

Dr. Sasmita Mohanty

Designation: Professor Qualification: M.Sc (Ag), PhD Date of Birth: 27.07.1968 Date of Joining: 08.06.2018 Tel: 07205293884; Email: Sasmita.mohanty@rdwu.ac.in ORCID: https://orcid.org/0000-0002-1378-3775 VIDWAN: https://vidwan.inflibnet.ac.in/profile/<u>326504</u> https://scholar.google.com/citations?user=TDvBiLIAAAAJ&hl=en Scopus Author ID: 57202226646 https://www.researchgate.net/profile/Sasmita-Mohanty-2 Web of Science ResearcherID: AAI-3732-2021

Additional qualification

- 2016 MOOC course on Competency Enhancement for Effective Teaching: Nov 18-Dec 22, 2016 from ICAR-NAARM, Hyderabad
- 2009 On-line *Certificate Course* on *Cyber Law* from Indian Law Institute (Deemed University), New Delhi
- 2006 **Post-doc: Rice Genomics** Plant Molecular Genetics Group (Group Leader: Dr Adam Price), Department of Plant and Soil Sciences, School of Biological Sciences, College of Life Sciences & Medicine, University of Aberdeen, Scotland, UK (May-September, 2006)
- 2006 On-line Certificate Course on Intellectual Property Rights and Information Technology in the Internet Age from Indian Law Institute (Deemed University), New Delhi (4 months duration).
- 1995 Qualified the *National Eligibility Test ffor Assistant Professorship in State Agricultural Universities (SAUs),* Conducted by Agricultural Scientists Recruitment Board (ASRB), Indian Council of Agricultural Research (ICAR).
- 1993 Qualified Joint CSIR-UGC (Council of Scientific & Industrial Research University Grants Commission) Fellowship Exam, 1993 and **Selected for CSIR Junior** *Research Fellowship (JRF) and National Eligibility Test (NET) for Lectureship.*

Area of Interest

Molecular Plant Physiology, Genomics and Proteomics, Stress Biology -Temperature stress, Arsenicosis.

Courses taught

Genetics, Genetic Engineering, Molecular Biology

Career

- Professor (Biotechnology)- Rama Devi Women's University, Bhubaneswar, since 8 June, 2018-continuing
- Associate Professor (Biotechnology)- School of Biotechnology, KIIT University, Bhubaneswar 1 Sep 2016 – 1 June 2018
- Assistant Professor (Biotechnology)- School of Biotechnology, KIIT University, Bhubaneswar 15 Sep 2008 – 31 Oct 2016
- CSIR-Pool Officer- Bose institute, Kolkata, Dept. of Botany, since June, 2008-12 Sep, 2008
- Honorary Researcher- Bose institute, Kolkata, Dept. of Botany, since Feb, 2007-June, 2008
- Assistant Professor (Biotechnology) Bengal College of Engineering & Technology (West Bengal University of Technology), Department of Biotechnology, Durgapur 713212, West Bengal, INDIA (3 Jan – 21 Mar 2006)
- Assistant Professor (Biotechnology) Allahabad Agricultural Institute-Deemed University, College of Biotechnology & Allied Sciences, Allahabad 211 007, INDIA (April 2004 - July 2005)
- Research Associate (Biotechnology) Indian Institute of Information Technology (IIIT)-(Deemed University), Indo-Russian Centre for Biotechnology (IRCB), Allahabad 211 002, INDIA (Jan 2004 - April 2004)
- Research Fellow (CSIR) Institute of Life Sciences (Department of Biotechnology, Govt of India), Bhubaneswar 751012, INDIA (Jan 1994- April 1996)

Teaching Experience

17 years

Research Experience

20 years

Administrative/Executive Experience

- HOD, Dept. of Biotechnology, Rama Devi Women's University (September 2018-September 2020)
- Chairperson PG Council, Rama Devi Women's University (September 2020-August 2022)
- Director, College Development Council, Rama Devi Women's University (September 2022-present)
- Director, Internal Quality Assurance Cell, Rama Devi Women's University (September 2022-present)
- Member, Academic Council (2018-2022)
- Member, Syndicate (2020- Continuing)

Workshop/Refresher Course/ Professional Training

- Training Programme on "Genetically Engineered (GE) Plants: Biosafety Considerations, Policies, Challenges and Detection Strategies organized by ICAR-NBPGR, New Delhi on 19-25 July 2022
- Online Faculty Development Program on "Organizational Behaviour" from 13/09/2021 to 17/09/2021 at National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad.
- **Orientation Training Programme for mentors of Higher Education Institutions** organized by NITTTR, Kolkata, India on January 27-February 04, 2021.
- Workshop for Empowering Teaching through Online Mode (JNU-WETOM II) held by Jawaharlal Nehru University, New Delhi on May 09-10, 2020.
- Hands-on workshop on "RNA DENOVO Data Analysis, RNA RESEQ Data Analysis & NGS platforms and its applications" organized by Bionivid Technologies Pvt. Ltd., India on April 28-30, 2020.
- Faculty Development Programme organized by School of Biotechnology, KIIT, India on June 23-30, 2017
- International Workshop on 'Transcriptomics, Proteomics and Structural Biology' organized by NDRI, Karnal and NBAGR, Karnal, India on February 27-29, 2012.
- Two-day Workshop on 'ecology and conservation of Chilika lake, India' jointly organized by Embassy of Switzerland in India and Chilika Development Authority (CDA) on 25-26 November, 2011.
- All India Refresher Course in 'Plant Genetic Engineering' organized by Indian Academy of Sciences, Bangalore, India in collaboration with Centre for Plant Molecular Biology (CPMB), School of Biotechnology, Madurai Kamaraj University (MKU), Madurai, India on December 7-21, 2004.
- ICGEB-sponsored International Workshop-'Molecular Biology of Drought Tolerance in crop Plants'- Organized by Institute of Genetic Engineering, Kostinbrod, Bulgaria at Bulgarian Academy of Sciences, Varna, BULGERIA from 12-15 September, 1998 [with travel support from CSIR & DST, Govt. of India].

Awards & Honors

- 2021: Research Excellence Award by Institute of Scholars, Bengaluru, Karnataka, India.
- 2018: Resource person at Refresher Course in Biosciences organized by Utkal University, Bhubaneswar on August 21-September 10, 2018.
- 2017: Distinguished Scientist Award in Plant Biotechnology at VIRA-2017; Venus International Foundation, Chennai.
- 1995: National Eligibility Test for Assistant Professorship in State Agricultural Universities (SAUs), Indian Council of Agricultural Research (ICAR), Govt of India
- 1993: CSIR Junior Research Fellowship (JRF) & National Eligibility Test (NET) for Lectureship, Govt of India

Research Guidance

- \checkmark PhD thesis supervised
- ✓ M Tech/M.Phil thesis supervised
- ✓ M.Sc thesis supervised

: 05 (FIVE) : 03(THREE)

: 16 (SIXTEEN)

Research Grants

Title	Funding Agency	Amount	Duration
Abiotic stress response in Animal and Fish	ICAR -National Agricultural Science Fund (NASF)	2 crores	Jan, 2011- Jun2 2014
Rapid development of NGS based SNP markers and marker- assisted selection towards purple blotch resistance in Onion (Allium cepa L.)	SERB, Govt. of India	42.35 Lakhs	2019 to 2022
Consolidation of University Research for Innovation & Excellence in Women Universities (Institutional Project)	DST, India	2.31 Crores	2019-2022

Publications

Patents

Patent no.	Patent type	Patent title	Year of filing	Name of Inventor(s)	Status
202023101314	German Utility Model	A system for assessing the effect of brewer's yeast-based diet on fish physiology	2023	A Mohanty, BP Mohanty, S Mohanty, D Pradhan, K Samantaray	Granted

Journal publications

 Pradhan D, Mahanty A, Mohanty S, Samantaray K, Mohanty BP (2022) Brewer's spent yeast replacement in carp diet leads to muscle biomass production, recycling, waste management and resource conservation. Fish Physiol Biochem. 48(6):1427-1442. doi: 10.1007/s10695-022-01133-w.

- Girma, B., Panda, A.N., Roy, P.C., Ray, L., Mohanty, S., Chowdhary, G (2022) Molecular, biochemical, and comparative genome analysis of a rhizobacterial strain *Klebsiella* Sp. KBG6.2 imparting salt stress tolerance to *Oryza sativa* L. Environmental and Experimental Botany 203. 105066. 10.1016/j.envexpbot.2022.105066.
- Mohanty, I., Banerjee, S., Mahanty, A., Mohanty, S., Nayak, N.R., Parija, S.C., Mohanty, B.P. (2022) Proteomic Profiling and Pathway Analysis of Acid Stress-Induced Vasorelaxation of Mesenteric Arteries In Vitro. *Genes*, 13, 801. <u>https://pubmed.ncbi.nlm.nih.gov/35627186/</u>
- Mallick, T., Mishra, R., Mohanty, S., Joshi, R. K. (2022) Genome Wide Analysis of the Potato Soft Rot Pathogen *Pectobacterium carotovorum* Strain ICMP 5702 to Predict Novel Insights into Its Genetic Features. *Plant Pathol J.* 38(2), 102-114. <u>https://pubmed.ncbi.nlm.nih.gov/35385916/</u>
- 5. Mohanty, B.P., Ganguly, S., Mahanty, A., Mitra, T., & Mohanty, S. (2020). Nutrigenomics and fish. *CABI Reviews*, 15, 048, 1-19. <u>https://doi.org/10.1079/PAVSNNR202015048</u>
- Girma, B., Panda, A., Mohanty, S., Ray, L., & Chowdhary, G. (2020). Draft genome sequence of plant growth promoting rhizobacteria Klebsiella sp. KBG6.2 imparting salt tolerance to rice. *Microbiology Resource Announcements*, 9, e00491-20. https://doi.org/10.1128/MRA .00491-20
- Ganguly, S., Mitra, T., Mahanty, A., Mohanty, S., & Mohanty B. P. (2020). A comparative metabolomics study on anadromous clupeid *Tenualosa ilisha* for better understanding the influence of habitat on nutritional composition. *Metabolomics*, (16)30. https://doi.org/10.1007/s11306-020-01655-5
- Mohanty, B. P., Mahanty, A., Mitra T., Mohanty S., Naik, A. K., Parija, S. C. (2020). Proteomic and transcriptomic changes in rat liver following oral feeding of formaldehyde. *Chemosphere*, 245, 125599. <u>https://doi.org/10.1016/j.chemosphere.2019.125599</u>
- 9. Mohanty, B.P., Ganguly, S., Mahanty, A., Mitra, T., & Mohanty, S. (2020). Identification of fesh-quality-attribute-related proteins on muscle proteome of *Tenualosa ilisha*. *Agricaquascience Research Journal*, 1, 58-73.
- Mahanty A, Purohit GK, Mohanty S, Mohanty BP. (2019) Heat stress induced alterations in the expression of genes associated with gonadal integrity of the teleost *Puntius sophore*. Fish *Physiology and Biochemistry* 45(4):1409-1417. <u>10.1007/s10695-019-</u> <u>00643-4</u>
- Mitra T, Mohanty BP, Mohanty S, Purohit GK, Das BK. (2018) Expression patterns and mutation analysis of p53 in fish *Rita rita* from polluted riverine environment. *Mutat Res Gen Tox En* 832–833 41–51. <u>https://doi.org/10.1016/j.mrgentox.2018.05.022</u>
- Mitra T, Mahanty A, Ganguly S, Purohit GK, Mohanty S, Parida PK, Behera PR, Raman RK, Mohanty BP. (2018) Expression patterns of heat shock protein genes in Rita rita from natural riverine habitat as biomarker response against environmental pollution. *Chemosphere* Jul 23; 211:535-546. <u>10.1016/j.chemosphere.2018.07.093</u>
- Ramakrishna C, Singh S, Raghavendrarao S, Padaria JC, Mohanty S, Sharma TR, Amolkumar U. Solanke AU. (2018) The membrane tethered transcription factor EcbZIP17 from finger millet promotes plant growth and enhances tolerance to abiotic stresses. *Scientific Reports* 8:2148 | https://doi.org/10.1038/s41598-018-19766-4.
- Banerjee S, Mahanty A, Mohanty S, Goha Mazumder DN, Cash P, Mohanty BP. (2017) Identification of potential biomarkers of hepatotoxicity by plasma proteome analysis of arsenic-exposed carp *Labeo rohita*. *J Hazardous Materials*. 336:71-80. DOI: <u>10.1016/j.jhazmat.2017.04.054</u>

- Dutta S, Mohanty S, Tripathy BC. (2009) Role of Temperature Stress on Chloroplast Biogenesis and Protein Import in Pea (*Pisum sativum* L). *Plant Physiol* 150:1050–1061. doi: 10.1104/pp.109.137265. Epub 2009 Apr 29.
- Bhattacharya S, Mohanty S, Sharma AP, Mohanty BP. (2011) Effect of storage temperature on the lens crystallin protein quality for proteomic studies. *Proteomics Clin Appl* 5(9-10): 504-12. doi: 10.1002/prca.201100004. Epub 2011 Sep 7
- Mohanty S, Tripathy BC. (2011) Early and Late Plastid Development in Response to Chillstress and Heat-stress in Wheat Seedlings. *Protoplasma* 248(4):725-36. 10.1007/s00709-010-0235-4
- Ganguly S, Mahanty A, Mitra T, Mohanty S, Das BK, Mohanty BP. (2018) Nutrigenomics studies on hilsa to evaluate flesh quality attributes and genes related to fatty acid metabolism in hilsa from rivers Hooghly and Padma. *Food Research International* 103:21-29. 10.1016/j.foodres.2017.10.017
- Mahanty A, Purohit G, Mohanty S, Nayak NR, Mohanty BP. (2017) Suitable reference genes for quantitative real-time PCR analysis of gene expression in gonadal tissues of minnow *Puntius sophore* under high-temperature stress. *BMC Genomics* 18(1): 617 DOI: 10.1186/s12864-017-3974-1
- 20. Mahanty A, **Mohanty S**, Mohanty BP. (2017) Dietary supplementation of curcumin augments heat stress tolerance through upregulation of nrf-2-mediated antioxidative enzymes and hsps in Puntius sophore. *Fish Physiology Biochemistry* 2017 43(4):1131-1141 doi 10.1007/s10695-017-0358-z
- Chopperla R, Singh S, Mohanty S, Reddy N, Padaria JC, Solanke AU. (2017) Isolation and expression analysis of EcbZIP17 from different finger millet genotypes shows conserved nature of the gene. 3 *Biotech* 7: 342 <u>10.1007/s13205-017-0984-2</u>
- Kandoi D, Sasmita Mohanty, Tripathy B.C. (2018) Overexpression of plastidic maize NADP-malate dehydrogenase (ZmNADP-MDH) in Arabidopsis thaliana confers tolerance to salt stress. *Protoplasma* 2018 255(2):547-563.<u>https://doi.org/10.1007/s00709-017-1168-y</u>
- 23. Mahanty A, Purohit GK, Banerjee S, Karunakaran D, **Mohanty S**, Mohanty BP. Proteomic changes in the liver of *Channa striatus* in response to high temperature stress. *Electrophoresis*. 2016 37(12):1704-17 10.1002/elps.201500393
- 24. Mahanty A, Purohit GK, Yadav RP, **Mohanty S**, Mohanty BP. 2017. *hsp90* and *hsp47* appear to play an important role in minnow *Puntius sophore* for surviving in the hot spring runoff aquatic ecosystem. *Fish Physiology Biochemistry* 2017 Feb;43(1):89-102 doi:10.1007/s10695-016-0270-y
- Purohit GK, Mahanty A, Mohanty BP, Mohanty S. Evaluation of housekeeping genes as references for quantitative real-time PCR analysis of gene expression in the murrel *Channa striatus* under high-temperature stress. *Fish Physiology Biochemistry*. 2016 42: 125-135 10.1007/s10695-015-0123-0
- 26. Kandoi D, **Mohanty S**, Govindjee, Tripathy BC. 2016. Towards efficient photosynthesis: overexpression of *Zea mays* phosphoenolpyruvate carboxylase in *Arabidopsis thaliana*. **Photosynth. Res**. 2016 130(1-3):47-72. **DOI:** 10.1007/s11120-016-0224-3
- Banerjee S, Mitra T, Purohit GK, Mohanty S, Mohanty BP. Immunomodulatory effect of arsenic on cytokine and HSP gene expression in *Labeo rohita* fingerlings. *Fish Shellfish Immunol.* 2015 44: 43-49 <u>10.1016/j.fsi.2015.01.029</u>
- Mohanty BP, Mitra T, Banerjee S, Bhattacharjee S, Mahanty A, Ganguly S, Purohit GK, Karunakaran D, Mohanty S. Proteomic profiling of white muscle from freshwater catfish *Rita rita. Fish Physiol. Biochem.* 2015 41(3): 789-802. DOI 10.1007/s10695-015-0046-9

- Purohit, GK, Mahanty A, Suar M, Sharma AP, Mohanty BP, Mohanty S. Investigating *hsp* gene expression in liver of *Channa striatus* under heat stress for understanding the upper thermal acclimation. *Biomed Research International* 2014 Volume 2014, Article ID 381719, 10 pages <u>10.1155/2014/381719</u> DOI:
- Mohanty BP, Banerjee S, Bhattacharjee S, Mitra T, Purohit GK, Sharma AP, Karunakaran D, Mohanty S. Muscle proteomics of the Indian major carp catla (*Catla catla*, Hamilton). *J Proteomics Bioinform.* 2013 6: 11. http://dx.doi.org/10.4172/jpb.1000288
- Barik SK, Banerjee S, Bhattacharjee S, DasGupta SK, Mohanty S, Mohanty BP. Proteomic analysis of sarcoplasmic peptides of two related fish species for food authentication. *Applied Biochem Biotechnol* 2013 171: 1011-1021. DOI 10.1007/s12010-013-0384-y.
- Mohanty S, Grimm B, Tripathy BC. Light and dark modulation of chlorophyll biosynthetic genes in response to temperature. *Planta* 2006 224 (3): 692-699. 10.1007/s00425-006-0248-6

Book/book chapter Publications

- Mahanty A, Yadav RP, Purohit GK, Mohanty S, Mohanty BP (2023). Metabolomic Response to High Temperature Stress in Murrel *Channa striatus* and Insights for Designer Feeds. In: Sinha, A., Kumar, S., Kumari, K. (eds) Outlook of Climate Change and Fish Nutrition. Springer, Singapore. https://doi.org/10.1007/978-981-19-5500-6_15
- Mohanty BP, Ganguly S, Mahanty A, Mitra T, Mohanty S, Das BK (2023). Production of Omega-3 Capsules from Fish Offal: Recycling of Resources for Sustainable Production and Consumption. In: R. K. Majumder, A. K. Balange (Eds.), Advances in Fish Processing Technologies Preservation, Waste Utilization, and Safety Assurance, 1st Ed, Ch 14, Apple Academic Press Inc.
- Mohanty BP, Mohanty D, Mitra T, Ganguly S, Mahanty A, Mohanty S, Karunakaran D (2021). Big data science and omics technology. In: U. K. Sarkar, & B. K. Das (Eds.), Fisheries Biology: New Approaches and Changing Perspectives pp. 251-270, Narendra Publishing House, New Delhi.
- Mohanty BP, Banerjee S, Mitra T, Bhattacharjee S, Mahanty A, Mohanty S (2019) Muscle proteomics of Indian major carp *Catla catla* (Hamilton). In: Advances in Fish Research. B. P. Mohanty (Ed)., Vol. VII Ch 6, pp 103-120 ISBN: 978-93-87590-48-9
- Mohanty BP, Mohanty S, Mitra T, Mahanty A, Ganguly S, Singh S (2019) Omics Technology In Fisheries And Aquaculture. In: B.P. Mohanty (Ed) Advances in Fish Research, Vol.-VII, Ch 1, pp. 1–30, Narendra Publishing House, New Delhi.
- Mohanty BP, Bhattacharjee S, Mitra T, Mahanty A, Ganguly S, Mohanty S. Eye lens of catfish *Rita rita*-age-related changes in lens lipids and proteins under omics platform. In: B.P. Mohanty (Ed) Advances in Fish Research, Vol.VII, Ch 5, pp 81-101. ISBN: 978-93-87590-48-9
- Mohanty BP, Mahanty A, Mitra T, Parija SC, Mohanty S. 2018. Heat Shock Proteins in Stress in Teleosts. In: Asea A., Kaur P. (eds) Regulation of Heat Shock Protein Responses. Heat Shock Proteins, vol 13. Ch 4 pp. 71-94 Springer International Publishing AG https://doi.org/10.1007/978-3-319-74715-6_4

- Mohanty BP, Vivekanandan E, Mohanty S, Mahanty A, Trivedi R, Tripathy M, Sahu J. 2017. The Impact of Climate Change on Marine and Inland Fisheries and Aquaculture in India. In: Bruce F. Phillips and Mónica Pérez-Ramírez (Eds.) Climate Change Impacts on Fisheries and Aquaculture: A Global Analysis, vol.2, ch. 17, pp.569-601, ISBN: 978-1-119-15404-4, Wiley-Blackwell.
- Mohanty BP, Mahanty A, Mohanty S, Sankar TV. 2016. Role of Public Private Partnership in Fish Food Safety Assurance and Quality Management in Fish Trade. In: VRP Sinha, P Keshavanath, AP Sharma, BP Mohanty (Eds.) Public Private Partnership in Aquaculture, Edition: First, Ch. 22, pp.217-228, Narendra Publishing House, Delhi, ISBN: 978-93-84337-36-0

Popular articles

- 1. Mohanty, B. P., Mohanty, S., & Mahanty, A. (2020). Nutrition, immunity and COVID-19 management Opinion. *Journal of Inland Fisheries Society of India*, 52 (1), 3-4.
- Mohanty BP, Banerjee S, Mohanty S, Sharma AP. 2011. Depletion and contamination of national groundwater reserve- A challenge to safe drinking water supply. Natl Acad Sci Lett 134 (11&12): 383-391.
- Mohanty BP, S. Mohanty, Parija SC. Universal Red Blood Cells (*Research News*).
 2008. Natl Acad Sci Lett 31 (5&6): 161-169.
- Parija SC, Mohanty BP, Mohanty S. 2006. *Helicobacter pylori*, Gastritis, Peptic Ulcer Disease and the 2005 Nobel Prize in Physiology or Medicine. Natl Acad Sci Lett 29 (9&10): 333-343.
- 5. Mohanty BP, **Mohanty S**, Panwar RS. 2005. Proteomics and its potential application in fisheries. **Fishing Chimes** 25 (4): 35-38.

Training Manual

- Mohanty BP, Mohanty S. 2004. Two-Dimensional Gel Electrophoresis Theory and Applications. Laboratory Manual on *Frontier Molecular Tools for Animal Genome Research*. Central Institute for Research on Goats (CIRG) (ICAR), Makhdoom- Farah, Mathura. Chapter 10. pp.35-47.
- Mohanty BP, Mohanty S, Parija SC, Seth RN. 2002. Piscine Cytochrome P450 1A1: A Sensitive Biomarker in Aquatic Environmental Monitoring Programme. *Proc Natl Acad Sci, India*. 72 B (I): 1-24.
- Mohanty BP, Mohanty S. 1998. Molecular genetic markers: Applications in fish genetic research. In: A. G. Ponniah, P. Das and S. R. Verma (Eds.) *Fish Genetics and Biodiversity Conservation for Sustainable Production*. Nat Con, Muzaffer Nagar, India. p.351-357. (Conf. Proceedings)

Participation in Conferences & Seminars

SI. No	Conference/Workshop/Webinar/Seminar attended/organized	Whether organized / attended	Organizing Institution Name	Month/Year
1	20 th ADNAT Convention and International Symposium on 'Genome Editing Technologies and their Applications in Biology, Medicine and Agriculture'	Organized (Organizing Secretary)	KIIT University, Bhubaneswar and ADNAT Society, Hyderabad at KIIT University, Bhubaneswar	February 16- 18 2017.
2	National Seminar on "Biotechnological interventions in stress management"	Organized (Convenor)	Rama Devi Women's University, Bhubaneswar	January 12, 2019
3	National Conference on "Advances In Life Sciences & Biotechnology" (Lifetech-2020)	Organized (Convenor)	Rama Devi Women's University, Bhubaneswar	February 27- 28, 2020
4	Biotechnology towards Nutritional Security and Human Health (ICBNH-2021)	Organized (Chairperson)	Rama Devi Women's University, Bhubaneswar	March 4-6, 2021
5	International Conference on Recent Trends in Biotechnology	Session Chair	Centurian University of Technology and Management	June 22-23, 2022

Other information(s)

Membership of Professional Societies

Life Member

- Society of Biological Chemists, India (SBC-I)
- Society of Plant Biochemistry & Biotechnology (SPBB)
- Association for Photosciences in Tropics (APT)
- Indian Society of Technical Education (ISTE)
- Association for Promotion of DNA Fingerprinting & Other DNA Technologies (ADNAT), CCMB, hyderabad
- Odisha Vigyan Academy

Reviewer for Journals

Journal of Photochemistry and Photobiology B: Biology Journal of Medicinal Plants Research Scientific Reports Molecular Biology Reports International Journal of Basic and Applied Sciences Aquaculture

Editorial Board member

Austin J Biotechnology and Bioengineering