

CURRICULUM VITAE



PERSONAL DETAILS

Krishnendu Adhikary, M.Sc. (Human Physiology), PhD*

Junior Scientist of Year-2023 Awardee under National Environmental Science Academy, New Delhi

Young Scientist of Year-2024 Awardee under National Environmental Science Academy, New Delhi

Father's Name	Mr. Dipak Adhikary
Mother's Name	Mrs. Sonali Adhikary
Residential Address	DC-18, Hudco, Bidhannagar, Durgapur-713212, Dist.- West Bardhaman, PS + PO: New Township
Mobile	8759369702
Alternative Mobile No.	9563601822
Email Id	krisskrishnendu@gmail.com
Date of Birth	29 th March, 1994
Nationality	Indian
Mother tongue	Bengali
Language Known	English, Hindi

CAREER OBJECTIVES

Looking for a position which demands the best of my teaching and research ability and helps me in broadening and enhancing my current skill and knowledge.

PERSONAL SKILLS

-
- Possess strong communication and analytical skills and have the ability to extract, interpret and present relevant information and advice to management.
 - Use of aid to give concrete idea of the concepts.
 - Concentrates on feedback.
 - Keep good relation.
 - Strong interpersonal abilities, with the ability to communicate and work with personnel from a wide variety of professional disciplines and nationalities.
 - Well organized capable of operating to tight deadlines

ACHIEVEMENTS

-
- Secured 3rd position in Poster Presentation in International Conference on Molecules to Systems Physiology: 100 Years Journey (ICMSP 100), 2015, University of Calcutta.

- Secured Best Oral Presentation prize in National level seminar on Recent Aspects of Microbiological Techniques (RAMT, 2017), Techno India University.
- Certificate in Oral Presentation in XXXIst Annual National Conference of the Physiological Society of India PHYSICON 2019 on “Recent Trends in Physiology and Healthcare Research for Salubrious Society” Organized by Dept. of Physiology, Bankura Christian College, 2019.
- Certificate in Oral Presentation in XXXIst Annual National Conference of the Physiological Society of India PHYSICON 2019: An extension programme on “Recent Trends in Physiology and Healthcare Research for Salubrious Society” Organized by Dept. of Physiology, Bankura Christian College, 2022.
- Secured Best Oral Award in International conference jointly organized by Institute of Medical Science, Banaras Hindu University (BHU), Varanasi and National Environmental Science Academy, New Delhi
- Appointed and Resource person and Invited speaker in several Workshops, Seminars and Webinars.

PERSONAL QUALITIES

- Visionary, team building, leadership skills.
- Practical decision making, creative, self-motivated, result oriented.
- Able to maintain high quality standards, handling crises, excellent academic knowledge.
- Hard worker, optimistic.

ACADEMIC QUALIFICATIONS

- Secondary Examination (W.B.B.S.E) passed with 80% marks from Bidhannagar Govt. Sponsored boys' high school in 2009.
- Higher Secondary Examination (W.B.C.H.S.E.) passed with 72% marks from Durgapur A.V.B. high school in 2011.
- Bachelor of Science (Physiology) with 68 % marks from Bankura Christian College, Burdwan University (2011-14).
- Master of Science (Human Physiology, Special Paper: Neurophysiology) with 72 % marks from Rajabazar Science College (UCSTA), University of Calcutta (2014-16).
- Submitted thesis on ‘Harnessing Lemongrass (*Cymbopogon flexuosus*) Herb: A Multifaceted Study on Its Antimicrobial, Larvicidal and wound Healing Efficacy’ for Doctor of Philosophy (Ph.D.) degree in Interdisciplinary Science under the school of Applied Sciences, Centurion University of Technology & Management, Odisha.

- Project on Study of anthropometric measurements of gym and non-gym sedentary subjects in Bankura.
- **Adhikary, K.** & Ghosh, T.(2018). Intracerebroventricular injection of oligomerized β -amyloid ($a\beta$ 1-42) peptide induces neuroinflammation, neurodegeneration and changes in peripheral immune responses in rats. *International Journal of Scientific & Engineering Research*, 9(6), 244-270. <https://doi.org/10.1007/s12031-018-1189-9>
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- **Adhikary, K.**, Chatterjee, A., Banerjee, P.(2021). An updated review on nanomaterials for biomedical advancements: Concepts and applications. *Bioscience Biotechnology Research Communications*, 14(4), 1428–1434. <https://doi.org/10.21786/bbrc/14.4.9>
- Banerjee, P., **Adhikary, K.**, Chatterjee, A., Sarkar, R., Bagchi, D., Ghosh, N., Das, A.(2021) Digestion and gut microbiome. In Bagchi, D(Ed.), Ohia, S(Ed.). *Nutrition and Functional Foods in Boosting Digestion, Metabolism and Immune Health* (123-138).United Kingdom: Academic Press.
- **Adhikary, K.**, Chatterjee, A., Chakraborty, S., Bhattacharjee, A., Banerjee, P.(2022).Malaria: Epidemiology, pathogenesis and therapeutics. In Bagchi, D (Ed.), Das, A (Ed.), Downs, B., W. Viral, Parasitic, Bacterial, and Fungal Infections (314-358).United Kingdom: Academic Press.
- Banerjee, P., **Adhikary, K.**, Sarkar, R., Chakraborty, S., Jana, S.(2022).Prion diseases: A raregroup of neurodegenerative disorders. In Bagchi, D (Ed.), Das, A (Ed.), Downs, B., W. Viral, Parasitic, Bacterial, and Fungal Infections (314-358).United Kingdom: Academic Press.
- **Adhikary, K.**, Banerjee, P., Barman, S., Bandyopadhyay, B., & Bagchi, D. (2023). Nutritional Aspects, Chemistry Profile, Extraction Techniques of Lemongrass Essential Oil and It's Physiological Benefits. *Journal of the American Nutrition Association*, 1–18. Advance online publication. <https://doi.org/10.1080/27697061.2023.2245435>
- Chowdhury, M., & Chowdhury, S., Bhattacharjee, A., Roy, C., Sarkar, R., **Adhikary, K.**, Maiti, R., & Karak, P. (2023). Natural antioxidants and nutraceuticals to fight against common human diseases: an overview. *European Chemical Bulletin*, 12(9), 1505-1521 <https://doi.org/10.48047/ecb>
- Gupte, C., A., Kama, S., Gupta, A., **Adhikary, K.**, & Ali, S. (2023). Predicting Protein Structure Using Deep Learning and Molecular Dynamics Simulations. *European Chemical Bulletin*, 12(Special issue 4), 19882–19904. <https://doi.org/10.48047/ecb/2023.12.si4.1767>

- Rajan, Sudha. K., Jaleel, M. U., Krishna, S. M. M., **Adhikary, K.**, & Padmaja, D. L. (2023). Predicting Clinical Outcomes in Patients with Alzheimer's disease: A Comprehensive Nursing and Computer Science Perspective. *European Chemical Bulletin*, 12(Special issue 8), 7406–7414. <https://doi.org/10.48047/ecb>
- Hauque, M., Anamika, Jha, B. N., Kumari, P., Jana, R., Shukla, S., Kumar, A., Bhadauria, S. S., Yadav, P., Ashique, S., **Adhikary, K.**, & Maiti, R. (2023). Development and Characterization of Drug loaded Novel Carrier for the Treatment of Arthritis. *European Chemical Bulletin*, 12(Special Issue 5), 6950–6965. <https://doi.org/10.48047/ecb/2023.12.si5a.0629>
- Tiwari, P. N., Rehman, A., Sreedhar, C., Jahan, Z. A., Kundavaram, R., Bhattacharyya, I., Pal, R., Ashique, S., Jana, R., Kumar, S., **Adhikary, K.**, Maiti, R., & Karak, P. (2022). Development and Validation of an RP-HPLC Method for the Determination of Rifapentine in Bulk and Pharmaceutical Dosage Form. *European Chemical Bulletin*, 12(7), 4114–4128. <https://doi.org/10.48047/ecb/2023.12.7.346>
- **Adhikary, K.**, Banerjee, P., Barman, S., Bandyopadhyay, B., & Bagchi, D. (2024). Nutritional Aspects, Chemistry Profile, Extraction Techniques of Lemongrass Essential Oil and Its Physiological Benefits. *Journal of the American Nutrition Association*, 43(2), 183–200. <https://doi.org/10.1080/27697061.2023.2245435>
- Ganguly, K., **Adhikary, K.**, Acharjee, A., Acharjee, P., Trigun, S. K., Mutlaq, A. S., Ashique, S., Yasmin, S., Alshahrani, A. M., & Ansari, M. Y. (2024). Biological significance and pathophysiological role of Matrix Metalloproteinases in the Central Nervous System. *International journal of biological macromolecules*, 280(Pt 3), 135967. Advance online publication. <https://doi.org/10.1016/j.ijbiomac.2024.135967>
- **Adhikary, K.**, Kumari, S., Chatterjee, P., Dey, R., Maiti, R., Chakraborty, S., Ahuja, D., & Karak, P. (2024). Unveiling bisphenol A toxicity: human health impacts and sustainable treatment strategies. *Hormone molecular biology and clinical investigation*, 10.1515/hmbci-2024-0034. Advance online publication. <https://doi.org/10.1515/hmbci-2024-0034>
- **Adhikary, K.**, Sarkar, R., Maity, S., Sadhukhan, I., Sarkar, R., Ganguly, K., Barman, S., Maiti, R., Chakraborty, S., Chakraborty, T. R., Bagchi, D., & Banerjee, P. (2024). Immunomodulation of Macrophages in Diabetic Wound Individuals by Structurally Diverse Bioactive Phytochemicals. *Pharmaceuticals (Basel, Switzerland)*, 17(10), 1294. <https://doi.org/10.3390/ph17101294>
- **Adhikary, K.**, Sarkar, R., Maity, S., Banerjee, I., Chatterjee, P., Bhattacharya, K., Ahuja, D., Sinha, N. K., & Maiti, R. (2024). The underlying causes, treatment options of gut microbiota and food habits in type 2 diabetes mellitus: a narrative review. *Journal of basic and clinical physiology and pharmacology*, 35(3), 153–168. <https://doi.org/10.1515/jbcpp-2024-0043>
- Sarkar, R., **Adhikary, K.**, Banerjee, A., Ganguly, K., Sarkar, R., Mohanty, S., Dhua, R., Bhattacharya, K., Ahuja, D., Pal, S., & Maiti, R. (2024). Novel targets and improved immunotherapeutic techniques with an emphasis on antimycosal drug resistance for the treatment and management of mycosis. *Heliyon*, 10(16), e35835. <https://doi.org/10.1016/j.heliyon.2024.e35835>

- **Adhikary, K.**, Mohanty, S., Bandyopadhyay, B., Maiti, R., Bhattacharya, K., & Karak, P. (2024). β -Amyloid peptide modulates peripheral immune responses and neuroinflammation in rats. *Biomolecular concepts*, 15(1), 10.1515/bmc-2022-0042. <https://doi.org/10.1515/bmc-2022-0042>
- **Adhikary, K.**, Banerjee, P., Barman, S., Banerjee, A., Sarkar, A., Bag, S., Chatterjee, S., Bandyopadhyay, B., & Panja, A. S. (2024). Larvicidal activity of β -Citral: An In-vitro and In-silico study to understand its potential against mosquito. *Acta tropica*, 258, 107356. <https://doi.org/10.1016/j.actatropica.2024.107356>
- **Adhikary, K.**, Barman, S., Banerjee, P., Mondal, P., Dam, B., Misra, A., Chandra Mandal, N., Mukherjee, D., Bandyopadhyay, B., & Maiti, R. (2024). Characterization and antimicrobial activity of essential oils extracted from lemongrass (*Cymbopogon flexuosus*) using microwave-assisted hydro distillation. *Zeitschrift fur Naturforschung. C, Journal of biosciences*, 10.1515/znc-2024-0095. Advance online publication. <https://doi.org/10.1515/znc-2024-0095>
- Das, P., Mukherjee, T., **Adhikary, K.**, & Mohanty, S. (2025). Progressive Approaches in Adipose Radio Imaging: Cancer Utilization and Necessity for Advancements. *Infectious disorders drug targets*, 25(1), e220524230197. <https://doi.org/10.2174/0118715265314722240508092646>
- Bandyopadhyay, U., Sen, D., Ahuja, D., Mahapatra, S. P., Biswas, D., Maiti, R., Chakraborty, S., Hazra, A., Parua, S., Basak, A. K., Das, A., Paul, N., Purkait, M. P., Syamal, A. K., Dey, R., Bhattacharya, K., **Adhikary, K.**, & Bhattacharjee, A. (2025). Interplay of calcium, vitamin D, and parathormone in the milieu of infections and immunity: Reassessed in the context of COVID-19. *The Journal of steroid biochemistry and molecular biology*, 245, 106624. <https://doi.org/10.1016/j.jsbmb.2024.106624>
- Mukherjee, T., Das, T., Basak, S., Mohanty, S., **Adhikary, K.**, Chatterjee, P., Maiti, R., & Karak, P. (2024). Mucormycosis during COVID-19 era: A retrospective assessment. *Infectious medicine*, 3(2), 100112. <https://doi.org/10.1016/j.imj.2024.100112>
- Bhattacharya, K., Dey, R., Sen, D., Paul, N., Basak, A. K., Purkait, M. P., Shukla, N., Chaudhuri, G. R., Bhattacharya, A., Maiti, R., **Adhikary, K.**, Chatterjee, P., Karak, P., & Syamal, A. K. (2024). Polycystic ovary syndrome and its management: In view of oxidative stress. *Biomolecular concepts*, 15(1), 10.1515/bmc-2022-0038. <https://doi.org/10.1515/bmc-2022-0038>
- Mukherjee, T. .; Mohanty, S. .; Kaur, J. .; Das, M. .; **Adhikary, K.** .; Chatterjee, P.; Maiti, R. Exploring Small-Molecule Inhibitors Targeting MAPK Pathway Components: Focus on ERK, MEK1, and MEK2 Kinases in Cancer Treatment. *Chem Biol Lett* **2024**, 11 (2), 659. <https://doi.org/10.62110/sciencein.cbl.2024.v11.659>.
- **Adhikary, K.** .; Ganguly, K. .; Roy, N. .; Bar, P. .; Mahapatra, S. .; Maiti, R. Updated Insights on Clinical Diagnosis and Targeted Therapy of Acute Myeloid Leukaemia (AML): A Molecular Approach. *Chem Biol Lett* **2024**, 12 (2), 1262. <https://doi.org/10.62110/sciencein.cbl.2025.v12.1262>.

- **Adhikary, K.**, Banerjee, P., Parveen, B., Datta, N., Barman, S., Maiti, R., GC-FID, LC-QToF-MS, NMR, quantum chemical analysis, and toxicological evaluation of lemongrass (*Cymbopogon flexuosus*) essential oil yields in Mayurbhanj district of Odisha state. *African Journal of Biological Science* **2024**, 13(6). [10.48047/AFJBS.6.13.2024.2008-2031](https://doi.org/10.48047/AFJBS.6.13.2024.2008-2031)
- **Adhikary, K.**, Sarkar, R., Chatterjee, P., Chowdhury, S. R., Karak, P., Ahuja, D., & Maiti, R. (2024). The Homeostatic Phyto-defense Mechanism for Reactive Oxygen Species under Environmental Stress Conditions: A Review. *Research Journal of Pharmacy and Technology*, 3505–3513. <https://doi.org/10.52711/0974-360x.2024.00548>
- Banerjee, P., **Adhikary, K.**, Choudhury, S., Sarkar, R., Chowdhury, A. S. R., & Bagchi, D. (2024b). Obesity, gut microbiota, and probiotic interventions. In *CRC Press eBooks* (pp. 509–529). <https://doi.org/10.1201/9781003361473-36>
- **Adhikary, K.**, Banerjee, R., Chatterjee, A., De, S., & Banerjee, P. (2024b). Neuroprotective abilities of vitamins, micronutrients, antioxidants, and nutraceuticals. In *Elsevier eBooks* (pp. 633–649). <https://doi.org/10.1016/b978-0-323-95735-9.00015-2>
- **Adhikary, K.**, Sarkar, R., Chowdhury, S. R., & Banerjee, P. (2024b). An overview on pathophysiology and therapeutic approaches of Alzheimer’s disease and Parkinson’s disease. In *Elsevier eBooks* (pp. 235–247). <https://doi.org/10.1016/b978-0-323-95735-9.00031-0>
- Posinasetty, B., Soni, M., Pande, S. D., **Adhikary, K.**, & Tripathi, D. K. (2024). Enhancing Single-Cell trajectory inference and microbial data intelligence. In *Microorganisms for sustainability* (pp. 341–364). https://doi.org/10.1007/978-981-99-9621-6_21
- **Adhikary, K.**, Chatterjee, A., Chakraborty, S., Bhattacharjee, A., & Banerjee, P. (2023). Malaria: Epidemiology, pathogenesis, and therapeutics. In *Elsevier eBooks* (pp. 341–363). <https://doi.org/10.1016/b978-0-323-85730-7.00022-9>
- Banerjee, P., **Adhikary, K.**, Chatterjee, A., Sarkar, R., Bagchi, D., Ghosh, N., & Das, A. (2022). Digestion and gut microbiome. In *Elsevier eBooks* (pp. 123–140). <https://doi.org/10.1016/b978-0-12-821232-5.00029-x>
- Banerjee, P., **Adhikary, K.**, Sarkar, R., Chakraborty, S., & Jana, S. (2023). Prion diseases: A rare group of neurodegenerative disorders. In *Elsevier eBooks* (pp. 651–666). <https://doi.org/10.1016/b978-0-323-85730-7.00046-1>

- **Editor of Book ‘Futuristic Trends in Medical Sciences’ Book 18, Vol. 3. Iterative International Publisher. ISBN: 978-93-6252-675-5**
- **Editor of Book ‘Recent Advances in Physiology & Nutrition’ Book 1, Vol. 1. Iterative International Publisher. ISBN: 978-93-6252-350-1**
- **Editor of Book ‘Impact of Yoga and Proper Diet on Cardiopulmonary Function’ by IGI Global Publisher.**
- **Editor of Book ‘Updates in 21st Century Neuroscience: Brain Physiology and Disorders’ by Apple Academic Publisher (Taylor & Francis)**
- **Patent on ‘Instrument used for detection of Diabetic Neuropathy’ Design no.: 400398-001**
- **UK Design Patent on ‘Laboratory Animal Anaesthesia System’ Design no.: 6305724**
- **Patent on ‘Insulin pump with continuous glucose monitoring device’ Design No.; 407006-001**
- **Patent on ‘Biosensor device for detecting lung cancer’ Design No: 393709-001**
- **Patent on ‘Lemongrass oil organic formulation for disinfectant and floor cleaning’ Application No.:202431037623A**

PRACTICAL KNOWLEDGE & WORKSHOP

- Stereotaxic apparatus, animal EEG, ECG, Immunological assays like, ELISA, PCR, Electrophoresis, SEM, brain cell culture.
- Hematological tests: CBC, Hb, PCV, ESR, PT, BT, CT.
- Histotechniques, tissue processing, microtomy, histological staining techniques.
- Phytochemical extraction techniques like, steam distillation, solvent extraction, fraction distillation.
- Online 7days workshop attended on Flow cytometry organized by Indo-US flow cytometry workshops, Trust for Education and Training in cytometry (TETC), India.
- Work shop attended on Manufacturing & COVID-Food Safety Supervisor under Food Safety training and Certification Authority of India.

LABORATORY & FIELD VISIT

- One day visit at Dept. of Molecular Biology & Human Genetics in Indian Statistical Institute, Kolkata during graduation for project and instrumentation, 2013.
- Laboratory visit for report submission at Defense Institute of Physiology & Allied Science (Wing of DRDO) in eight different depts., for M.Sc. Final semester report submission.

- Laboratory visit for report submission at All India Institute of Medical Science (AIIMS), Delhi in various different depts., for M.Sc. Final semester report submission.
- Chemistry laboratory visit at National Institute of Technology, Durgapur for phytochemical extraction for research work.
- Field visit on anthropometric measurement, health checkup camp, blood donation camp.

WORKING EXPERIENCE

- Current Position: Assistant Professor & Head in Department of Medical Laboratory Technology (BMLT) of Paramedical College Durgapur (Affiliated MAKAUT) since 2016.
- Appointed as Head of The Department of BMLT of same college since 2017.
- Appointed as Head of The Department of Biotechnology of same college since 2020.
- Appointed as Course Coordinator of Nutrition Dept. of same college since 2022.
- Appointed as paper setter under Vidyasagar University in the subject of Human Physiology, Immunology, Clinical Biochemistry, Endocrinology & Andrology several times.
- Appointed as paper setter under WBUHS in the subject of Human Physiology for Bachelor of physiotherapy examination several times.
- Appointed as external examiner under WBUHS in the subject of Human Physiology of BPT and BMLT several times.
- Acted as Organizing Secretary in several international and national level seminar, conference, webinar.

COMPUTER LITERACY

- **Working knowledge:** Diploma in Information Technology Application and Financial Accounting System.
- **Operating systems:** Windows XP, 7/8.
- **Application packages:** MS Office.

HOBBIES

- Like to participate in every type of sports activity, drama, debate.
- Write poetry, painting, recitation, travelling, mystery solve etc.

- **Scopus ID:** 57694493400
- **Google Scholar ID:** <https://scholar.google.com/citations?user=JD9Qk6YAAAAJ&hl=en&oi=ao>
- **Research Gate ID:** <https://www.researchgate.net/profile/Krishnendu-Adhikary-4/research>
- **ORCID:** [0000-0002-9942-1491](https://orcid.org/0000-0002-9942-1491)

Declaration: *I hereby state that the information I gave here is true.*

(Krishnendu Adhikary)

Place:

Date: