

Mr. Kartik K. Adake, M.Sc., SET, GATE

Present position

- Assistant Professor, Department of Zoology, Fergusson College (Autonomous), Pune.

Contact Details

- ☎ +91 9623174737
 - ✉ kartik.adake@fergusson.edu
 - in <https://tinyurl.com/27xvr2a7>
-

Work Experience

Teaching: 3 years.

Research/ Industrial: 10 months.

Personal Profile

- Dedicated and an enthusiastic teacher with a sincere motive to develop the inter-disciplinary approach looking towards any subject among the students. Highly encourages students to think independently and critically.
- Completed my masters with specialisation- Entomology, but have strong affinity towards subjects' like- Molecular Biology, Biochemistry, Genetics, Biostatistics, Cell Biology, Developmental Biology and so on.
- A passionate Marathon Runner.
- Having a holistic approach of living life.

Course(s) Taught (Only Titles)

1. Molecular Biology
2. Biochemistry
3. Genetics
4. Biostatistics
5. Developmental Biology
6. Cell Biology
7. Life and Diversity – III
8. Immunology

9. F.Y.B.Sc. and S.Y.B.Sc. Practical's (Applied Zoology, Classification and taxonomy)
10. M.Sc.-I and M.Sc.-II Practical's (Practical's of Molecular biology, Cell biology, Immunology, Developmental biology, Genetics, Biostatistics, Comparative Anatomy, Endocrinology)

Field of Specialization/Areas of Interests

- Molecular Biology
- Recombinant DNA technology, Molecular Cloning
- Entomology
- Biochemistry, enzymology and metabolic pathways
- Bacterial and Phage Genetics
- Mathematics for Zoologists (Differentiation, Integration, Differential Equation, Definite integral, partial derivative, double integration, triple integration, etc.)
- Plant Physiology

Education

- **Doctor of Philosophy (PhD):** 2023- present
Department of Zoology, Savitribai Phule Pune University, Ganeshkhind, Pune (Maharashtra)
- **Master of Science- Zoology:** 2021
Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune (Maharashtra)
- **Bachelor of Science- Zoology:** 2019
Walchand College, (Solapur University) Solapur (Maharashtra) (**Gold Medalist** in University)
- **HSC (Higher Secondary School Certificate):** 2016
DBF Dayanand College, Solapur (Maharashtra)
- **SSC (Secondary School Certificate):** 2014
Shri Siddheshwar Prashala, Solapur (Maharashtra)

Fellowship/Awards/ Certifications/Achievements

- **Qualified GATE in Life Sciences conducted by IISc, Bangalore in 2024**
- **Qualified GATE in Life Sciences conducted by IIT, Kanpur in 2023.**
- **Qualified GATE in Biotechnology in 2023.**
- **Qualified MH-SET in 2021.**
- **Gold Medalist in Punyashlok Ahilyadevi Holkar, Solapur University for being topper in B.Sc. Zoology in 2019.**
- **Qualified IIT-JAM in 2019**

- Received **DST-INSPIRE Scholarship** for five consecutive years (**Three years of Bachelor’s and Two years of Master’s**) from **Department of Science and Technology, Government of India.(2017-2021)**
- **Successfully completed more than 30+ Marathons of 21Km, 10Km, 5Km and 3Km till now. (Personal best for 21Km- 1hr 48 min.; 10Km- 50 min.)**
- Received Offer letter for **DST-INSPIRE JRF Fellowship** (2022)
- Received “**Best Student Trophy**” Award for two consecutive years during M.Sc. at Modern College, Pune (2019-21)
- Selected in the University Team which participated in “West Zone Inter University Lawn Tennis Tournament” at Laxmibai National University of Physical Education, Gwalior (2017-18)
- Won National Level Technical Symposium for the event “BillBoard” from C.S.E. and I.T. Department, Walchand Institute of Technology, Solapur (2018)
- Member of ‘Microbiology Society of India’ (2016-2018)
- Participated in many State Level Intercollegiate Competitions such as Meet The Press, Extempore, Poster Presentations, etc. (2016-2019)
- Won in many intercollegiate competitions such as Photography Competition, Poster Presentations, Quiz Competitions, Running Competitions and Extempore Competitions. (2016-2019)

Member of College Committees/ Professional Bodies and Others

College Level	Professional Bodies	Others
Departmental Campus drive coordinator	Active member of Microbiology Society of India (2016-2018)	External Examiner
Departmental OBE coordinator	Member of Solapur Marathon Runners Association (SRA)	
Member in NAAC Committee Criteria 7		
Admission committee of PG Zoology		
Board of Studies (BoS) member of UG and PG Zoology	Global Outreach Contributing Member of American Society of Microbiology (2023-24)	

Employment History

Organization : Savitribai Phule Pune University, Pune
Role : PhD Research Scholar
Duration : July 2023- present.

Responsibilities	<ul style="list-style-type: none">• Collection, identification and analysis of Microplastic from different freshwater bodies.• Gene expression analysis in zooplanktons
-------------------------	--

Organization : Agharkar Research Institute, Pune
Role : Project Associate
Duration : March 2022- April 2022.

Responsibilities	<ul style="list-style-type: none">• Genotyping of <i>Danio rerio</i>• DNA Isolation from the fins of zebrafish and running Real Time Polymerase Chain Reaction, AGE, etc.
-------------------------	--

Research Publications in National and International Journals:

- Mane A.V., Dhamale M.M., Kamble P.N., Pathade G.R., **Adake K.K.** (2024). Air Pollution Induced Biochemical Changes in Selected Plant Species Growing on Fergusson and Jangali Maharaj Road of Pune *Indian Journal of Environmental Protection* 44(2): 112-119 : Vol. 44 Issue. 2

BOOK CHAPTERS-

A Reference Book on Life Sciences (UGC CSIR NET/ SET/ SLET) by **NIRALI PUBLICATION**.(2024)

- Conformation of proteins (Ramachandran plot, secondary structure, domains, motif and folds).
- Basic concepts of development.
- Gametogenesis, fertilization and early development.
- Morphogenesis and organogenesis in animals.

Participation in Conferences/Seminars/Symposia/Workshops:

1. **Kartik K. Adake** participated in **Entrepreneurship Awareness Camp** organised by Maharashtra Centre for Entrepreneurship Development (MCED), Government of Maharashtra from 11 Oct 2018 to 13 Oct 2018

2. **Kartik K. Adake** participated in “One Day Seminar-cum-Workshop” on ‘**Applied Zoology- Scope, Importance and Applications**’ organised by Walchand College of Arts and Science, Solapur on 2nd February, 2019
3. **Kartik K. Adake** completed **Certificate Course in Introductory Ornithology** organised by SNTD College of Home Science, Pune and Institute of Natural History Educational Research (INHER) Pune from 22 Nov. 2019 to 03 Dec. 2019
4. **Kartik K. Adake** completed Career Oriented Course in **Naturopathy and Cosmetology** conducted by Walchand College of Arts and Science, Solapur during 2017-18
5. **Kartik K. Adake** successfully completed Hands-on training course on **Animal Systematics for Beginners** conducted by Department of Zoology, Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune-05 (Maharashtra) from 27th January to 3rd February 2020.
6. **Kartik K. Adake** participated in National Level Workshop on **Basic Techniques in Drosophila Genetics and Embryology** held at Modern Education Society’s, Nowrosjee Wadia College, Pune from 13th to 15th February 2020.
7. **Kartik K. Adake** has completed the certificate course in **Limnology (Wonders of Water)**, jointly organised by Department of Zoology, Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune-05 and Institute of Natural History Educational Research (INHER) Pune., from 17th February 2020 to 3rd March 2020.
8. **Kartik K. Adake** has successfully completed the **10-Days Hands-On Training Programme in Environmental Molecular Sciences** held at the **ICMR- National Institute for Research in Environmental Health, Bhopal** during December 1-10, 2021 (Selected in Top 25 Students in India).
9. **Kartik K. Adake** completed 7 Days Training Program on **Insight and Hands-on training program on Techniques in Biotechnology** organised by Shoolini University in collaboration with **SAIF/ CIL Panjab University, Chandigarh under DST-STUTI** from 21-27 July 2022
10. **Kartik K. Adake** successfully completed Hands-On Workshop on **Operation and Maintenance of Opto-Analytical Laboratory Equipments** organised by Fergusson College (Autonomous), Pune in collaboration with **Western Regional Instrumentation Centre (WRIC), Mumbai** from 3rd to 7th January 2023.
11. **Kartik K. Adake** participated in National Seminar on **Implementation of Multi and Trans-Disciplinary Education under NEP 2020** organised by Fergusson College (Autonomous), Pune from 18th to 20th January 2023.
12. **Kartik K. Adake** participated in **Professional Development Workshop** on Digital Creativity Skills as a part of Adobe Academic Essential Program. April 2023.

13. **Kartik K. Adake** completed 3 Days Training program on **Microplastic: Analysis, Mitigation and Management strategies** funded by **European Commission** at **Andhra University, Vishakhapatnam** from 26-28 June 2023.
14. **Kartik K. Adake** successfully completed 4 Days Workshop on **Art of Living (Yes+)** organised by **Fergusson College (Autonomous), Pune** from 13th to 16th July 2023.
15. **Kartik K. Adake** successfully completed **Assessment of NCBI Biology resources** using **Edirect for Command Line Novices** for 2 hours on 18/07/2023.
16. **Kartik K. Adake** participated in 3 Days E-Workshop on **Basic Bioinformatics** organised by **Biosrishti** from 26-28 July 2023.
17. **Kartik K. Adake** completed **Exploring Evolutionary Relationships** using **BLAST** for 2 hours organised by **National Library of Medicine** on 03/08/2023.
18. **Kartik K. Adake** attended National guest talk on **“Lab to market, Leveraging IP”** at **Indian Institute of Science Education and Research (IISER), Pune** under **Intellectual Property Rights Festival** on 20 July 2023.
19. **Kartik K. Adake** participated in Two Days **National Seminar** on **“Microplastics: Current Scenario, Challenges & Future Perspectives”**, held at **ICMR – NIREH, Bhopal** during August 22 – 23, 2023.
20. **Kartik K. Adake** successfully completed Two Days **“Orientation and Induction Program for Faculties” (FDP)** organised by **IQAC, Fergusson College (Autonomous), Pune** on 6th and 7th September 2023.
21. **Kartik K. Adake** attended and actively participated in the webinar '**Applications of Natural Language Processing**', presented by Prof. Ramprasad Joshi, Associate Professor, **BITS Pilani, Goa.** (EduScale A Leap & Scale Enterprise) on 7th October 2023.
22. **Kartik K. Adake** attended **International Conference/Symposium** on **"Recent Trends in Comparative Endocrinology and Physiology from Brain to Behaviour"** organised by Department of Zoology, **Savitribai Phule Pune University** from 12th to 14th October.
23. **Kartik K. Adake** attended and actively participated in the webinar '**Demystifying Data Science**', presented by Dr. Neha Sharma, Founder Secretary, Society for Data Science & Consultant, **TATA Consultancy Services.** (EduScale A Leap & Scale Enterprise) on 28th October 2023.
24. **Kartik K. Adake** participated in the **National Level Faculty Development Programme** on **"Mastering the Art of Using I.C.T in Teaching Pedagogies"** Organized by **National Press Associates, New Delhi,** on 7th November 2023.

25. **Kartik K. Adake** participated in the **National Workshop on developing Curricula** organised by DES Pune University (**DESPU**) in association with **Institute for Educational and Developmental Studies (IEDS)** on December 21&22, 2023
26. **Kartik K. Adake** participated in workshop on **EFFECTIVE TEACHING LEARNING** organised in collaboration with Maharashtra State Development of Educators and Enhancement in Delivery (**MS-DEED**), **IISER, Pune** on 11th and 12th January 2024.
27. **Kartik K. Adake** participated in 2 Days Workshop on Systems Biology Approaches to Understand Complex Cellular Dynamics- **SBAUCCD 2024** organised by Department of Chemistry, **Indian Institute of Technology, Bombay** on 1st and 2nd February 2024
28. **Kartik K. Adake** participated in **Campus Bird Counting event** at Fergusson College (Autonomous),Pune from 16th to 19th February. Total 51 checklists are made during these 4 days of birding.
29. **Kartik K. Adake** participated in One Day Seminar on “**Water Management Strategies for Sustainable Future**” organised by **Centre for Clean Environment (CCE)** and **Centre for Disaster Mitigation and Management (CDMM)**, **Vellore Institute of Technology (VIT)**, on March 22nd 2024.
30. **Kartik K. Adake** attended the online **National Level Workshop on Reference Management Tools** organised by **Department of Zoology, D.G. Ruparel College of Arts, Science and Commerce, Mumbai** from 26th- 29th March 2024.
31. **Kartik K. Adake** attended a two day hands-on training program on “**Aquatic Animal Health Management**” at **Modern College of Arts, Science and Commerce, Ganeshkhind, Pune** on 12th and 13th April 2024.
32. **Kartik K. Adake** participated in One week **National Level Faculty Development Program** on “**Exploring The Use of AI Tools in Research**” organised by Career Development Cell (**CDC**), **Gokul Global University, Sidhpur, Gujarat** from 8th to 13th April 2024.
33. **Kartik K. Adake** completed the **NEP 2020 Orientation and Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission”(UGC)** organised by **IISER, Pune** from April 18th to April 26th 2024.

Events Organised/ Coordinated:

Sr. No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1.	Guest lecture on ‘Aneuploidy and Cancer, Kahani Mein Twist’ by Dr. Kundan Sengupta, Professor and Associate Dean, IISER, Pune	Dept. of Zoology, Fergusson College (Autonomous), Pune	Organizer	12 th October 2022
2.	Guest lecture on ‘Data Analysis for Life Science Students’ by Dr. Sameer Padhye, Principal Scientist, Biologia Life Sciences LLP.	Dept. Of Zoology, Fergusson College (Autonomous), Pune	Program Coordination	31 st July 2023
3.	Guest lecture on ‘Research Opportunities in Life Sciences ’ by Prof. R.S Pandit, Department of Zoology, Savitribai Phule Pune University.	Dept. Of Zoology, Fergusson College (Autonomous), Pune	Program Coordinator	11 th August 2023
4.	Guest lecture on “Principles of Experimental Design, Types of Data and Statistical Representation of Data” by Dr. Kedar Ahire, Department of Zoology, Savitribai Phule Pune University.	Dept. Of Zoology, Fergusson College (Autonomous), Pune	Program Coordination	7 th and 8 th September 2023

5.	One day Workshop for Autonomous Colleges On 'आपले प्रश्न आपले विज्ञान' Case Study Alias Case Study in Development Project	Fergusson College (Autonomous), Pune in collaboration with IIT Bombay.	Program Coordination	8 th November 2023
6.	Lecture Series: Amrit Kaal - Vimarsh Viksit Bharat @2047 'अमृतकालाच्या उंबरठ्यावर आकांक्षावान भारत' by Dr. Vinay Sahasrabuddhe, Chairman ICCR, Former MP.	Fergusson College (Autonomous), Pune	Registration, Creation of Google forms, overall program coordination	21 st December 2023

Additional skills

- Actively involved in organizing guest talks and academic activities in the department along with placement activities.
- Involved in 'Outcome Based Education' assessment of the post graduate students.
- Good skills in coordinating groups of work, by teaching lab activities and supervise postgraduate work.
- Involved in arranging visits to National Research Institutes viz. ZSI-WRC, CBRTI, etc

I hereby declare that the above information is true to the best of my knowledge.

Mr. Kartik Kailaskumar Adake.

| P