraput, Odisha from 23rd -24th Dec. 2022.
- **4.** Participated, presented a paper (**Oral Presentation**) and **chaired a technical session** in the 45th Annual Conference of Orissa Botanical Society & **National** seminar on Biotechnological approaches for mitigating climate change organized by Udayanath Autonomous College of Science & Technology, Adaspur Cuttack from 10th -11th Dec. 2022.
- **5.** Participated in the **University level** seminar as an **Invited speaker** and delivered a lecture on Diversity Microalgae and mass cultivation Techniques and Techniques for Micraolgal Cultivation in the Department of Botany, Rama Devi Women's University, BBSR on 02.01.2022 to 03.01.2022 via Online mode.
- **6.** Invited as **Resource Person** and delivered a lecture (online mode) on "Algal Diversity and their Cultivation Techniques" in 21 days Skill Based Internship Programme on 'Advanced Techniques for Microalgal Cultivation' organized by Centre for Advanced Studies in Botany, University of Madras, Chennai on 28.12.2021.
- **7.** Participated in the UGC-Autonomy Seminar as a **Resource Person** and delivered a talk on "Algae for food, Nutraceuticals and Future Green Energy" Organized by Department of Botany, Kendrapara Autonomous College, Kendrapara, 11th December, 2021.
- **8.** Participated in the AARI International Algal Webinar Series session-II, Entitled "*Charophytes: Morphotaxonomy vs Cytotaxonomy*" organised by 1/152, Vembuli Amman Koil Street, Madipakkam, Chennai- 60009 on 3rd October, 2020.
- **9.** Invited as **resource person** and delivered a talk in the Seminar (University level) on "Algal diversity of Wetlands: Prettiness and Significance" a University level special seminar organized by Saraswati Degree Vidya Mandir, Berhamur, Ganjam on the occasion celebration World Wetlands Day on 22nd February, 2020.
- **10.** Participated and delivered an **Invited lecture** and **Co-chaired a technical session** in the Prof. Deshikachary Birth Centenary **International** Symposium on Biodiversity, Biology and Biotechnology of algae (ISBBA-2020), CAS Botany, University of Madras, 8th-10th, Jan. 2020.
- **11.** Invited as **Resource Person** and delivered a lecture in the Induction Training Programme under the sponsorship of the Higher Education Department, Govt. of Odisha for the newly

- recruited SSB lecturers organized by Human Resources Development Centre, Berhampur University, 21st December, 2019.
- **12.** Participated in the **International** Seminar on "International Roving Seminar on Patent Cooperation Treaty (PCT)" organized by United Nation-World Intellectual Property Organization (WIPO) and Intellectual Property India (IPO) in association with KIIT University at KIIT University, Bhubaneswar on 28th of June, 2019.
- **13.** Participated and delivered an **Invited talk** in the **International** Conference on "Chemical & biological Sciences in Drug Discovery" organized by P.G. Department of Chemistry, Berhampur University, Odisha, from 8th -10th March, 2019.
- **14.** Invited as **Resource Person** and delivered a talk on "Algae as a promising feedstock of Biofuel for pollution free environment" a special seminar organized by Department of Botany, Upendra Nath College, Soro on 22nd January, 2019 as a resource person.
- **15.** Participated and presented paper (**Poster Presentation**) in the **National** conference on "Plants for Sustainable Development and Clean Environment & 43rd Annual Conference of Orissa Botanical Society" organized by P.G. Department of Botany, School of Applied Sciences, Centurion University of Technology & Management, from 23rd 24th December 2018
- **16.** Participated and delivered an **Invited lecture** in the **National** Seminar on "Perspectives of Human Health, Microbial Biotechnology and Innovation" (PHMBI-18) organized by Department of Human Physiology with Community Health and Department of Microbiology, Vidyasagar University, West Bengal, from 27th-29th March, 2018
- **17.** Participated and delivered an **Invited lecture** and **Co-chaired a technical session** in the **2nd International** workshop on Biodiversity and Climate Change (BDCC2018), organized by CORAL, Indian Institute Technology, Kharagpur, West Bengal, from 24th -27th February, 2018.
- **18.** Participated and presented a research paper (**Oral Presentation**) in the **National** conference on "Biotechnological Interventions for Environmental Stress Management in Plants and Microbes and 42nd Annual Conference of Orissa Botanical Society" organized by P.G. Department of Botany, Utkal University, Bhubaneswar from 20th 21st January, 2018.
- **19.** Participated and delivered an **Invited talk** in the **National** conference on Bimolecular Dynamics–Experimental and Theoretical Perspectives organized by Department of Chemistry, NIT Rourkela from 18th -20th December, 2017.

- **20.** Participated and presented research paper (**Oral Presentation**) in the **National** Seminar on "Bioresource Management and Restoration" organized by P.G. Dept. of Bioscience and Biotechnology", Fakir Mohan University, Nuapadhi, Balasore from 27th 28th of March, 2017.
- **21.** Participated and delivered an **Invited talk** in the **International** Conference on "Recent Trends of Chemical & Biological Science in Medicine, Natural product and drug Discovery (IC_RTCBSMNPDD-2017) organized by P.G. Department of Chemistry, Berhampur University, Bhanja Bihar, Odisha from 3rd 5th March, 2017.
- **22.** Participated and delivered an **Invited talk** in the **National** conference on Biodiversity, Biology and Biotechnology of Algae (NCBBBA-2017) organized by CAS in Botany, University of Madras, Guindy Campus, Chennai, from 9th 10th Jan. 2017.
- **23.** Participated and presented a paper (**Oral Presentation**) in the **National** Seminar on "Emerging Trends in Plant Science Research: Challenges and opportunities" organized by Department of Botany, North Odisha University, Sriramchndra Vihar, Takatpur, Baripada, Odisha, from 22nd to 2^{3rd} March, 2017.
- **24.** Participated and delivered an **invited talk** in the UGC –sponsored (**University level**) Seminar "Environmental Protection: Concerns and Avenues" organized by the stream of sciences, Aska Science College, Aska (Ganjam), Odisha on 28th February, 2017.
- **25.** Participated in the 40th Annual conference of Orissa Botanical Society, organized jointly by department of Bioscience and Biotechnology and department of Environmental Science, F.M. University, Balasore, Odisha, India, from 9th-10th February, 2016.
- **26.** Participated and presented research paper (**Poster Presentation**) in the **National** Conference on "Marine Bio-resources of East Coast of India and Their Prospecting" organized jointly by Department of Bioscience and Biotechnology and Department of Environmental Science, F. M. University, Balasore, Odisha, India, from 10th-12th February, 2016.
- **27.** Participated in the **International** Conference on "India and the Indian Ocean, Renewing the Maritime Trade and Civilization Linkages" at Bhubaneswar, Odisha, from 20th -22nd March, 2015.
- **28.** Participated in the **International** Conference on "Innovative Applications of Chemistry in Pharmacology and Technology", organized by P.G. Department of Chemistry, Berhampur University from 6th-8th Feb. 2015

- **29.** Participated and presented a research paper (**Oral Presentation**) in the **International** Conference "Frontiers in Biological Science" organized by Department of Life Science, National Institute of Technology, Rourkela, Odisha, India, from 22nd-24th January, 2015.
- **30.** Participated and presented a research paper (**Oral Presentation**) in the **National** conference on "Progress in algology in the Indian context" at Bharathidashan University, organized jointly by Department of Microbiology, Bhrathidarshan University, Tiruchirapalli and Krishnamurthy Institute of Algology, Chennai, from 19th-21st September, 2014.
- **31.** Participated and delivered an **Invited talk** in the **National** Seminar on "Phytoresouces: Utilization and Conservation" organized by Department of Botany, North Odisha University, Takatpur, Baripada, on 24th March 2014.
- **32.** Participated and presented a research paper (**Oral Presentation**) in the **National** Conference on "Frontiers in Algology and Algal Biotechnology", organized by Department of Biotechnology, Visva-Bharati (A central University), Santiniketan, West Bengal, from 15th-17th, November, 2013.
- **33.** Participated in the 37th Annual conference of Odisha Botanical Society, organized by Department of Botany, Ravenshaw University, from 21st-22nd October, 2012.
- **34.** Participated in the **National** Seminar on "Human Health and Environmental Toxicology", organized by P.G. Departments of Zoology and Botany, Berhampur University, from 8th-9th January, 2012.
- **35.** Participated in the **National** Seminar on "Research Methodology", organized by Department of Business Administration, Berhampur University, Berhampur, from 29th-30th October, 2011.
- **36.** Participated and delivered an **Invited talk** in the DAAD Annual meetings of Wise Programme Scholarships organized by DAAD at Berlin, Germany, on 12th June, 2009.
- **37.** Participated and presented a research paper (**Oral Presentation**) in the **National** Symposium on "Biodiversity Management and sustainable Use of Resources" (BMSUR-2008) at the Post Graduate Department of Botany, Gangadhar Meher College (Autonomous), Sambalpur, from 19th and 20th April 2008.
- **38.** Participated and presented a paper (**Poster Presentation**) in the **International** Conference on "Current Trends in Algal BioSource Utilisation" at the Department of Ecology and Environmental Science, Assam University, Silchar, India from 4th to 6th December 2006.
- **39.** Participated and presented a paper (**Oral Presentation**) in the **National** Symposium on "Issues and Challenges for Conservation of Plants and Ecosystems in India" at the

- Department of Botany, North Estern Hill University, Shillong from 2nd to 3rd November, 2006.
- **40.** Participated and presented a paper (**Poster Presentation**) in the **International** conference on Applied Phycology "Algae in Biotechnology and Environment" at the University of Delhi, February 14th -15th, 2006.
- **41.** Participated and presented a paper (**Oral Presentation**) in the **National** conference on "Current research on plants and Microbial Science" at the Department of Botany, University of Burdwan, West Bengal, November 26th to 27th, 2005.
- **42.** Participated and presented a paper (**Poster Presentation**) in the **International** conference on "Conservation, Restoration and Management of Lakes and Costal Wetlands" at the Bhubaneswar, December 9th to 13th, 2004.
- **43.** Participated and presented a paper (**Oral Presentation**) in the **National** Symposium on "Biology and Biodiversity of freshwater Algae" at the Center for Advance Studies in Botany, Madras University, Chennai, September 8th to 9th, 2004.
- **44.** Participated and presented a paper (**Poster Presentation**) in the **National** Symposium on "Microbial Biotechnology" at the National Facility for Marine Cyanobacteria Bharatidasan University, presented paper in poster session, which was adjusted best and awarded, March 11th to 13th 2004.

> Popular Talk

- 1. Invited as **Resource person** and delivered a talk on "Environmental Pollution" in the Capacity building program for eco-club Master Trainer and Teachers of Naygargh, District, on 15.03.2022 Organized by Office of the Divisional Forest Officer, Nayagarh Division, Nayagarh.
- **2.** Invited as **Resource person** and delivered a talk on Environmental Pollution, Global Warming and climate Change" in the Capacity building program for eco-club teachers of Ganjam, District, 19.01.2022 and 21.01.2022 Organized by RCCF, Brahmapur Circle at Brahmapur near Courtpeta Square. 19.01.2022 and 21.01.2022.
- **3.** Invited as **Chief Guest** and delivered a talk on "Heathy Ecosystem and Rich Biodiversity Vital for Pollution Free Environment" on the occasion celebration World Environment Day on 5th June 2021 organized by ICICI Foundation for Inclusive Growth and ICICI Academy of Skills enabling livelihood Bhubaneswar Centre, Bhubaneswar.
- **4.** Invited as **Resource Person** and delivered a talk on "Algae a Promising Feedstock for food, Feed, Pharmaceuticals and Biofuels: Prospectives and Challenges" Organized by Utkalamani Gopabandhu Mahvidyalaya, Khamar, Anugul,1st Dec. 2020.

- **5.** Invited as **Guest of Honour** and delivered a talk in the National Seminar on "Air Pollution" on 5th June, 2019, World Environment Day-2019 as organized by Zoological Survey of India, Estuarine Biology Regional Centre, Gopalpur-on-Sea, Ganjam.
- **6.** Invited as **Resource Person** and delivered a talk on "Microalgae as a promising feedstocks for production of biodiesel on the occasion of World Biofuel Day, organized by Ministry of Petroleum and Natural Gas in Association with National Yuva Society (NYCS) Ltd., Berhampur on 10.08.2017.
- **7.** Invited as **Resource Person** and presented a talk on "Jaiba Indhana ra Prastuti for "Sambrudhi Pathe Bhrata Programme" at All India Radio, Berhampur on 25th November 2017 at. 11.30 am.
- **8.** Invited as **Resource Person** and delivered lecture as chief speaker on "Algal Resource Utilization and Commercialization in India: advances and prospective" in special seminar organized by Department of Botany, Upendra Nath College, Soro on 22nd Nov. 2016.

• Orientation Program/Refreshers Courses/UGC-Short-term training Courses

- **1.** Participated in the UGC, Govt. of India, sponsored online refresher course in Multidisciplinary Life Sciences on "Synthetic Biology" organized by UGC-HRDC, Pt. Ravi Shankar Shukla University, Raipur, CG from 14-12-2020 to 28-12-2020.
- **2.** Participated Online Short-term Faculty Development Program on Mathematics for Biological Sciences (of one week (6 days) organized by HRDC –Sabitri bai Phule University, Pune from 15/06/2020 to 20/06/2020.
- **3.** Participated One week (5 days), workshop (TUAPMS-2020) Organized Department of Life sciences, NIT Rourkela, from 26th Feb. 2020 to 1st March 2020.
- **4.** Participated in the UGC-sponsored Refresher Course in "Research Methodology in Basic Science" organized by UGC-HRDC, Utkal University, Bhubaneswar, from 19/08/2019 to 01/09/2019, Obtained Grade "A".
- **5.** Participated in the UGC sponsored Refresher Course in "Life Sciences". Organized by Human Resource Development Centre, University of Hyderabad, Hyderabad, from 13-11-2015 to 03-12-2015, Obtained Grade "A".
- **6.** Participated in the UGC sponsored short Term course on "Use of SPSS in data Analysis" organized by UGC-Academic Staff College, Sambalpur University, Odisha, from 19th-21st April, 2014.
- **7.** Participated in the UGC sponsored Orientation Programme at Academic Staff College, Sambalpur University, Jyoti Bihar, from 10th August to 6th September, 2013. Obtained Grade "A" and awarded as best participants.

8. Participated in the Training cum Certification course on Radiation Safety of Gamma Irradiation Chamber (Category-I Irradiators) by Bhabha Atomic Research Centre, Government of India, Mumbai, from 18th -26th February, 2013.

• Workshops/Training Programme participated

- **1.** Species Distribution Modeling during 3rd International workshop on Biodiversity and Climate Change (BDCC2023), organized by CORAL, Indian Institute Technology, Kharagpur, West Bengal, from 16th -19th, February, 2023
- 2. Participated in the International E-Lecture Workshop On Innovation In Biotechnology & Inauguration of Nano and Biomaterials Association (NBA) held on January 19-20, 2022 organized by School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, India in association with the Biotech Research Society, India (BRSI).
- **3.** Species Distribution Modeling during 2nd International workshop on Biodiversity and Climate Change (BDCC2018), organized by CORAL, Indian Institute Technology, Kharagpur, West Bengal, from 24th -27th February, 2018.
- **4.** Workshop-cum-training on "Recent Development and future Trends of Bioinformatics in Biological Science" organized by Bioinformatics Infrastructures Facility Centre, P.G. Department of Zoology, Berhampur University, Odisha from 26th to 27th December, 2016.
- **5.** Workshop on "Digital India" organized by NSS Burro, Berhampur University, Bhanja Bihar on 30th August, 2016.
- **6.** National workshop on Biotechnology for Economic Enhancement of Rural Community in Southern Region of Odisha organized by Dept. of Zoology, Berhampur University, Bhanja Bihar, Odisha on 11 September, 2015.
- 7. Workshop on "The Conservation of Cycas in Maniakati Village and its surrounding areas, Ganjam District, Orissa" at Village Maniakati, Gnajam Organised by P.G. Biotechnology Utkal University, BBSR and Guru Gobinda Singh Indraprastha University, Delhi. Supported by Ministry of Environment and Forest Govt. of India, 29 March 2008.
- **8.** Seminar-cum-workshop on "Freshwater algae and their utilization" at the P.G. Department of Utkal University, Bhubaneswar. Supported by Ministry of Environment and Forest Govt. of India, from 18 to 19th March 2007.
- **9.** Workshop on "Research Techniques in Cyanobacteriologists" (WORTIC) and "Workshop on Bioinformatics for Cyanobacteriologists" (WOBIC) at National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli supported by Department of Biotechnology, Govt. of India, from 21st Feb. to 4th March 2005.

10. Workshop on "Farmers training programmed on BGA for rice" at village Maniakati, Ganjam. Supported by Department Biotechnology, Govt. India, from 30-31st March 2004.

> OTHER RESPONSIBILITIES/CONTRIBUTION TO THE UNIVERSITY'S ADMINISTRATION

- Coordinator of the P.G. Department, Botany, Berhampur University from -16/10/2015 to 31/05/2019.
- Nodal Officer Intellectual Property rights (IPR) cell, Berhampur University-24/08/2018continuing.
- Asst. Superintendent of Chilika Ladies Hostel, Berhampur University, June 2019-May 2022.
- Chairman, BoS of Botany, Berhampur University, 2018-continuing
- Chairman, BoS of Agriculture and Agri-Biotechnology, Berhampur University, 2018-2021
- Chairman, BoS of Environmental Studies, Berhampur University, 2018-2021.
- Member of Board of Studies in Life Science, Berhampur University, 2015-contnuing.
- Member of DRC in Botany, Berhampur University, 2015-Continuing
- Member of Board of Residence, Berhampur University, 2015-2017, 2019-2022
- Member of committee of IQAC, Cell Berhampur University -2015-continuing.
- Member of committee of NIRF, Berhampur University. 2018- continuing.
- Member of Board of Studies in Life Sciences, Rayagada Autonomous College, Berhampur, 2021-continuing
- Member of Bard of Studies in Botany, Khallikote Unitary University, 2021-continuing
- Member of Bard of Studies in Environmental Sciences, F.M. University, 2022-continuing
- Member (Vice Chancellor Nominee of Berhampur University) of Joint Inspection Committee for Permanent Recognition of Degree Colleges of Rayagada District, Odisha, 2021-continuing
- Member of Board of Studies of Botany, Berhampur University, 2015-2018
- Member of Board of Studies of Agricultural and Agri-Biotechnology, Berhampur University 2016-2018
- Member of Board of Studies in Bio-Sciences (M.Sc. & M.Phil.), F.M. University, 2015-2017
- Member of Board of Studies in Botany (M. Phil.), Khallikote College (Autonomous), 2018.
- Member of Board of Studies in (B.Sc.) Botany, S.B.R. (Autonomous) Govt. College, Berhampur, 2015-2016.
- Radiological Safety Officer-Gamma irradiation facility centre-Berhampur University, March, 2013-2018
- Asst. Superintendent of Rushikulya Boy's Hostel, Berhampur University, 2015 -2017
- Course coordinator of M.Sc. Botany (DEC –mode), Berhampur University-2014-2018
- NSS Programming Officer (UNIT-I), Berhampur University, 2015-2017
- Member of Committee for Enhancement of quality of search of World Bank Assistance Project-2017
- Member of Committee for massive plantation Programme in University campus under taken by TATA Steel CSR division, Bhubaneswar, 2017

- Member of committee of Sports Council, for 50th Inter College Athletes Meet, Berhampur University, 2017
- Scrutinizers/tabulators (P.G. and Professional Unit), Berhampur University, 2016-2017.

REVIEWER OF RESEARCH JOURNALS/BOOKS:

2018-2020

1.Biocatalysis and Agricultural Biotechnology (Elsevier); **2.** South African Journal of Botany (Elsevier); **3.** Journal of Agriculture and Crop Research (Web Science); **4.** Natural Product Research (Taylor & Francis); **5.** E-book "Studies in Natural Products Chemistry: Bioactive Natural Products (Elsevier Science Publishers – Amsterdam); **6.** The Natural Product Journal (Bentham Science); **7.** Journal of Applied Phycology (Springer); **8.** Future Journal of Pharmaceutical Sciences (Springer nature).

2021

1.World Journal of Surgical Oncology -BMC (Part of Springer Nature); **02** PLOS ONE; **03**. Nutrition and Cancer (Tailor & Francis); **04.** Indian Journal of Geo-Marine Science (NISCAIR); **05.** BIOCELL (Tech Science Press, USA); **06.** Phyton (Tech Science Press, USA),**07**. International Journal of Nano medicine (Dove Medical Press).**08.** NPG Asia Materials (Nature), **09.** South African Journal of Botany (Elsevier),**10.** Molecules (MDPI), **11.** Applied Sciences. **12.** Journal of Applied Phycology (Springer).**13**. Nutrition and Cancer (Tailor & Francis)

2022

- 1. Applied Sciences (MDPI), 2. Molecules (MDPI), 3. Molecular Bioogy Report (Springer),
- **4.** South African Journal of Botany (Elsevier), **5.** Journal King Soud University (Springer),
- **6.** Toxins (MDPI), **7.** Foods (MDPI), **8.** Vegetos (Spinger).**9**. Frotiers in Pharmacology (Frontiers), **10.** Polysecharides (MDPI), **11**. Journal of Food Biochesmitry (Tailor & Francis),
- 12. Pharmaceutical biology (Tailor & Francis) 13. Sustainability (MDPI), 14. Life (MDPI)

> MEMBERS OF PROFESSIONAL AND OTHER BODIES

- Alumni of DAAD (German Academic Exchange Service)
- Life member of Odisha Botanical Society (OBS)
- Annual Member of Association of Indian Microbiologist (AMI)
- Annual Member of Indian Botanical Society (IBS)
- Annual Member of Indian Ecological Society

> COLLABORATIONS

1. Dr. habil Lothar Krienitz

Institute of Ecology and Inland Fisheries, Stechlin-Neuglobso, D-16775, Germany

2. Prof. (Dr.) Andrea Ragusa

Asst. Professor

Department of Biological and Environmental Sciences and Technologies and CNR-Nanotech, Campus Ecotekne, University of Salento

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