

**Dr. YUGAL KISHORE MOHANTA, M.Sc., Ph.D.**

Assistant Professor

Chief Co-ordinator, Microbiologists' Society, India(NER India)
Department of Applied Biology, School of Biological Sciences
University of Science and Technology Meghalaya (USTM)
NAAC "A" Graded University ; nirf Indian ranking-2024 (151-200)

Profile page: <https://ustm.ac.in/dr-yugal-kishore-mohanta/>**BACK GROUND**

I have over six years of post-PhD extensive research experience in the fields of nanobiotechnology and microbiology, plant natural products, and fermented foods. As a dedicated researcher and academician, I have honed my skills and knowledge in these areas. Furthermore, I have successfully published **114 scientific articles** (Q1/Q2/Q3), **9 edited books** (Elsevier, CRC press, Springer Nature), **28 book chapters** (Scopus indexed), **2 Indian patents** in my field of expertise and established a research lab (NanoBioTraK_Lab) through **SERB-DST grant (2022-24)**. Recently, I have received an **International research network project scheme grant sponsored by XJENZA MALTA, Govt. of Malta in 2024-25**. I have supervised **3 PhD students** (on-going), **6 masters dissertation students** and **1 SERB-DST interns**. I possess a strong sense of curiosity, a creative mindset, and a genuine eagerness to acquire new knowledge. With my strong set of skills and qualities, I excel in the fields of science, education, and social work. I am particularly interested in prioritizing the concept of translational research in the field of sustainable development. Moreover for the promotion of science and research I am also acting as chief coordinator in Microbiologists' Society India for the northeastern states of India.

Google Scholar Citations: 4459, H-index 37, i10-index 82**Scopus citations: 3313, H-index 32****Web of Science citations: 2462, H-index 28****Publication Matrix:**International collaboration- **84.9%**Publications in Top 25% Journal Percentiles (%): **65.7%**Output in Top 10% Citation Percentiles (%): **38.1%**Field-Weighted Citation Impact: **2.17**Citations per Publication: **20.2****Techno City, 9th Mile, Baridua, Ri-Bhoi-793101, Meghalaya, India**E-mail: ykmohanta@gmail.com/yugalkmohanta@ustm.ac.in

Phone& WhatsApp: (+91)9439093024

Thursday, July 3, 2025

ACADEMIC APPOINTMENTS

October 2021- Continue...

Assistant Professor, University of Science and Technology, Meghalaya (USTM), India

September 2019 –November 2019

Post-doctoral Researcher, Natural and Medical Sciences Research Center, University of Nizwa, Oman

February 2016 –May 2019

Pre-doctoral Researcher, North Orissa University, Baripada, Odisha, India

April 2016 –July 2016

Visiting Research Scholar, KU Leuven, Belgium

August 2015 –April 2016

Guest-Faculty, MPC (Auto.) College, Odisha, India

December 2011 –November 2013

Research Scholar, NIT Rourkela, India

December 2010 –July 2011

Industrial Trainee, BCIL, Department of Biotechnology, Govt. of India

EDUCATION

Sl. No	Degrees	Year	Subjects	University/Institution
01	BS	2008	Biotechnology	North Orissa University (Now known as MSCB University)
02	MS	2010	Biotechnology	North Orissa University (Now known as MSCB University)
03	PhD	2019	Life Sciences	North Orissa University (Now known as MSCB University)

PROFESSIONAL AWARD & RECOGNITION

- ❖ Chief Co-ordinator, Microbiologist Society, India for North-east States of India 2025-2026.
- ❖ Peer Reviewer (2024) Recognition by Wiley & ACS Publications 2025
- ❖ International leadership in “**Education for Sustainable Development Award -2024**” by Eudfam International Academy, Al Bustan, Dubai.
- ❖ Chief Co-ordinator, Microbiologist Society, India for North-east States of India 2024-2025.
- ❖ Peer Reviewer (2023) Recognition by Wiley Publications 2024
- ❖ Visiting Assistant Professor, Chettinad Academy of Research and Education (CARE), Tamilnadu, India
- ❖ State President (Assam& Meghalaya), Microbiologist Society, India 2023-2024
- ❖ Peer Reviewer (2022) Recognition by Wiley Publications 2023.
- ❖ Peer Reviewer (2022) Recognition by ACS Publications, American Chemical Society, 2023.
- ❖ **Out standing Researchers of the Year -2022** award by University of Science and Technology Meghalaya.
- ❖ **Visiting Research Fellowship** by KU Leuven, Belgium, April- June 2016.
- ❖ **DST-Inspire Fellowship** by Department of Science and Technology, Govt. of India, 2011.
- ❖ **BCIL- Industrial Trainee Fellowship** by Department of Biotechnology, Govt. of India, 2010.

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- ❖ **First class with distinction (Gold Medalist)**, M.Sc. Biotechnology, North Orissa University, India, 2010
- ❖ **First class with distinction (Gold Medalist)**, B.Sc. Biotechnology, North Orissa University, India, 2008

AS SUPERVISOR

PhD students:

Mr. Minisrang Daimary (On going @ Bodoland University, Kokrajhar, Assam)
Mr. Irom Bipin Kumar Singh (On Going @ Uttaranchal University, Dehradun, Odisha)
Mr. Jibanjyoti Panda (On going @ MSCB University, Baripada, Odisha)

Internship@ NanobioTrak_lab:

Ms. Puja Roy (July-September 2024)

Masters dissertations (06)

RESEARCH PROJECT GRANTS

- Title:** Developing therapeutic functional food by formulating synbiotic microcapsules using edible mushrooms as prebiotic resources
Grant No: Research Network Project-2024-008
Duration: 2024-2025 (On going)
Funding Agency: XJENZA MALTA, Government of Malta
- Title:** Search for nutraceutical lead molecules from wild edible mushroom (WEMs) extracts and utilization as prebiotic sources to develop synbiotic microcapsules (SDG III)
Grant No: SRG/2022/000641
Duration: 2022-2024 (Completed)
Funding Agency: SERB (currently known as ANRF), Department of Science and Technology, Government of India

CURRENT RESEARCH ACTIVITY

Exploring natural bioresources for designing and synthesizing bio-functional nanomaterials for application in food, agriculture, medicine, and environments (**Nano-FAME**)

Research themes

- Development of Nano-nutraceuticals through biomass valorization
- Nutritional and Microbial diversity evaluation of fermented foods from North East India
- Nanotechnological application in food preservation and packaging

FIELDS OF INTEREST

Nano-biotechnology, Natural Products, Fermented Foods, Microbiology, Nutraceuticals, SDGs

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PATENTS FILE/PUBLISHED/GRANTED

- ❖ Rhamnolipid biosurfactant coated iron nanoparticle: a credible approach towards potential petroleum hydrocarbon remediation ([Application No.202331052858 A; published on 13/10/2023](#))
- ❖ Synthesis of rhamnolipid biosurfactant coated zinc-oxide nanoparticle and its anticancer potential against human breast cancer cell lines ([Application No.202331052859 A; published on 13/10/2023](#))

PAST TEACHING EXPERIENCES

- ❖ Lecturer in P.G. Department of Biochemistry, M.P.C. Autonomous College, Baripada, Odisha India (From 1st August 2015 -April 2016)
- ❖ Teaching Assigned to Biochemistry (Elective) papers in P.G. Department of Botany, North Orissa University, Baripada, India (From 2016-2018)

CURRENT COURSE TEACHINGS

- Plant Biotechnology
- Animal Biotechnology
- Genetic Engineering
- Bioprocess Technology

INDUSTRIAL EXPOSURE

Industrial Trainee in Biotech Industrial Training Programme 2010-11 sponsored by **Biotech Consortium India Limited, Department of Biotechnology, Government of India** at Tectona Biotech Resource Centre (TBRC), Bhubaneswar.

EDITORIAL EXPERIENCES

Editorial cum Advisory Board Member: [Current Research in Nutrition and Food Science \(Scopus;ESCI\)](#)

Guest Associate/Review Editor:

Frontiers in Nanotechnology, Discover Agriculture, Discover Sustainability, Frontiers in Pharmacology, Frontiers in Oncology, Frontiers in Cellular and Infection Microbiology [Link](#)

Book Editor: [CRC Press, Elsevier, Springer Nature](#)

REVIEWERS FOR JOURNALS

eFoods, Trends in Food Science and Technology, PLoS ONE, International Journal of Biological Macromolecules, Food and Bioprocess Technology, Environmental Research, Food and Function, Scientific Reports, International Journal of Nanomedicine, Applied Organometallic Chemistry, IET Nanobiotechnology, MDPI Crystals, MDPI Antibiotics, MDPI Nutraceuticals, MDPI Materials, MDPI Agronomy, MDPI Processes, MDPI Molecules, MDPI Pharmaceuticals, Nano Plant Biology, Chemical Papers, Journal of Cluster Sciences, Frontiers in Oncology, Green Processing and Synthesis, Journal of Molecular Structures and Dynamics, Journal of Applied Microbiology, Journal of Nanoparticle Research, Journal of Pure and Applied Microbiology, Micro Nanoletter, Applied Biochemistry and Biotechnology, Process Biochemistry, Waste Management, Waste and Biomass

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Valorization, Advances in Natural Sciences: Nanoscience and Nanotechnology, Journal of Experimental Nanoscience, Inorganic and Nanometal Chemistry, Journal of Total Bioactive Products, International Journal of Environmental Analytical Chemistry, Applied Food Research, Expert Opinion On Pharmacotherapy, Artificial Cells, Nanomedicine and Biotechnology, Particulate Science and Technology, Frontiers in Pharmacology, Journal of Food Sciences, ACS Omega, ACS Nano, Journal of Food Processing and Preservation, Microbial Cell Factories, eFoods, Analytical Letters, Discover Series Journals.

LIST OF PUBLICATIONS (Cumulative Impact Factors: 513.690)

Research/Review Articles:

Publications Year 2025

1. M. Sharifi-Rad, J. Panda, Y. K. Mohanta, P. Pohl, G. Zingen, M. G. Moloney (2025) Essential oil of *Cleome coluteoides* (Boiss.): phytochemical constituents, antioxidant, antimicrobial, antiproliferative, anti-inflammatory, enzymatic inhibition, and Xanthine oxidase inhibitory properties. **Journal of Herbal Medicine**; 52(x): 101036; ISSN 2210-8041; <https://doi.org/10.1016/j.hermed.2025.101036> [Q3: IF: 1.9]
2. M. Soren, S. K. Mishra, A. K. Mishra, P. R. Rauta, J. Panda, S. Rustagi, S. Rahman, Y. K. Mohanta, D. Nayak (2025) Assessment of toxicity profile of Mollusca hemolymph: Insight into its potential biocompatibility and anti-biofilm efficacy. **Kuwait Journal of Science**; 52(4): 100455; ISSN 2307-4108; <https://doi.org/10.1016/j.kjs.2025.100455> [Q3: IF: 1.1]
3. V. Rhetso, A. K. Mishra, P. C. Nath, J. Panda, D. Nayak, B. P. Panda, S. Rustagi, S. K. Avula, S. Rahman, Y. K. Mohanta (2025) Exploring edible insects as a potential source of food-nutraceuticals: A sustainable approach. **Food Biophysics**; 20(93); ISSN 1557-1858; <https://doi.org/10.1007/s11483-025-09980-9> [Q3: IF: 3.2]
4. R.K. Singla, Y.K. Mohanta, A. R. Oladipupo (2025) Exploring nutritional supplement use for countering respiratory tract infections through an X (formerly Twitter)-based survey. **Current Research In Biotechnology**; 9:100282; ISSN 2590-2628; <https://doi.org/10.1016/j.crbiot.2025.100282> [Q1: IF: 3.5]
5. J. Panda, A. Nongbet, S. K. Avula, D. Nayak, S. Rustagi, B. P. Panda, Y. K. Mohanta (2025) Macro-fungi mediated nanoparticles for sustainable agriculture: recent advancement and future strategies. **Discover Sustainability**; 6:375; ISSN 2662-9984 ; <https://doi.org/10.1007/s43621-025-01219-4> [Q3: IF: 2.6]
6. Y. K. Mohanta, A. K. Mishra, N. S. V. Lakshmayya, J. Panda, H.N. Thatoi, H. Sarma, S. Rustagi, K. H. Baek, B. Mishra (2025) Agro-Waste-Derived Bioplastics: Sustainable Innovations for a Circular Economy. **Waste and Biomass Valorization**; ISSN 1877-265X; <https://doi.org/10.1007/s12649-025-03070-0> [Q3: IF: 3.4]
7. B.P. Panda, S. P. Parida, A. Pradhan, Y.K. Mohanta, P. Parthipan, M. Narayan, H. Sarma (2025) Identifying ecological risk zones using spatial prioritization of heavy metal pollution and bioaccumulation in birds. **Environmental Science and Pollution Research**; ISSN 0944-1344; <https://doi.org/10.1007/s11356-025-36385-5> (Scopus)
8. D. B. Shelke, M. R. Chambhare, H. B. Sonawane, N. F. Islam, R. Patowary, M.R. Das, Y.K. Mohanta, K. Patowary, S. J. Joshi, M. Narayan, B. P. Panda, H. Sarma (2025) Synergistic approaches in halophyte-microbe interactions: mitigating soil salinity and industrial contaminants for sustainable agriculture. **Discover Life**, 55(11):2025, ISSN 2948-2968 <https://doi.org/10.1007/s11084-025-09688-3> (Scopus)
9. Z. Sebgatollahi, R. Yogesh, N. Mahato, V. Kumar, Y.K. Mohanta, K. H. Baek, A. K. Mishra (2025) Signaling Pathways in Oxidative Stress-Induced Neurodegenerative Diseases: A Review of Phytochemical Therapeutic Interventions. **Antioxidants**, 14(4):457, ISSN 2076-3921; [10.3390/antiox14040457](https://doi.org/10.3390/antiox14040457) [Q1: 6.0]

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10. S. Chettri, S. Jena, P. C. Nath, S. Rustagi, M. Katyal, R. Sharma, B. P. Panda and Y.K.Mohanta (2025) Optimization of vacuum drying characteristics of red and green cherry pepper paste using response surface methodology: a comparative study. **Cogent Food & Agriculture**, 11(1):2481421, ISSN 2331-1932; [10.1080/23311932.2025.2481421](https://doi.org/10.1080/23311932.2025.2481421) [Q2:1.7]
11. D. Nayak, A. K. Mishra, K. Biswas, A. Sen, C. Malakar, J. Panda, N. A. Kungwani, S. Rustagi, B. P. Panda and Y. K. Mohanta (2025) Mangrove pneumatophores as biocatalyst for the fabrication of silver nanoparticles and its potential applications against biofilm and hepatic carcinoma. **RSC Nanoscale Advances**; ISSN 2516-0230; [10.1039/D4NA00722K](https://doi.org/10.1039/D4NA00722K) [Q2: IF- 4.6]
12. J. Panda, R. Amrit, A. K. Mishra, A. Chakraborty, S. Rustagi, P. C. Nath, K. Sarabandi, H. Sarma, M. S. Wagh, Y. K. Mohanta (2025) Sustainable Valorization of Fruit and Vegetable Waste for Bioactive Compounds: Advancing Functional Food and Wellness. **Waste and Biomass Valorization**; ISSN 1877-265X; <https://doi.org/10.1007/s12649-025-02937-6>. [Q3: IF- 3.4]
13. P. Das, P. C. Nath, A. B. Altemimi, M. Katyal, R. K. Kesavan, S. Rustagi, J. Panda, S. K. Avula, P. K. Nayak and Y. K. Mohanta (2025) Recent advances on artificial intelligence-based approaches for food adulteration and fraud detection in the food industry: Challenges and opportunities. **Food Chemistry**, 468:142439; ISSN: 0308-8146, <https://doi.org/10.1016/j.foodchem.2024.142439> . [Q1: IF-8.5]

Publications Year 2024

14. T. Bhuyan, K. Choudhury, P. Das, S. Sharma, J. Mazumder, Y. K. Mohanta (2024) Biosynthesis of pH-Responsive Mesoporous Silica Nanoparticles from Cucumber Peel for targeting 3D Lung Tumor Spheroids. **ACS Applied Bio Materials**, 7(11):7494-7508; ISSN 2576-6422 <https://doi.org/10.1021/acsabm.4c01092> [Q1: IF-4.6]
15. B. Mishra, J. Panda, A. K. Mishra, P. C. Nath, P. K. Nayak, U. Mahapatra, M. Sharma, H. Chopra, Y. K. Mohanta, K. Sridhar (2024) Recent advances in sustainable biopolymer-based nanocomposites for smart food packaging: A review. **International Journal of Biological Macromolecules** 279:135583; ISSN 0141-8130 <https://doi.org/10.1016/j.ijbiomac.2024.135583> [Q1: IF-7.7]
16. Y. K. Mohanta, K. Biswas, A. K. Mishra, B. Patra, B. Mishra, J. Panda, S. K. Avula, R. S. Varma, B. P. Panda, D. Nayak (2024) Amelioration of gold nanoparticles mediated through Ocimum oil extracts induces reactive oxygen species and mitochondrial instability against MCF-7 breast carcinoma. **RSC Advances** 14: 27816; ISSN 2046-2069; [10.1039/d4ra04807e](https://doi.org/10.1039/d4ra04807e) [Q3: IF-3.9]
17. P. Muthusamy, S. Murugan, S. K. Mandal, B. Mishra, Y. K. Mohanta, H. Sarma, M. Narayan (2024) Utilizing banana peduncle as an affordable bio-adsorbent for efficient removal of lead ions from water and industrial effluents. **Sustainable Chemistry for the Environment** 7:100150; ISSN 2949-8392; <https://doi.org/10.1016/j.scenv.2024.100150> [Q3: CS-1.8]
18. N. A. Kungwani, J. Panda, A. K. Mishra, N. Chavda, S. Shukla, K. Vikhe, G. Sharma, Y. K. Mohanta, M. Sharifi-Rad (2024) Combating bacterial biofilms and related drug resistance: Role of phyto-derived adjuvant and nanomaterials. **Microbial Pathogenesis** 195:106874; ISSN 0882-4010; <https://doi.org/10.1016/j.micpath.2024.106874> [Q3: IF-3.3]
19. D. Nayak, A. K. Mishra, S. Malla, U. Swain, K. Panigrahi, J. Panda, S. Rustagi, P. R. Rauta, Y. K. Mohanta (2024) Eco-Friendly Mycogenic Synthesis of Iron Oxide Nanoparticles Using *Volvarella volvacea* and Unveiling its Potential as Antibiofilm and Anticancer Agents. **ECS Journal of Solid State Science and Technology** 13:087003; ISSN 2162-8777 [10.1149/2162-8777/ad658b](https://doi.org/10.1149/2162-8777/ad658b) [Q3: IF- 1.8]
20. A. Chakraborty, J. Panda, A. K. Mishra, S. Sivakumar, L. V. Srinivasan, A. Nongbet, S. S. Mohanty, S. Rustagi, P. C. Nath, M. S. Wagh, Y. K. Mohanta (2024) Jackfruit waste for the production of sustainable

- biorefinery products: a step towards bio-economic advancement. **Biomass Conversion and Biorefinery** ; ISSN 21906815/21906823; <https://doi.org/10.1007/s13399-024-05954-y> [Q2: IF- 3.5]
21. D. Thapa, V. Kumar, B. Naik, V. Kumar, A. K. Gupta, Y. K. Mohanta, B. Mishra, S. Rustagi (2024) Harnessing probiotic foods: managing cancer through gut health. **Food Science and Biotechnology** ; ISSN 1226-7708 <https://doi.org/10.1007/s10068-024-01638-5> [Q3: IF- 2.9]
 22. P. C. Nath, R. Sharma, U. Mahapatra, Y. K. Mohanta, S. Rustagi, M. Sharma, S. Mahajan, P. K. Nayak, K. Sridhar (2024) Sustainable production of cellulosic biopolymers for enhanced smart food packaging: An up-to-date review. **International Journal of Biological Macromolecules** 273:1330090; ISSN 0141-8130 <https://doi.org/10.1016/j.ijbiomac.2024.133090> [Q1: IF- 8.20]
 23. S. Rahaman, N.C. Talukdar, K. Patowary, Y.K. Mohanta (2024) Propolis from the North-East region of India exhibits potent antioxidant and anticancer activity against breast cancer cells. **Biocatalysis and Agricultural Biotechnology** 59: 103269; ISSN:1878-8181 <https://doi.org/10.1016/j.bcab.2024.103269>. [Q3: IF- 4.0]
 24. T. Bhuyan, Y.K. Mohanta, K. Patowary, S. Maity, D. Nayak, K. Deka, K. M. Sundaram, S. Muthupandian, H. Sarma (2024) Therapeutic potential of lipopeptide biosurfactant-fabricated copper oxide nanoparticles: Mechanistic insight into their biocompatibility using zebra fish. **Current Research in Biotechnology** ISSN 2590-2628 <https://doi.org/10.1016/j.crbiot.2024.100227> [Q1: IF- 5.6]
 25. J. Panda, A. K. Mishra, P. C. Nath, S. Mahanta, M. Sharma, P. K. Nayak, Y.K. Mohanta*, K. Sridhar (2024) Wild edible mushrooms to achieve sustainable development goals: Novel sources for food security, health, and well-being. **Food Bioscience** 60: 104277 ISSN 2212-4292 <https://doi.org/10.1016/j.fbio.2024.104277> [Q1: IF- 5.2]
 26. B. Doolam, B. Mishra, D. Surabhi, S. K. Mandal, S. Sada, N. R. Reddy, J. Panda, S. Rustagi, A. K. Mishra, Y. K. Mohanta* (2024) A systematic review of potential bioactive compounds from *Saccharomyces cerevisiae*: exploring their applications in health promotion and food development. **Environment, Development and Sustainability** ISSN 1387-585X <https://doi.org/10.1007/s10668-024-04969-9> [Q2: IF- 4.9]
 27. M. Pyla, S. Kankipati, B. Sumithra, P.K. Mishra, B. Mishra, S.K. Mandal, J. Panda, H. Chopra, S. K. Avula, M. Salah, Y.K. Mohanta, M.A. Kamal (2024) Bacterial Proteins and Peptides as Potential Anticancer Agents: A Novel Search for Protein-based Therapeutics. **Current Medicinal Chemistry** ISSN 0929-8673 <https://doi.org/10.2174/0109298673253414231127162817> [Q3: IF- 4.1]
 28. T. K. Mohanta, Y.K. Mohanta, P. Kaushik, J. Kumar (2024) Physiology, genomics, and evolutionary aspects of desert plants. **Journal of Advanced Research** 58: 63-78; ISSN2090-1232 <https://doi.org/10.1016/j.jare.2023.04.019> [Q1: IF- 12.877] [Link](#)
 29. J. Panda, A. K. Mishra, Y. K. Mohanta, K. Patowary, P. R. Rauta, B. Mishra (2024) Exploring Biopolymer for Food and Pharmaceuticals Application in the Circular Bioeconomy: An Agro-Food Waste-to-Wealth Approach. **Waste and Biomass Valorization**; ISSN 1877-265X <https://doi.org/10.1007/s12649-024-02452-0> [Q3: IF- 3.4]
 30. P. C. Nath, A. K. Mishra, R. Sharma, B. Bhunia, B. Mishra, A. Tiwari, P. K. Nayak, M. Sharma, T. Bhuyan, S. Kaushal, Y. K. Mohanta, K. Sridhar (2024) Recent advances in artificial intelligence towards the sustainable future of agri-food industry. **Food Chemistry** 447: 138945; ISSN 0308-8146 <https://doi.org/10.1016/j.foodchem.2024.138945> [Q1: IF- 8.8]
 31. B. Mishra, A. K. Mishra, Y. K. Mohanta, Rajasri Yadavalli, D. C. Agrawal, H. P. Reddy, R. Gorrepati, C.N. Reddy, S. K. Mandal, M. Zaki Shamim, J. Panda (2024) Postbiotics: the new horizons of microbial functional bioactive compounds in food preservation and security. **Food Production, Processing and Nutrition** 6:28 ISSN 2661-8974 <https://doi.org/10.1186/s43014-023-00200-w> [Q2: IF- 4.7]
 32. T. Bhuyan, S. Gogoi, T. Ghoshal, P. R. Parmar, K. Mishra, Y. K. Mohanta, P. S. Nayak, M. Sharifi-Rad (2024) Mitigation of Cr (VI) phytotoxicity in mung bean seedlings through the supplementation of phyto-fabricated zinc oxide nanoparticles using *Paederia foetida*. **Biocatalysis and Agriculture Biotechnology** 56:103055 ISSN:1878-8181 <https://doi.org/10.1016/j.bcab.2024.103055> [Q3: IF- 4.0]
 33. M. S. Wagh, Sowjanya S., P.C. Nath, A. Chakraborty, R. Amrit, B. Mishra, A. K. Mishra, Y. K. Mohanta (2024) Valorisation of agro-industrial wastes: circular bioeconomy and biorefinery process –a sustainable

- symphony. **Process Safety and Environmental Protection** 183: 708–725, ISSN 0957-5820 <https://doi.org/10.1016/j.psep.2024.01.055>. [Q1: IF- 7.8]
34. R. Sharma, P. C. Nath, Y. K. Mohanta, B. Bhunia, B. Mishra, M. Sharma, S. Suri, M. Bhaswant, P. K. Nayak, K. Sridhar (2024) Recent advances in cellulose-based sustainable materials for wastewater treatment: An overview. **International Journal of Biological Macromolecules** 256(2):128517, ISSN 0141-8130 <https://doi.org/10.1016/j.ijbiomac.2023.128517>. [Q1: IF- 8.20]
35. Q. Y. Tamboli, S. M. Patange, Y. K. Mohanta, A. D. Patil, S. R. Kamble, R. Alig, I. Bushnak, K. R. Zakdea (2024) *Moringa oleifera* Gum-Assisted Synthesis and Characterization of $\text{CoAg}_x\text{Fe}_2\text{-xO}_4$: Insight into Structural, Magnetic, Optical, and Biomedical Properties. **ACS Omega** 9(3): 3835–3845, ISSN 2470-1343, <https://doi.org/10.1021/acsomega.3c06578>. [Q2: IF- 4.10]
36. M. Sharifi-Rad, Y. K. Mohanta, P. Pohl, D. Nayak, M. Messaoudi (2024) Facile phytosynthesis of gold nanoparticles using *Nepeta bodeana* Bunge: Evaluation of its therapeutics and potential catalytic activities. **Journal of Photochemistry & Photobiology, A: Chemistry** 446:115156, ISSN 18732666/10106030 <https://doi.org/10.1016/j.jphotochem.2023.115150>. [Q2: IF- 4.30]

Publications Year 2023

37. B. Sarma, H. Kashtoh, T. L. Tamang, P. N. Bhattacharyya, Y. K. Mohanta*, and K. H. Baek (2023) Abiotic Stress in Rice: Visiting the Physiological Response and Its Tolerance Mechanisms. **Plants** 12(23):3948, ISSN:2223-7747 <https://doi.org/10.3390/plants12233948>. [Q1: IF 4.5]
38. Y. K. Mohanta, A. K. Mishra, J. Panda, I. Chakrabartty, B. Sarma, S. K. Panda, H. Chopra, G. Zengin, M. G. Moloney, M. Sharifi-Rad (2023) Promising applications of phyto-fabricated silver nanoparticles: Recent trends in biomedicine. **Biochemical and Biophysical Research Communications** 668:149126, ISSN 1090-2104 <https://doi.org/10.1016/j.bbrc.2023.149126>. [Q3: IF- 3.10]
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5. Y.K. Mohanta, L. Padhy, S.K. Panda & A.K. Bastia (2014). Antimicrobial activity of aboriginal plants used in the preparation of “*Handia*” among the Tribals of Northern Odisha. Proceedings-Phytoresources-Utilization and Conservation, pp. 40
 6. Y.K. Mohanta & L. Padhy (2014). Ethno-medicinal evaluation of wild mushrooms from Similipal Biosphere Reserve, Odisha, India. Proceedings-Phytoresources-Utilization and Conservation, pp. 42
 7. Y.K. Mohanta (2013). Actinobacterial Diversity of Bhitarkanika Mangrove Ecosystem: Sustainable use as potential drug candidate. Proceedings-Conserving Biodiversity for Sustainable Development, pp.84
 8. Y.K. Mohanta & S. Das (2012). Antimicrobial and antioxidant activity of marine Actinomycetes from Odisha coast, India. Proceedings-Utilization of microbes for sustainable development, pp. 70
 9. Y.K. Mohanta, L.P. Padhi, G. Sahoo, S.K. Dutta, & S.K. Panda (2012). Bacterial flora of Indian chameleon (*Chamaeleo zeylanicus*, Laurenti). Proceeding-Current Trend of Wildlife Research in India with special reference to Herpetology, pp. 88
 10. Y.K. Mohanta, R. N. Rout, S. Satapathy & A. Mohapatra (2008). Preliminary study on Plant Biodiversity in Lulung forest of Similipal Biosphere Reserve. Proceedings –Botanical Researches: Present scenario & Future prospect, pp.91

CONFERENCE/WORK SHOP/COURSES/FDP ORGANIZED

1. National Conference on “**Bioresources and Sustainability: Current Trends and Future Prospects**” (**NCBS-2024**) held on 2nd and 3rd April 2024 at the Department of Applied Biology, University of Science and Technology Meghalaya, India sponsored by DST-SERB, Govt. of India (File No: SSY/2024/000154) and recognized by Viksit Bharat-2047 mission. (**As Convenor**)
2. Workshop on “**Basics of Scientific Writings**” held on September and October 2023 at the Department of Applied Biology, University of Science and Technology Meghalaya, India. (**As Convenor**)
3. Hands-on training on “**Microbiological Techniques and Quality**” held on 15th and 16th September 2022 at the Department of Applied Biology, University of Science and Technology Meghalaya, India. (**As Organizing secretary**)

INVITED LECTURER/RESOURCE PERSON

1. Invited speaker and resource person in the National Seminar on “**Bioresources Conservation: Challenges and Opportunities on the Dynamic Climate Changes in Northeast India**” held on 27-28 June, 2025, organized by Majuli College, Majuli, Assam, India.
2. Invited speaker and resource person in the International Seminar on “**Interdisciplinary approaches for a sustainable world**” held on 6th & 7th January 2025 organized by CNB College, Bokakhat, Assam, India.
3. Contribution as a resource person in ICSSR, New Delhi “**Two-Week Capacity Building Programme on Advancing Social Sciences**”, held from 20th January to 1st February 2025 organized by the Department of Rural Development, USTM, Meghalaya, India.
4. Invited speaker and resource person in the National Seminar on “**Microbial Mystry: Investigations on the Unknowns and Unseens**” at Darjeeling Government College, Darjeeling, West Bengal, India on 27th September 2024.
5. Invited speaker and resource person in the SERB sponsored National Workshop on “**Application of Nanotechnology in Plant Growth Promotion for Sustainable Agriculture**” at Amity Institute of Microbial Technology, Amity University Uttar Pradesh, Noida on 9-13th September 2024.
6. Invited key-note speaker for the International Conference on “**Recent innovations in scientific and commercial approaches towards land restoration and environmental sustainability**” at Swami Shri Swaroopanand Saraswati Mahavidyalaya, situated in Hudco, Bhilai, Chhatisgarh on 5-6th June 2024.

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7. Invited Speaker for the National Level Online Faculty Development Program on “**Current Science and Development in Nanobiotechnology**” Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, Telangana on 1st February 2024.
8. Invited Speaker for the National Level Online Faculty Development Program on “**Current Trends and Innovations in Biological Sciences**” Chettinad Academy of Research and Education, Kelambakkam, Chennai on 2nd September 2022.

WORK SHOP/COURSES/FDP ATTENDED

1. FDP on hands-on Training on “**LMS Moodle**” on 3rd to 10th September 2022 at the University of Science and Technology Meghalaya, India.
2. FDP on “**INTELLECTUAL PROPERTY RIGHTS**” organized by Intellectual property office, India on 9th September 2022.
3. Clarivate-**JOURNAL CITATION REPORTS (JCR) CERTIFICATION SERIES-2022** held on 10th August 2022.
4. Online Weeklong FDP on “**E-CONTENT DEVELOPMENT**” Organized by TLC, Tezpur University from 4th to 8th April 2022.
5. **UGC-HRDC FDP on “PROFESSIONAL ETHICS AND MORAL VALUES IN QUALITY EDUCATION AND RESEARCH**” from 21st to 26th October 2021 at Jai Narain Vyas University, Rajasthan, India (Online mode).
6. E-workshop cum Discussion forum on “**HIGH-END CHARACTERIZATION OF MICRO-ALGAE: OVERCOMING THE TECHNOLOGICAL BARRIERS**” from 3rd to 4th March, 2021 at The Energy and Resources Institute, New Delhi.
7. Certificate course on “**HPLC-MASS TECHNOLOGY**” funded by **DST-DPRP** organized from 15th to 18th May 2019 at HPLC-MASS Laboratory, Department of Chemistry, Karunya Institute of Technology and Sciences, Coimbatore-641114, TamilNadu, India.
8. Short-term course on “**FERMENTATION AND ENZYME TECHNOLOGY**” under **TEQIP-II** held from 1st February to 5th February 2013 at the Department of Biotechnology, College of Engineering and Technology, BPUT, Bhubaneswar, Odisha, India.

SEMINARS/CONFERENCES ATTENDED

1. International conference on “**Global Leaders Conference 2024 on Sustainable Development Goals (SDGs)**” on 14th September, 2024 (Oral presentation) at Al Bustan, Dubai, Saudi Arabia
2. International conference on “**Microbiological research: Current challenges and future prospects**” during January 9th-11th, 2024. (Oral presentation) at Bharathidasan University, Tiruchirappalli, Tamilnadu.
3. International Symposium on “**Advances in Algal Research**” during June 12th-14th, 2023. (Oral presentation) at Indian Institute of Technology Guwahati.
4. International Seminar on “**Advances in Entrepreneurial Botany: Entrepreneurship Opportunities from Plant Resources for Sustainable Development**” during October 27th- 29th, 2022. (Oral Presentation) at University of Science and Technology Meghalaya.
5. International symposium on “**Water Sustainability: Challenges, Technologies and Opportunities**” held on 22nd to 25th March, 2021 at Amrita ViswaVidyapeetham, Kerala, India. (Online)
6. National seminar on “**Emerging Trends in Plant Science Research: Challenges and Opportunities**” held on 22nd to 23rd March, 2017 at PG Department of Botany, North Orissa University, Takatpur, Baripada, Odisha, India. (Oral presentation)

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7. International conference on “**Nanocomputing and Nanobiotechnology-2016**” held on 03-05 October, 2016 at MaulanaAbulKalam Azad University of Technology, WestBengal, India. (Oral presentation)
8. International conference on “**Nanotechnology for Biological and Biomedical Applications-2015**” held on 01-04 December, 2015 at Indian Institute of Technology, Mumbai, India. (Poster presentation)
9. National seminar on “**Condensed Matter Days-2015**” held on 27th to 29th August, 2015 at Department of Physics, Visva-Bharati, Santiniketan, West Bengal, India. (Poster presentation)
10. National seminar on “**Phytoresources: Utilization and Conservation**” held on 24th to 25th March, 2014 at PG Department of Botany, North Orissa University, Takatpur, Baripada, Odisha, India. (Oral presentation)
11. International conference on “**Conserving Biodiversity for Sustainable Development**” held on 16th to 18th August, 2013 at Department of Biotechnology and Biomedical Engineering, National Institute of Technology, Rourkela, Odisha, India. (Oral presentation)
12. One day seminar on “**Conservation of Biodiversity**” held on 11th January 2013 at Department of Life Science, National Institute of Technology, Rourkela, Odisha, India.
13. PranakrushnaParija Memorial National Conference on “**Recent Advances in Plant Biotechnology**” held on 22nd & 23rd December, 2012 at Dept. Of Botany, Ravenshaw University, Cuttack, Odisha, India.
14. National seminar on “**Utilization of Microbes for Sustainable Development**” held on 14th&15th December, 2012 at Dept. of Microbiology, CBSH, Orissa University of Agriculture and Technology, Odisha, India.
15. National seminar on “**Botanical Researches: Present Scenario & Future Prospect**” held on 29thand 30thJanuary, 2008 at Government college of Science, Raipur, C.G., India. (Oral Presentation)
16. National seminar on “**Biotechnology: Prospects and Potential in Orissa**” held on 20th October, 2006 at Fakir Mohan University, Balasore, Odisha, India.

MEMBERSHIPS

- Life Member Microbiologist Society, India (**MS/LM/681**)
- Life Member Indian Science Congress Association (**L41741**)
- International Natural Product Sciences Taskforce (www.inpst.net)

HOBBIES/EXTRACURRICULAR ACTIVITIES

- Nature photography (Wildlife & Landscape photographer)
- Adventure, Trekking
- Social and Promotional activities for empowering society as well as conservation of nature and wildlife biodiversity.

INTERNATIONAL COLLABORATIONS

1. Prof. Mahesh Narayan (University of Texas at El Paso, USA)
2. Chev. Prof. Renald Blundell (University of Malta)
3. Dr. Khasayar Sarabandi (RIFST, Mashhad,Iran)
4. Prof. Walter H.M.L. Luyten (KU Leuven, Belgium)
5. Prof. Majid Sharifi-Rad (University of Zabol, Iran)

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6. Prof. Kwang-Hyun Baek (Yeungnam University, South Korea)
7. Dr. Awdhesh Kumar Mishra (Yeungnam University, South Korea)
8. Dr. Hamed Barabadi (Shahid Beheshti University of Medical Sciences, Iran)
9. Prof. Hans-Uwe Dahms (Department of Biomedical Science and Environmental Biology, KMU - Kaohsiung Medical University, Kaohsiung 80708, Taiwan)
10. Prof. Jiang Shiou Hwang (Institute of Marine Biology, National Taiwan Ocean University, Keelung 20224, Taiwan)
11. Prof. Guy Raymond Feuya Tchouya (Université des Sciences et Techniques de Masuku, Box. 901, Franceville, Gabon)
12. Dr. Satya Kumar Avula (University of Nizwa, Sultanate of Oman)

NATIONAL COLLABORATIONS

1. Dr. Hemen Sarma (Bodoland University, BTR, Assam)
2. Dr. Kumanand Tayung (Gauhati University, Assam)
3. Dr. Bibhu Prasad Panda (SOA, Bhubaneswar)
4. Dr. Neelam Amit Kungwani (GBU, Gandhinagar, Gujarat)
5. Dr. Prakash Kumar Nayak (CIT, Kokrajhar, Assam)
6. Dr. Biswanath Bhunia (NIT, Agartala, Tripura)
7. Dr. Saurov Mahanta (National Institute of Electronics and Information Technology, Gol)
8. Dr. Ramesh Namdeo Pudake (Amity Institute of Nanotechnology, Noida, Hariyana)
9. Prof. Sanket J. Joshi (Amity Institute of Microbial Technology, Jaipur, Rajasthan)
10. Prof. Saravanan Muthupandian (Saveetha University, Chennai)
11. Prof. B. Jebasingh (Karunya University, Coimbatore, Tamilnadu)

PERSONAL INFORMATION

NAME	:	YUGAL KISHORE MOHANTA
FATHER'S NAME	:	JUDHISTHIR MOHANTA
MOTHER'S NAME	:	SHANTILATA MOHANTA
DATE OF BIRTH	:	29 th SEP 1987
PERMANENT ADDRESS	:	AT-SINGARPUR, PO-MATIAGARH, VIA- JASHIPUR, DIST: MAYURBHANJ, ODISHA, INDIA, PIN: 757091
NATIONALITY	:	INDIAN
RELIGION	:	INDIAN
SEX	:	MALE
MARITAL STATUS	:	MARRIED
LANGUAGES KNOWN	:	ODIYA, HINDI, BENGALI, ENGLISH

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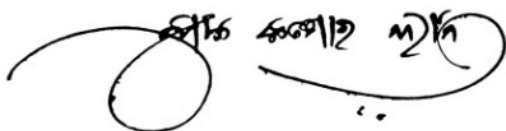
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DECLARATION

I hereby declare that all information given are true, complete and correct to best of my knowledge and belief.

A handwritten signature in black ink, appearing to read 'Y.K. Mohanta', with a large circular flourish on the left and a horizontal line extending to the right.

(Y.K. Mohanta)