

◆ MODERN EDUCATION SOCIETY'S ◆
NOWROSJEE WADIA COLLEGE, PUNE
FACULTY ACADEMIC PROFILE



Dr. Kanchan Anil Phatak

Associate Professor • Zoology

Highest Qualification: Ph.D.

Specialization: Zoology

Official College Email: kaphatak@nowrosjeewadacollege.edu.in

PROFESSIONAL SNAPSHOT

*I have been teaching in Department of Zoology, Nowrosjee Wadia College since 2009 focusing on areas such as animal systematics and diversity, cell biology, developmental biology, genetics, molecular biology, biochemistry, genetic toxicology, immunology etc. I have worked on several research projects funded by various state level funding agencies. I am currently working on research areas such as toxicology mediated by food additives, nano-toxicology, and food additives induced oxidative stress using *Drosophila* as model system. I am also interested to study amphibian behavioral ecology including areas such as responses towards predators and predation cues, development of learning memory, and physiological or morphological response towards environmental stress and predator exposure.*

EDUCATION

Qualification	University / Institution	Year
B. Sc. Zoology	Savitribai Phule Pune University, Pune	2007
M. Sc. Zoology	Department of Zoology, Savitribai Phule Pune University, Pune	2009
CSIR- NET (Life Sciences)	Conducted by CSIR-UGC Combined	2008, 2009
Ph. D. Zoology	Department of Zoology, Savitribai Phule Pune University, Pune	2020

TEACHING & ACADEMIC INTERESTS

- Molecular Biology • Biochemistry • Animal Systematics and Diversity • Genetics • Genetic toxicology • Cell biology • Developmental biology

RESEARCH & PUBLICATIONS

- Phatak, K. A., Khanna, P. K., & Nath, B. B. (2024). Silver oxide nanoparticles: a promising material with melanin modulatory properties validated in *Drosophila*. *BioNanoScience*, 14(4), 4594-4605.
- Phatak, K. A., Khanna, P. K., & Nath, B. B. (2024). ZnO nanoparticles: a key ingredient of sunscreen shows absence of adverse effects on *Drosophila* melanization pathway. *Nano-Structures & Nano-Objects*, 38, 101145.
- Phatak, K. A., Khanna, P. K., & Nath, B. B. (2022). Safety evaluation of zinc oxide microparticles on *Drosophila* melanization pathway. *Materials Today: Proceedings*, 57, 135-139.
- Phatak, K. A., Khanna, P. K., & Nath, B. B. (2021). Study of developmental and immunogenic consequences of silver nanoparticles in *Drosophila*. *New Visions in Biological Science Vol. 4*, 105-110.
- Phatak, K. A., Khanna, P. K., & Nath, B. B. (2016). Particle size-independent induction of leucism in *Drosophila melanogaster* by silver: nano vs. micro. *Metallomics*, 8(12), 1243-1254.

Research Profile: a) ORCID: <https://orcid.org/0000-0002-8489-7083>;

ACHIEVEMENTS & PROFESSIONAL DEVELOPMENT

- **Selected/Oral talks** in National/International Conferences: 23
- **Conference/Workshops/ Seminars/ Webinars/ Symposia** attended: more than 30.
- **Invited talks:** 10
- **Research projects guidance at M.Sc. level: more than 20 students.**
- **Research Projects completed: 03 funded by BCUD, RGSTC and ASPIRE-SPPU. Total funding received: 9,37,000/- (Nine lakhs thirty seven thousand).**
- **Awards and recognition:** **1.** Received best platform award for a paper entitled 'Novel genetic and biochemical investigations on pigmentation pathway with silver nanoparticles using *Drosophila* as model system' in "International Conference on new Frontiers in Environmental and Allied Sciences". **2.** Received second prize for oral presentation of paper in National Conference on chemistry of Chalcogenide compounds organised by Defence Institute of Advanced Technology (DIAT).
- **Scientific Membership:** a) Association of Teachers in Biological Sciences (ATBS), India e) Animal Behavior Collective-NGO, UK b) Life member of Society For Materials Chemistry, Bhabha Atomic Research Centre (BARC), Trombay, Mumbai.

ACADEMIC RESPONSIBILITIES

- Working as Academic and Research Co-ordinator (ARC) of college since 2022.
- Worked as member of NAAC- AQAR Preparation committee.
- Worked as member of Admission Committee.
- Working as member of College Cultural Committee.
- Working as member of BoS (subject expert outside the parent university) of K. J. Somaiya college of Science and Commerce, vidya vihar- Mumbai.