

Dr. Sujit Kumar Bhowal

Designation: Associate Professor in Zoology

Qualification: M.Sc., Ph.D.



About me:

Experience / Expertise:

He has more than 15 years of Under Graduate and Post Graduate teaching. In PG courses he has been regularly undertaking dissertation projects in Cytogenetic and Molecular Biology. He is proficient in advanced molecular and general biology laboratory techniques. Apart from academics he also has deep interest in service-related matters and taxation related work.

Specialisation & Area of Research Interests:

Professor Bhowal is currently serving as Assistant Professor in Zoology at Maulana Azad College. He has been teaching UG and PG students for more than 12 years. He completed his academics from University of Kalyani and qualified CSIR-UGC NET JRF twice as well as SLET (WB). His specialization in post-graduate teaching is Cytogenetics and Molecular Biology. His research interest encompasses Genetics & Human Cytogenetics, Reproductive Biology, Biodiversity Studies and Avian Biology. He joined in West Bengal Education Service (W.B.E.S.) in 2006 as an Assistant Professor. Prior to his current posting at Maulana Azad College he has served Darjeeling Govt. College, Krishnagar Govt. College and Kaliganj Govt. College. Beside academic he has keen interest in painting and wildlife photography.

Current Teaching: He has experience of more than twelve years of UG and PG teaching. His subject of teaching spans from general Zoology to advanced domains like Cytogenetic and Molecular Biology and Molecular Cell Biology.

Name of the Research Project completed: Inventorization of Sacred Groves in Nadia district of West Bengal approved and Sanctioned vide memo no. 143/5K (Bio)-1/ 2014, dated 26.02.2014 Sanctioning & Funding authority: West Bengal Biodiversity Board, Kol- 700106.

Selected Publications:

- **Bhowal, S. K.**, Dasgupta, S. C., Karmakar, S. R., Kar, A., Chakrabarty, E., Ghosh, M., & Dey, P. (2021). Impact of urea on monogastric mammalian system: a short term study. *Uttar Pradesh Journal of Zoology*, 42(3), 54-65. ISSN: 0256-971X (P)
- **Bhowal, S. K.** (2021). Conservation and traditional management of sacred groves in the district of Nadia, West Bengal, India. *Uttar Pradesh Journal of Zoology*, 42(3), 54-65. ISSN: 0256-971X (P)
- Kar A, Karmakar, S. R., Dasgupta, S. C., **Bhowal, S. K.** (2020) Role of Artificial Intelligence in 21st Century Cancer Research: A Review, *International Journal of research and Analytical Reviews*, 7(2), 881-893. E-ISSN 2348-1269, P- ISSN 2349-5138
- **Bhowal, S. K.** (2021). A brief review on the therapeutic resistance against cancer by cancer stem cell (CSC). *Uttar Pradesh Journal of Zoology*, 42(7): 56-68. ISSN: 0256-971X (P)
- **Bhowal, S. K.** (2021). Anti-proliferative activity of indoles and related compounds: a review. *Uttar Pradesh Journal of Zoology*, 42(6), 64-80. ISSN: 0256-971X (P)
- Synthesis and assessment of fertility-regulating potential of 2- (2"-chloroacetamidobenzyl)-3- (3'-indolyl) quinoline in adult rats as a male contraceptive agent, **Sujit K. Bhowal**, SanchitaLala, AbhijitHazra, PriyankarPaira, Sukdeb Banerjee, Nirup B Mondal, SmritinathChakraborty, *Contraception*. 2008 Mar; 77 (3):214-222.
- Review on some male fertility regulating agents and development of prospective male contraceptive, **Sujit Kr. Bhowal**, *Conscientia*, 2011; 1(2): 43-52.
- Embryotoxic effect of butanolic part of the aqueous extract of *Chenopodium album* seeds in female rats (Poster presentation), D. Mandal, S. Kumar, S. Banerjee, N. B. Mandal, **Sujit Kr. Bhowal** and S. N. Chakraborty, Symposium on trends in molecular and applied approaches to reproduction and 15th annual meeting of ISSRF, 2005, Kolkata, India.
- Preliminary status survey of natural biodiversity in the wetlands of Panchla, Howrah district, West Bengal and its impact on livelihood of local people, P. Ghosh, **S. K. Bhowal** and P. Sanyal, Abstract in National Conference on Biodiversity, 2014, Pg. 157, Kolkata, India.

- *In vivo* study of the effect of genotoxicity through chromosome aberrations of bone marrow cells and testicular cells as well as micronuclei from mouse treated with carbon tetrachloride (CCl₄), **Sujit Kr. Bhowal**, Chapter in the book “Contemporary laboratory and field experiments in zoology” and proceedings of National level workshop, held at APC Govt. college, Siliguri, 2015, pp 96-102. ISBN: 978-81-8211-128-8.
- Attaining Male Reversible Infertility through Modulation of Spermatogenesis by 2-(2"-chloroacetamido benzyl) - 3-(3'- indolyl) Quinoline or Indolyl Quinoline in Rats *Rattus rattus*. **Bhowal S.K**, Mahapatra P and Sahu CR. *Austin Andrology*. 2016; 1(2): 1006: 1-6.
- Primary investigatory study on natural biodiversity of Panchla wetlands, Howrah, West Bengal and its impact on local population **Bhowal S.K** *Conscientia (Krishnagar Govt. College Academic Journal)*, 2016; 4(1): 33-41.
- Induction of functional infertility in male rats (*Rattus rattus*) by indolyl quinoline, an anti-flagellated agent, S.K. Bhowal, C.R. Sahu and P.K. Mahapatra, National Seminar on climate changes and future of animals, held on 22-23 December, 2018 at P N College, Autonomous, Khordha, Odisha.
- Ghosh Rhitoban, Madhu Parna Karmakar,, Mohima Mitra, **Susanta Roy Karmakar, Sujit Kumar Bhowal** (2024). PSC-Dependent Stem Cell Engineering for Management of Cancer and Its Current Challenges. *International Journal for Multidisciplinary Research (IJFMR)* Volume 6, Issue 6, E-ISSN: 2582-2160.
- Mitra Mohima, Rhitoban Ghosh, Madhu Parna Karmakar, Susanta Roy Karmakar, **Sujit Kumar Bhowal** (2024). Molecular Aspects of Loss of Y-linked Proteins and Their Potential Applications in Cell Biology. *International Journal for Multidisciplinary Research (IJFMR)* Volume 6, Issue 6, E-ISSN: 2582-2160.
- Karmakar Madhu Parna, Rhitoban Ghosh, Mohima Mitra, **Sujit Kumar Bhowal**, Susanta Roy Karmakar (2024). Loss of y chromosome, an alarm towards aggressive bladder cancer in men: it's detection and diagnosis. *International Journal of Advanced Research*. 12(11), 733-749. ISSN: 2320-5407

Book publication:

- A concise text book on Practical Zoology, (2024) Som D. K., **Bhowal S. K.**, Ghosh N. & Mukherjee A. Rainbow Publishers, Kolkata, ISBN 978-81-957758-0-4.
- A concise text book of Animal Biology, Manna S., **Bhowal S. K.**, Ghosh R., Ghosh N. & Mukherjee A. (2024) Techno World Publishers & Distributors, Kolkata, ISBN 978-81-19777-08-2.

Participation and presentation at International and national symposium, seminar, workshop etc:

1. National seminar on clinical research – practice and prospect, organized by Bioequivalence study center, Department of pharmaceutical technology and Indian drug manufacturers' association in 2006 at Jadavpur University, Jadavpur, Kolkata- 700032.
2. International Symposium on trends in molecular and applied approaches to reproduction and 15th annual meeting of ISSRF, 2006, Kolkata, India.
3. Workshop on “Suggestive Curriculum by UGC on Practical Teaching in Zoology”, organized by Dept. of Zoology, University of Calcutta and The Zoological Society, Kolkata, held on 24th February, 2007 at Dept. of Zoology, University of Calcutta.
4. National seminar on science and society, sponsored by the department of higher education, Govt. of West Bengal at Darjeeling Govt. College, held on 27th and 28th March, 2008.
5. National Seminar on “Recent Trends in Exploration, Exploitation and Conservation of Biodiversity” organized by P.G. Dept. of Zoology, Darjeeling Govt. College, Darjeeling- 734101 held on 1st and 2nd June, 2008.
6. UGC-sponsored Refresher Course on “Environmental Issues and its Modulation”, jointly organized by Dept. of Botany, Chemistry, Environmental Science and Zoology, University of Kalyani, Kalyani – 741235, Nadia, held on 2nd to 22nd January, 2008 and obtained Grade A.
7. UGC sponsored National Seminar on Inductive education: challenges ahead in higher education organized by Govt. College of Arts and Crafts, Kolkata, held on 23.01.2010.
8. UGC-sponsored seminar on Biodiversity crisis, held at P.G. Dept. of Zoology, Krishnagar Govt. College on 29.4.2011.
9. International seminar on recent trends in Zoology, held at P.G. Dept. of Zoology, Jhargram Raj College on 08.03.2011 in collaboration with I.N.S.A. and DST, Govt. of India.
10. W.B. Higher Education Dept. sponsored National level workshop on Contemporary laboratory and field experiments in Zoology held at APC Govt. College, Siliguri, Darjeeling, W.B. Nov. 22 to Dec 1, 2015.

11. Participated in National level training workshop on "Skills and Techniques of Taxidermy" at Zoological Survey of India, Kolkata from 08.09.17 to 09.09.17.
12. State level seminar on Biodiversity of West Bengal, organised by Dept. of Zoology, Ramkrishna Mission Vidyamandir, Belur on 28.09.2018.
13. National conference on Advances in Zoology held at Dept. of Zoology, Utkal University, Bhubaneswar from 2.3.2019-3.3.2019.
14. Orientation Programme Attended (UGC sponsored): 21.11.2011 to 19.12.2011 Academic Staff College, Jadavpur University, Kolkata, W.B.
15. Refresher Course Attended (UGC sponsored): 02.01.2008 to 22.01.2008, Dept. of Botany, Chemistry, Environmental Science & Zoology, University of Kalyani, Kalyani, Nadia, W.B.
16. Refresher Course Attended (UGC sponsored): 06.11.2017 to 26.11.2017, Dept. of Zoology and Biotechnology, University of Calcutta, Kolkata, W.B.
17. Participated in one day Seminar in "Frontiers in Biomedical research" organized by Maulana Azad College, Kolkata on 28.08.2019.
18. Participated in One day international Webinar on "Scientific approach...& Covid-19" organized by RBC College, Naihati in collaboration with Bijoygarh JR college on 1st July, 2020.
19. Participated in two day National seminar on Diversity in the era of globalization: challenges and management organized by Bidhannagar Govt. College, Kolkata during 22- 23 Feb, 2020.
20. Participated in DBT Star college science day seminar organized by Maulana Azad College, Kolkata on 28.02.2020.
21. Participated in ISCA-National Seminar on Science & technology: rural development at Surendranath College on 20-21 Feb, 2020.
22. Participated in Webinar on "Phase 2 mastering virtual classroom delivery-session 35" organized by Bethune College on 18th June, 2020.
23. Participated in faculty Enrichment Programme on "Tips and tricks for publishing in international scientific journals" organized by Surendranath College, Kolkata on 20th June, 2020.
24. Participated in one week faculty Development Programme on "Emerging Trends in Sciences-usage of Research Tools and Techniques" organized by Vardhaman College of Engineering, Hyderabad on 15-20th June, 2020.
25. Participated in international Webinar on Context based pedagogy and assessment in higher education organised by Central University of Haryana on 3rd June, 2020.
26. Participated in National Webinar on "Covid-19 Diagnosis: Prospects and Challenges" organized by Maulana Azad College on 27th June, 2020.
27. Participated in National seminar on "Diversity in the... management" organized by Bidhannagar Govt. College during 22 -23 Feb, 2020.
28. Participated in National level online course on "Satellite photogrammetry and its application" organized by IIRS-ISRO, Dehradun from 29-30 June, 2020.
29. Participated in National seminar on "Covid19 diagnosis: prospects and challenges" organized by Maulana Azad College on 27th June, 2020.
30. Participated in one week International workshop on "Science leadership" organized by Central University of Punjab, Bhatinda, India during 22-28th June, 2020.
31. Participated in National Webinar on "How to read scientific literature" and successfully completed online evaluation organized by MANAV, on 26th August, 2020.
32. Participated in two day International Webinar on "Down syndrome research" organized by t21 research society & Dept of Zoology, Calcutta University during 30-31th July, 2020.
33. Participated in One day National Webinar on "NAAC accreditation...education policy" organized by SK College, Alipurduar in collaboration with NAAC, Bangalore on 22th August, 2020.
34. Participated in One day State level Webinar on "Elephant: lord...conservation" organized by Dept of Zoology, Sri Chaitanya College, Habra on 12th August, 2020.
35. Participated in two day National Webinar on "Intriguing concepts & applications in Zoology" organized by Dept of Zoology, Bidhannagar Govt. College, Kolkata during 27-28th Sep, 2020.
36. Participated in National Webinar on "Cumulative aquaculture...rural Assam" organized by Zoological society of Assam, Gwahati, on 28th July, 2020.
37. Participated in National Webinar on "Relevance of...Pandemic" organized by Jhargram Raj College on 12th August, 2020.
38. Participated in One Day National Webinar on "Plant space biology: molecular basis" organized by Women's Christian College, Chennai on 29th July, 2020.
39. Participated in 2 days international Webinar on "Biodiversity & sustainable development in human welfare" organized by BKGK, Howrah during 29- 30 July, 2020.

40. Participated in National Webinar on “Emergence of...microbiologists” organized by Dept of Microbiology, Bidhannagar Govt. College, Kolkata during 5th Aug, 2020.
41. Participated in One day international Webinar on “Living amidst COVID 19” organized by ABN Seal college on 18th July, 2020.
42. Participated in National Science Series organized by Bhaskaracharya College of Applied Sciences, New Delhi during 4-6th August, 2020.
43. Participated in National Webinar on “Regulations & safety measures in food industry” by Maulana Azad College on 18th Sep, 2020.
44. Participated in two day National eWorkshop on “Molecular visualization...programming” organized by Maulana Azad College, Kolkata during 10-12th August, 2020.
45. Participated in UGC-sponsored 7 days STC on leadership development organized by HRDC, Ranchi University during 2- 8 Dec, 2020
46. Participated in One day international Webinar on “Science Biology and the World’s Future” organized by Dinabandhu Andrews College on 25th August, 2020.
47. Participated in One day international Webinar on “Science Biology and the World’s Future” organized by Dinabandhu Andrews College on 25th August, 2020.
48. Participated in National level online course on “Satellite photogrammetry and its application” organized by IIRS-ISRO, Dehradun from 01-03 July, 2020
49. Participated in One day international Webinar on “Clinical Biology” organized by Ranaghat College on 30th July, 2020.
50. Participated in One day National Webinar on “Vaccines for Covid19 & ahead” organized by Dept of Zoology, Utkal University on 27th August, 2020.
51. Participated in National Science Series Online Hand-on training “Referencing scientific.... Write” organized by Bhaskaracharya College of Applied Sciences, New Delhi on 7th August, 2020.
52. Participated in UGC-sponsored 7 days STC on Research Methodology organized by HRDC, North Bengal University, Siliguri, W.B. during Nov 26 – Dec 2, 2020.
53. Delivered oral presentation on Sustainable Development through Heavy Metal Bioremediation in Two days international webinar on biodiversity and sustainable development in human welfare, organized by IQAC of Bijay Krishna Girls’ College, Howrah in collaboration with West Bengal Biodiversity Board during July 29-30, 2020.
54. Delivered oral presentation on Conservation and traditional management of sacred groves through local community participation in the district of Nadia, West Bengal, India in National seminar on Diversity in the era of globalization: challenges and management, organized by Bidhannagar Govt. College, Salt Lake-91 in collaboration with HE, GoWB during February 22-23, 2020 and secured 1st position.
55. Presented poster on Impacts of urea on monogastric mammalian system evidenced by biochemical and histopathological changes: a short term study in National conference on science and technology: rural development, organized by Surendranath College in Collaboration with Indian Science Congress Association, Kolkata Chapter during January 20-21, 2020 and secured 1st position.
56. Participated in Online NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by North-Eastern Hill University, Shillong from 20-30 Aug, 2024.

B) Memebership in Seminar/ webinar organizing committee

- 1) Member of organizing committee of One Day DBT-CTEP Sponsored Science Popularisation Programme on 13th Feb, 2020.
- 2) Member of organizing committee of in National Webinar on “Covid-19 Diagnosis: Prospects and Challenges” organized by Maulana Azad College on 27th June, 2020.
- 3) Member of organizing committee of two day National eWorkshop on “Molecular visualization...programming” organized by Maulana Azad College, Kolkata during 10-12th August, 2020.
- 4) Member of organizing committee of webinar on “How to live a healthy life amidst the Pandemic crisis” organized by all beneficiary Science Departments, held on 2nd September, 2020:
- 5) Member of organizing committee of webinar on “Regulations and Safety Measures in Food Industry” organized by Departments of Zoology and Microbiology, held on 18th September, 2020:
- 7) Member of organizing committee Celebration of National Science Day, “Science, Technology and Innovation in shaping Education” organized by all beneficiary Science Departments, held on 28th February, 2021.

Professional Memberships and Activities:

1. Life member (LJM) of Zoological Society, Kolkata
2. Member, PGEC, Department of Zoology, Maulana Azad College, Kolkata

Contact Details:

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