Profile of the Faculty

1. General Information

Name of the Faculty	:	**Dr Anuprita D. Watharkar**
Name of the Department	:	Biotechnology
Educational Qualifications	:	M.Sc. Biotechnology, GATE Ph.D Biotechnology
Present Position	:	Assistant Professor
Address for Correspondence	:	Changu Kana Thakur Arts, Commerce and Science College.New Panvel (Autonomous) – 410 206.
E-mail	:	anupritawatharkar@gmail.com
Contact Number	:	-
Specialization	:	Biotechnology
Total teaching experience	:	UG: 01 year , PG: 01 year as fulltime UG: 2.5 years , PG: 2.5 years as Visiting
Courses taught	:	Biotechnology, Molecular Biology, Environmental Biotechnology, Bio-process technology: upstream processing, Food microbiology, Applied chemistry: Natural product chemistry, Basics molecular diagnostics, Protein biochemistry, Bio-organic Chemistry, Precision agriculture and agriculture system, Good Laboratory practices, Scientific writing skills
Research experience	:	07 years after Ph.D

		➢ Worked as UGC-Women Postdoc fellow (October 2015-October 2020) ➢ Guided 03 UG Avishkar projects (year 2022-2023) 04 years of Ph.D ➢ Worked as Rajiv Ghandi national fellow during Ph.d (July 2011 to March 2015)

2. Publication of Research Papers:

Peer reviewed journals	**:**	**16**
Non-peer reviewed journals	**:**	**-**
Conference proceedings	**:**	**-**
Book Chapter		**02**

3. List of Publication of Research Papers:

(Articles: 16; book chapter: 02)

Total impact factor: 125.95, Average impact factor:7.829

RGScore:22.59, h-index: 14, i10-index: 14 Citations:585

1. **Watharkar A,** Kadam S, Khandare R, Kolekar P, Jeon B, Jadhav J, Govindwar S (2018) *Asparagus densiflorus*in a vertical subsurface flow phytoreactor for treatment of real textile effluent: A lab to land approach for *in situ* soil remediation. *Ecotoxicology and Environmental Safety* 161:70-77. **(IF:7.129)**

2. **Watharkar A,** Khandare R, Waghmare P, Jagadale A, Govindwar S, Jadhav J (2015) Treatment of textile effluent in a developed phytoreactor with immobilized bacterial augmentation and subsequent toxicity studies on *Etheostomaolmstedi*fish. *Journal of Hazardous Material* 283: 698–704. **(IF:14.224)**

3. **Watharkar A**, Jadhav J (2014) Detoxification and decolorization of a simulated textile dye mixture by phytoremediation using *Petunia grandiflora* and, *Gailardia grandiflora*:A plant-plant consortial strategy. *Ecotoxicology and Environmental*

*Safety*103:1-8. **(IF:7.129)**

4. **Watharkar A**, Rane N, Patil S, Khandare R, Jadhav J (2013) Enhanced phytotransformation of Navy Blue RX dye by *Petunia grandiflora* Juss. With augmentation of rhizospheric*Bacillus pumilus*strain PgJ and subsequent toxicity analysis. *Bioresource Technology* 142:246–254 **(IF:11.889)**

5. **Watharkar A**, Khandare R, Kamble A, Mulla A, Govindwar S, Jadhav J (2013) Phytoremediation potential of *Petunia grandiflora* Juss.an ornamental plant to degrade a disperse, disulfonated triphenylmethane textile dye Brilliant Blue G. *Environmental Science and Pollution Research.* 20:939-949 **(IF: 5.190)**

6. Patil S, Tamboli A, Bhalkar B, Survase S, **Watharkar A**, Jeon BH. (2023) 24 - Systems biology and multi omics integration in biological treatment of textile wastewater. *Current developments in Bioengineering and Biotechnology (Advances in Ecofriendly and sustainable technologies for treatment of textile wastewater).* Elsevier *https://doi.org/10.1016/B978-0-323-91235-8.00011-5 Elsevier* Pages: 711-742 **(Book Chapter)**

7. Rane N, Tapase S, Kanojia A, Watharkar A , Salama E , Jang M , Jeon B (2021) Molecular insights into plant-microbe interactions for sustainable remediation of contaminated environment. *Bioresource Technology* https://doi.org/10.1016/j.biortech.2021.126246 , Volume 344 part B **(IF:11.889)**

8. Khandare R, **Watharkar A**, Pawar P, Jagtap A, Desai N. (2021) *Hydrophytic plants Canna indica, Epipremnum aureum, Cyperus alternifolius* and *Cyperus rotundus* for phytoremediation of fluoride from water. *Environmental Technology & Innovation*. https://doi.org/10.1016/j.eti.2020.101234Get. 101234 **(IF:7.758)**

9. Kadam S, **Watharkar A,** Chandanshive V, Khandare R, Jeon B, Jadhav J, Govindwar S (2018) Co-planted floating phyto-bed along with microbial fuel cell for enhanced textile effluent treatment**.** *Journal of Cleaner Production.*203:288-798 **(IF: 11.072)**

10. Waghmare P, **Watharkar A**, Jeon B, Govindwar S (2018) Bioethanol production of waste biomass of *Pogonatherumcrinitum*phytoremdiator*: An ecofriendly strategy for renewable energy. 3 Biotech* 8:158 https://doi.org/10.1007/s13205-018-1188-0 **(IF:2.893)**

11. Kulkarni A, **Watharkar A**, Rane N, Jeon B, Govindwar S (2017) Decolorization

and detoxification of dye mixture and textile effluent by lichen Dermatocarpon vellereceum in fixed bed up flow bioreactor with subsequent oxidative stress study. *Ecotoxicology and Environmental Safety* 148:17-25**(IF:7.129)**

12. Khandare R ,Desai S, Bhujbal S,**Watharkar A**,Biradar S, Pawar P, Govindwar S (2017) Phytoremediation of fluoride with garden ornamentals *Nerium oleander, Portulaca oleracea and Pogonatherum crinitum. Environmental Science and Pollution Research* 24(7) **(IF: 5.190)**

13. Rane N, Khandare R, **Watharkar A**, Govindwar S (2017) Phytoremediation as a green and clean tool for textile dye pollution abatement in phytoremediation of environmental pollutants. *Phytoremediation of Environmental Pollutants,* 9781138062603_C013. Indd, 327-359 **(book chapter)**

14. Kharte S, **Watharkar A**, Shingote P, Chandrashekharan S, Pagariya M, Kawar P, Govindwar S (2016) Functional characterization and expression study of sugarcaneMYB transcription factor gene PEaMYBAS1 promoter from *Erianthusarundinaceus* that confers abiotic stress tolerance in tobacco. *RSC advances*. 6:19576-19586.**(IF:4.036)**

15. Patil S, Chandanshive V, Rane N, Khandare R, **Watharkar A**, Govindwar S (2016) Bioreactor with Ipomoea hederifolia adventitious roots and its endophyte *Cladosporium cladosporioides* for textile dye degradation. *Environmental Research* 146:340-349 **(IF: 8.431)**

16. Rane N, Chandanshive V, **Watharkar A**, Khandare R, Patil T, Pawar P, Govindwar S (2015) Phytormediation of sulfonated Remazol Red dye and textile effluents by *Alternanthera philoxeroides: An anatomical,* enzymatic and pilot scale study. *Water research*. 83:271-281**(IF:13.400)**

17. Khandare R, **Watharkar A**, Kabra A, Kachole M, Govindwar S (2014) Development of a low cost phyto-tunnel system and its application for the treatment of a real textile effluent and a simulated mixture of dyes. *Biotechnology Letters* 36: 47-55. **(IF:2.716)**

18. Jadhav S, Patil N, **Watharkar A**, Apine O, Jadhav J (2013) Batch and continuous biodegradation of Amaranth in plain distilled water by P. aeruginosa BCH and toxicological scrutiny using oxidative stress studies. *Environmental Science and*

Pollution Research 20:2854-2866 **(IF: 5.190)**

4. Minor Research Project

Title of the project	Date of sanction	Duration	Grant received	Funding agency
Development of lab and pilot scale bioreactors for the treatment of a real textile effluent and subsequent toxicity studies in concern with public health in Maharashtra	18 January, 2023	(1 Year) **ongoing**	1,00,000/-	RUSA
Survey of anxiety, stress and depression among adolescents by using DAAS 21 Scale.	Anugoonj Project 2023	(1 Year) **ongoing**	-	-

5. Academic Staff College Orientation/Refresher courses/FDP attended:

Name of the Course	Place	Duration	Sponsoring Agency
Watharkar, A (2023) The 5-DAy National level multidisciplinary Faculty Development Program on' Emerging trends in teaching and learning process and fundamental aspects of research.'	Mumbai	5 Days April 24-28, 2023	Organized by Ramsheth Thakur College of Commerce and Science, Kharghar, Navi Mumbai 410210.
Watharkar, A (2022) One week Faculty Development Program on e-content and MOOCS creations:Hands on training'	Mumbai	1 Week Sepetember 18-23,2022.	Organized by Central Library in association with IQAC, Changu Kana Thakur Art, Commerce and Science College, New Panvel (Autonomous) 410206.
Watharkar, A (2022) One week Faculty Development Program on 'Molecular	Mumbai	One week April 21-27,2022.	Organized by Amity Institute of Biotechnology, Amity University, Mumbai 410206

identification and gene cloning,'			in association with Genei labs.
Watharkar, A (2019) Faculty Development Program and workshop on 'Elementary concepts of system biology and molecular modelling'.	Mumbai	Two days January 10-11, 2019	Organized by Amity Institute of Biotechnology, Mumbai 410206,

6. Participation in conferences, symposium, seminars and workshops:

Level	Presented poster	Participated
International conferences	**04**	**01**
National conferences	**-**	**02**
University	**-**	**01**
Workshops	**-**	**04**

7. Experience on the various committees at the college

- Member, RUSA cell, Environmental consciousness (2022-2023)
- Member, Science Association (2022-2023)

8. Experience on the NAAC/ IQAC of the college

Member, Criteria III for NAAC (2022-2023)

9. Experience on the Various Committees at the University of Mumbai / Government/ Deemed to be University

- Paper Setter/ Examiner for B. Sc., MSc, B.Tech, M.Tech Biotechnology [Papers: Bioprocess Plant Design, Fundamentals of Biochemical engineering, Industrial Biotechnology and Environmental Biotechnology lab, Animal Science (Theory and lab), Human Physiology, Advanced analytical techniques, Ecosocial evolution in Biotechnology Theory], Amity Institute of Biotechnology, Amity University, Mumbai (2020-2022).

- Paper Setter/ Examiner for B.Tech, M.Tech Food Biotechnology [Papers: Food biotechnology, Food safety and toxicology and Food microbiology] Practical and Theory Examination, Amity Institute of Biotechnology, Amity University, Mumbai (2020-2022).

- Examiner for M. Sc. Food Biotechnology Practical Examination of MSc Sem II Food Analysis, School of Biotechnology and Bioinformatics., D.Y. Patil University (2022-2023).