

Amir Inayatulla Mulla, Ph.D.

Present position

- Assistant Professor

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Work Experience

- Teaching: 15 years
- Research/Industrial: 8 years

Personal Profile

I did my B.Sc in Zoology (2006) and M.Sc in Environmental Science (2008) from Shivaji University Kolhapur. Then I joined Fergusson College. I have been working here as Assistant Professor from 2008 till date. I teach UG as well as PG classes. I completed an Advanced Diploma in Industrial Safety (ADIS) in 2012. I completed a BCUD minor research project during 2012-2014. Then from 2014 to 2020 I completed my Ph.D from SPPU.

Course(s) Taught (Only Titles)

1. Earth and earth surface processes
2. Water and water resources
3. Natural resource management and sustainability
4. Land and soil conservation and management
5. Environmental Monitoring
6. Waste treatment technology
7. Environmental geo and atmospheric science
8. Water and wastewater treatment technologies
9. Environmental Management Systems
10. Climate change and sustainability
11. Hazardous waste management

Field of Specialization/Areas of Interests

- Environmental Monitoring
- Organic waste management
- Zero pollution technology
- Wastewater Treatment

- Geo and atmospheric science
- Ecology biodiversity

Education

- **Ph.D. – (Environmental Science):** from 2014 to 2020
- **Title of the Thesis:**

Biomethanation and vermicomposting of fruits and vegetable waste from Gultekadi Market, Pune City

Name of University: Savitribai Phule Pune University, Pune

Institution (Research Centre): Department of Environmental Science, Fergusson College (Autonomous) Pune

Year of Award: 2020

- **Master of Science/Arts- (Environmental Science):** 2008, Shivaji University Kolhapur.
- **Bachelor of Science- (Zoology):** 2006, Yashwantrao Chavan College of Science, Karad affiliated to Shivaji University Kolhapur

Fellowship/Awards/ Certifications/Achievements/Recognitions

N.A

Member of College Committees/ Professional Bodies and Others

College Level	Professional Bodies	Others
<ul style="list-style-type: none"> • Admission Committee • Internal Complaint Committee 	Society of Biological Chemists	Member BoS for UG and PG environmental Science
<ul style="list-style-type: none"> • Anti-ragging committee • Placement Cell • International student cell • NAAC criteria 7 • Member for Climate Reality project 		
<ul style="list-style-type: none"> • Coordinator for Departmental Festivals 		
<ul style="list-style-type: none"> • Member for all departmental activities and programs 		

Employment History

Example:

- 1) Organization : -----
 Role : -----
 Duration : -----

Responsibilities	<ul style="list-style-type: none"> . .
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- 2) Organization : -----
 Role : -----
 Duration : -----

Responsibilities	<ul style="list-style-type: none"> . .
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Research Projects

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration (Year) (From To)	Type (Minor/Major)	Outcome
Effect of Chromium and Lead on Some Biochemical Parameters of <i>Umbonium vestiarium</i> (L) Collected from Malvan Shore	BCUD	225000	2012 -2014	Minor	Characterization of coastal water of Malvan was carried out. Effect of controlled exposure of various concentrations of Lead and Chromium to <i>Umbonium vestiarium</i> were studied.

Research Publications in National and International Journals

- Amir I. Mulla and Girish .R. Pathade (2021) Vermicomposting process parameter optimization for feed of biomethanation sludge, fruits and vegetable waste (FVW) using *Eisenia fetida* species. http://www.envirobiotechjournals.com/article_abstract.php?aid=11165&iid=324&jid=3
- Mulla, A. I., & Pathade, G. R. (2020). Optimization of incubation period, pH and moisture content for vermicomposting of biomethanation sludge admixed with fruits and vegetable waste collected from Gultekadi Market Yard, Pune using *Eudrilus eugeniae*. *Nature Environment and Pollution Technology*, 19(2), 873-880. [https://neptjournal.com/upload-images/\(47\)B-3648-Final.pdf](https://neptjournal.com/upload-images/(47)B-3648-Final.pdf)

3. A.I. Mulla and G. R. Pathade (2019) The Optimization of pH and Hydraulic Retention Time (HRT) For Biomethanation of Fruits and Vegetable Waste (FVW)-Laboratory Study https://www.ijpbs.com/ijpbsadmin/special/ijpbsspecial_5d45322406af4.pdf
4. Mulla Amir, Mane Ashish, Kulkarni Shraddha, Pathade Girish (2016) Effect of Chromium on Some Biochemical Parameters of *Umbonium vestiarius* (L) – The laboratory study, International Conference on Environmental System and Sustainable Development ESSD16.

Participation in Conferences/Seminars/Symposia/Workshop:

1. Amir Mulla, participated in “Innovation Regional Research Conference” presented poster at Ahmednagar College on 16/04/2013.
2. Amir Mulla, participated in “Innovation Regional Research Conference” presented research project funded by BCUD “Effect of Chromium and Lead on Some Biochemical Parameters of *Umbonium vestiarius* (L) Collected from Malvan Shore” at H.V. Desai College, Pune on 26/04/2014.
3. Mulla Amir, Mane Ashish, Kulkarni Shraddha, Pathade Girish (2016) Effect of Chromium on Some Biochemical Parameters of *Umbonium vestiarius* (L) – The laboratory study, International Conference on Environmental System and Sustainable Development ESSD16.
4. Amir Mulla, invited as resource person as judge for poster presentation at National Conference on Health Hazards of Pesticides in Food Commodities in India at H.V Desai College, Pune 19th and 20th January 2018.
5. Amir Mulla and Girish Pathade, participated in “INTERNATIONAL CONFERENCE ON EMPOWERING SOCIETY WITH MICROBIAL TECHNOLOGY (ICESMT-2019)” at Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati 7th to 9th February, 2019 presented paper “The Optimization of pH and Hydraulic Retention Time (HRT) For Biomethanation of Fruits and Vegetable Waste (FVW)-Laboratory Study”
6. Amir Mulla, Vinayak Chavan, Purale Diksha, presented paper “current status of migratory birds, their habitat and conservation issues at selected sites in Pune” in Conference on Biodiversity and Environmental Management 2021 (BEM 2021)
7. Amir Mulla and Girish Pathade, presented paper “Microbiological and Microbial Consortia Studies on Biogas Plant Run on Fruits and Vegetables Waste” at International Conference on “Biotechnology for Better Tomorrow” at Udayana University, Indonesia, Bali, 29th & 30th October, 2022.

Events Organized/Coordinated:

Sr. No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1	Tree plantation Drive	<p>College has a very rich Botanical Garden in terms of unique species.</p> <p>Around 150 different plant species have been planted in college campus</p> <p>Including the Botanical Garden. Care has been taken in selection of the species; all species planted are native which will support the other Biodiversity inhabiting the campus.</p>	Member of tree plantation coordination committee	12th July 2017.
2	Watershed Management workshop	<p>Under the College with Excellence program in association with ACWADAM, Pune two days' workshop on Watershed Management was organized for MSc students. Students benefited from the</p> <p>Workshop through various case studies and practical's conducted during the workshop.</p>	Coordinated the workshop	9th .10th February 2018
3	Kirloskar Vasundhara International Film Festival	<p>Under Kirloskar Vasundhara Film Festival number of documentaries was screened followed by discussion on various issues of Environment and protection.</p>	Coordinated activities at college level	January 2017
4	A River walk	A River walk has been organized by the Department in association with Jeevitnadi, Pune under Kirloskar Vasundhara Film Festival for school children. Students from Ahilyadevi, New English School Tilak Road actively participated in a walk to understand cultural, social, Environmental aspects of the River Ecosystem.	Coordinated the activity	

5	National Science Day	MSc I students of the Department have conducted discussion sessions on Environmental Science, an Interdisciplinary branch of science for 7 th standard students of Ramanbaug High School, Pune.	Coordinated the activity	28 th February 2018
6	F.Y.B.Sc Excursion to Ujani, Baramati	Student's Study visit was organised to Ujjani, Baramati, Pune, for study of wetland bird communities.	Coordinated the study visit	15 th February 2018
7	Tree plantation Drive:	Around 150 different plant species have been planted in college campus Including Botanical Garden.	member of tree plantation committee	12th July 2018
8	Entrepreneurship Development Workshop	Under DBT Star College Scheme workshop was conducted by Dr. Adesh Gokhale Council Member DES on start-up program for Entrepreneurship Development on	Coordinated the activity	18 th August 2018
9	Green Economy Workshop	Under DBT Star College Scheme workshop was conducted by Dr. Gurudas Nulkar Head, Ext-MBA Symbiosis International University, Pune on Green Economy on was organized for MSc students in Department of Environmental Science.	Coordinated the activity	29 th August 2018
10	Best Practices in Waste Management workshop	Under DBT Star College Scheme workshop was conducted by Mr. Shrikant Parab Director, Asia Affairs, Delta Group, USA on Best Practices in Waste Management was organized for students in the Department of Environmental Science.	Coordinated the activity	30 th August 2018

11	Film Screening and Interaction with S. Nalla Muthu	Interaction was organized with the director of the film Clash of Tigers on Teachers and students of other colleges along with Fergusson College students involved in the program.	Coordinated the activity	2 nd January 2019.
12	River Ecology Workshop	Under DBT Star College Scheme Workshop was conducted by Oikos, Pune on River Ecology on was organized for students in the Department of Environmental Science.	Coordinated the activity	7 th January 2019
13	Biodiversity Conservation: Issues and Solutions Seminar	Under DBT Star College Scheme conducted Seminar by Dr. Madhukar Bachulkar Cholekar Principal Vijay Singh Yadav Science College; Kolhapur on Biodiversity Conservation: Issues and Solutions	Coordinated the activity	8 th January 2019
14	Hydrogeology Workshop	Under DBT Star College Scheme conducted Workshop was conducted by Dr. Chris Bradley Senior Lecturer School of Geography, Earth and Environmental Sciences University of Birmingham UK on Hydrogeology on was organized	Coordinated the activity	8 th January 2019
15	Climate Change Workshop:	Under DBT Star College Scheme Workshop was conducted with Professor John Bull Associate Professor (Senior Lecturer) in Pollution Ecology, School of Geography, Earth and Environmental Sciences, University of Plymouth on Climate Change on was organized for students	Coordinated the activity	17 th January 2019
16	Bioremediation of Toxic wastes Workshop:	The DBT Star College Scheme seminar was conducted by Dr. Yogesh Patil Professor and Head Research and Publication Symbiosis International University, Pune on Bioremediation of Toxic wastes was organized for students.	Member of the committee in coordinating the activity	22 nd January 2019

17	Colloquium on Sacred Groves	In association with Maharashtra Vriksha Samvardhini has been conducted on Commonwealth Award winning Documentary screening “Sacred Groves: Traditional treasure-trove of Environment” has been done. Number of NGOs from Pune and Mumbai area have been involved.	Activity coordinator	11 th February 2019
18	Environment Day Celebration:	College has participated in events organized by Pune Municipal Corporation on World Environment Day. It includes Cycle Rally, awareness campaigns, plantation drive. For the event this year many government and other officials were present.	Coordinated the activity	5 th June 2019
19	Tree plantation drive	Plantation drive was conducted in Fergusson College campus and Fergusson hill. This drive was organized in association with Pune Municipal Corporation.	Member of tree plantation committee	1 July 2019.
20	Kirloskar Vasundhara International Film Festival:	<p>1. Ramnadi Parikrama: Under Kirloskar Vasundhara International Film Festival, Eco-Rangers program has organized, to understand the Ramnadi from its source region near Khatpewadi to Pashan lake a Parikrama has been organized. The stretch which has been adopted by students of college is Pashan Lake Stretch, where awareness and action oriented programs have been conducted for the entire year. The findings of various research projects and activities also presented in</p> <p>2. Ramnadi Yuva Sansad. Kirloskar Eco-rangers’ inauguration program: an introductory program has been organized on Ramnadi Restoration Mission. Program was followed by Workshop on insect photography entitled ‘Joy at Fingertips’ by Mr. Alok Shevde</p> <p>3. Ramnadi Yuva Sansad: The program have been hosted by Fergusson college where 15 different colleges have presented their work regarding Ramnadi Restoration</p>	Activity coordinator	14/9/2019

		<p>Mission in Yuva-sansad The Mula and Mutha are well known rivers of Pune, but Ramnadi is the third river which flows through Bavdhan-Pashan-Baner suburbs Around 3-lakh citizen are located at the bank of the river. To create awareness and action for this neglected river, the department has taken initiative to organize Ramnadi Yuva Sansad during 14th KVIFF. The Sansad have listened to student's research, analysis and argument. Finding of this event will be used for preparing policy, recommendations and actions plan for the Ramnadi Restoration. The Sansad have been be presided by a panel of esteemed jury.</p>		27/7/2019
21	Beat the Plastic Pollution:	<p>Under Kirloskar Vasundhara Film Festival in association with Terre Policy Center, awareness programs on Plastic Pollution have been organized. have given a talk on Micro plastics and Consequences of Plastic Pollution.</p>	Coordinated the activity	4/1/2020
22	Wild India Film Festival	<p>A film festival organized by Fergusson College in association with Nature Walk, Adventure Foundation from 22 to 25 Aug 2019. Various National and International wildlife documentary screened during this festival. Nature walk conducted in Fergusson College campus and Kamala Nehru Park in presence of renowned botanist like Dr. Mandar Datar, Dr.Sachin Punekar and Dr.S.D.Mahajan. On 24/8/2019 Shri. Madhav Gadgil, Shri. S.D. Mahajan, Sachin Punekar, RahulMarathe interacted students in Panel discussion organized on current issues ofBiodiversity conservation. Eco-quiz was conducted for undergraduate and postgraduate students on 24/8/2019. Wildlife conference was held on 25/8/2019. Mr.Nalla Mutthu conducted a workshop on 'Basics of wildlife Filmmaking workshop on 25/8/2019. Wild India Film festival concluded on 25/8/2019 with very informative talk by Dhritiman Mukherjee</p>	Coordinated the activity	22 to 25 Aug 2019.

		followed by a award winning film screening.		
23	Plastic free campus	To aware the masses about plastic pollution collection drive and awareness activities like flash mob on song in front of main building, Kirloskar Vasundhara International film festival in Balgandharva Rangmadir, JM Road on 7 th January 2020 have been performed by students	Coordinated the activity	2 nd Oct 2019 and during
24	Life Cycle Assessment	In association with Sharada Shakti, a session has been organized. Students learned the basics of Life Cycle Assessment as well as calculating Ecological Footprint at the individual level.	Coordinated the activity	2/8/2019
25	Climate Reality program	Under Climate Reality Program on an interaction with has been organized to discuss various policy interventions to be made to make college more sustainable and Eco-friendlier	Coordinated the activity	14/12/2019
26	Conservation dynamics in Central India Tiger Reserves	An interaction has been organized Students benefited by the interaction in terms of various techniques used by Madhya Pradesh Forest Department in Tiger Conservation.	Coordinated the activity	7/12/2019
27	Western Ghats and its Ecosystem	An invited talk on Lesser-Known Ecosystems has been successful towards making students aware about various neglected ecosystems of Western Ghats like Rock outcrops and their conservation issues.	Coordinated the activity	16/9/2019

28	Maharashtra Star rating program	An interaction was fruitful in understanding Air pollution scenario in Indian cities and the role of common citizens towards the pollution tolerance.	Coordinated the activity	18/7/2019
29	The Climate Reality Project	Sessions on solar Energy, Biodiversity Conservation, Rainwater Harvesting etc conducted Green Schools of the Future for the master trainers. Further, these experts have been connected to master trainers through online platforms and offline interactions as and when requested by individual institutions.	Coordinated the activity	6th July 2019
30	Master's Training Program on Green Campus	A training was organized to train the team leaders from various schools from Deccan Education Society.		25 th and 26 th September 2019
31	Study Visit to Uttarakhand	Students visited a forest to study ecotourism and forest research institute	Coordinated the activity	
32	Biodiversity of India	Students learned about the importance of Biodiversity of India	Coordinated the activity	5th October 2020
33	Interaction with Alumni fellowship opportunities in the Environmental field	She also talked about various fellowship opportunities in the Environmental field including SPARK Fellowship by BAIF.	Coordinated the activity	19th Feb 2021
34	Session on wetland day	Students understood wetlands of Pune and their importance	Coordinated the activity	3rd February 2021

	Session on Hydroponics	Students understood the technique of Hydroponics	Coordinated the activity	11th Feb 2021
35	World Meteorological Day	Students learned about the concept of “Climate Crisis : Action Begins Now”	Coordinated the activity	23rd march 2021
36	Pune City Air Action Plan	Students learned about the air pollution monitoring of Pune City	Coordinated the activity	9 th march 2021.
37	Environmental Sustainability and Resilience in the context of Sustainable Development Goals	Students learned about Sustainability and what strategies are needed to achieve SDGs	Coordinated the activity	25th March 2021.
38	Interaction with Alumni: Meet a friend	Students interacted with alumni and learned about aspects of wastewater treatment	Coordinated the activity	17th July 2021
39	Moth Week	Students learned about How every student can participate and contribute in data collection	Coordinated the activity	24th July 2021
40	Spider Week	During the five days 20 species of spiders have been identified and documented.	Coordinated the activity	14th to 22nd August 2021
41	Interaction with Alumni	Students understood pros and cons of wildlife crime and how to track these illegal activities	Coordinated the activity	15th December 2021.

	Tracking illegal wildlife crime			
42	Big Butterfly Month	On this occasion students of the Environmental science department conducted a Butterfly Survey of Fergusson College Campus	Coordinated the activity	September 2021
43	Ban on Single use Plastic	The purpose of the event was to propose Fergusson College to initiate activities to ban Single Use Plastic in the Campus and declare it as 'First College to Ban Single Use of Plastic' by adopting authenticated verification methods. The college is continuing to make efforts to remain a Single Use Plastic Free Campus.	Member of the coordinating committee	11 th October 2021
44	Metal bottle for my friend	To avoid the use of plastic bottles on 29th October 2021 metal bottles were distributed among the workers.	member of the organizing committee	29th October 2021
45	Nadi ki Pathshala	The program was organized in association with Vanrai, Jal Biradari, College of Agriculture, Pune, College of Agriculture Rahuri and Yashada, Pune, The course focuses on understanding the river Ecology and managing our rivers accordingly.	Coordinated the activity	28th March 2022
46	International Conference on Biodiversity and Environment Management	Department has organized International Conference on Biodiversity and Environmental Management (BEM) in association with the Academic Partners, Centre for Sustainability, Department of Forestry and Environmental Science, University of Jayewardenepura, Sri Lanka and Deccan Education Society's	Coordinated the activity	12 and 13 November 2021, online

		Fergusson College (Autonomous) Pune, India on was organized on 12th -13th November 2021 (online) has laid foundation of conscious thinking and living a sustainable life.		
47	Workshop on sustainable and Eco-friendly products	Under STRIDE (Component I) workshop was organized on eco-friendly products to make students aware about the opportunities on designing and developing eco-friendly products.	Coordinated the activity	6 th May 2022
48	World Environment Day 2022	Observance of World Environment Day was organized on the topic Climate change and Role of youth in Tribal areas.	Coordinated the activity	5 th June 2022

Additional skills/Activities

Environmental Monitoring for all components of the environment.

Course Content Developed (e-content)

NA

Consultancy Services

NA