Information for profiling

Basic Info.	Name: Dr. Shivaji Subhash Waghmare Designation: Assistant Professor Department: Microbiology Deputy Controller of Examinations Fergusson College (Autonomous), Pune E-mail: shivaji.waghmare@fergusson.edu Work experience (in years)
	Teaching: 15 years
	Research: 15 years
Personal Profile	After completion of post-graduation in 2006 from Shivaji University, Kolhapur (M.S.) INDIA. My journey as a teacher started in 2006 at Dr. Babasaheb Ambedkar Marathwada University Aurangabad, sub-campus Osmanabad (M.S) INDIA. In year 2010, I have been awarded Ph.D. in Microbiology from Dr. B. A. M. University, Aurangabad. Immediately after obtaining my doctoral degree, I joined Fergusson College, one of the world's reputed academic organization in 2010. In 2016-2017, I was deputed as Academic Director to Fergusson Centre for higher Learning, Kurrakalva, Renigunta Mandal, Chittoor to set up laboratories and start courses related to industries. In 2019, Fergusson College (Autonomous), Pune gave me additional responsibility as Deputy Controller of Examinations. In 2019, I have been recognized as Ph.D. Research Guide in the subjects of Microbiology and Environmental Sciences. Currently, three Ph.D. students are working under my guidance. Updated educational information through orientation program, refresher course and faculty development programs conducted by HRDC and MHRD.
Course(s) Taught	Microbial World, Applied Microbiology, Food and Dairy Microbiology, Agricultural Microbiology and Bionanotechnology, Biophysics and instrumentation, Biodiversity, Tumor Immunology.
Field of specialization	Bionanotechnology, Applied Microbiology
Education Qualifications	Ph.D. (Microbiology)
(upto Graduation)	M.Sc. (Microbiology)

	B.Sc. (Microbiology)
Awards, Honors	 i. Golden Jubilee University Junior Research Fellowship for doctoral study, Dr. B.A.M.U. Aurangabad (2007-09). ii. First prize for poster presentation in Avishkar-2010, Zonal Research Competition, University of Pune, Pune.
Professional Membership	 i. Life Member of Microbiologist's Society, India. ii. Life Member of Association of Microbiologists of India (AMI), India. iii. Life Member of Association of Indian Science Congress, India.
Employment History	 i. One year teaching experience as CHB during 2006-07 to M.Sc. Biotechnology course of Dr. B. A.M.U. sub campus, Osmanabad, (M.S.) INDIA. ii. Two years teaching experience as during 2006-08, One year during 2008-09- and Two-months during Feb. 2010- Mar. 2010 to M.Sc. Microbiology, course of Dr. B. A.M.U. sub campus, Osmanabad, (M.S.) INDIA. iii. One year teaching to B.Sc. Microbiology and Departmental setting experience at Venkatesh Mahajan College, Osmanabad, (M.S.) INDIA. iv. One year teaching experience as CHB during 2008-09 to M.Sc. Microbiology, student of Dr. B. A.M.U. subcampus, Osmanabad, (M.S.) INDIA.
Research	 Project at M.Sc. II (Sem IV) entitled "Studies on microbiological qualities of milk up to consumer level and its concerned unit in Gokul dairy" during 2005-06 in Department of Gokul Dairy, Kolhapur. Project entitled "Antimicrobial activity of Garlic (<i>Allum satium</i>) on human pathogenic bacteria" in Identification and conservation of medicinal plants of center for community development, Shivaji University, Kolhapur. Completed training from 30th May 2005 to 14th June 2005 in Department of Pathology at Tata memorial centre rural cancer project and Nargis Dutt memorial cancer hospital, Barshi, Dist- Solapur (M.S.) INDIA.
Publications	 Pranjali S. Rajegaonkar, Bhakti A. Deshpande, Manjushri S. More, Shivaji S. Waghmare, Vishal V. Sangawe, Areeb Inamdar, Mahendra D. Shirsat, Nitin N. Adhapure "Catalytic reduction of p-nitrophenol and methylene blue by microbiologically synthesized silver nanoparticles" Materials Science & Engineering C 93 (2018) 623–629.

- Waghmare S.S., A. M. Deshmukh and Zygmunt Sadowski "Biosynthesis, optimization and purification of gold nanoparticles" African Journal of Microbiology Research, 2014, 8 (02),138-146.
- Waghmare S.S. Seema Sambrani and Deshmukh A.M. "Organic solvent tolerant actinomycete which secretes organic solvent stable enzymes" Int. J. Bioassays, 2013, 2 (07), 949-955.
- N.N. Adhapune., Waghmare S.S. and Deshmukh A.M. (2013) Metal solubilization from powdered PCB by microbial consortium from Bauxite and Pyrite Ores'. Applied Biochemistry and Microbiology, Pleiades Publishing, Ltd. (Springer). 49, (3), 256-262.
- Waghmare S.S., Deshmukh A.M. Kulkarni S.W. and Oswaldo, L.A. 2011. "Biosynthesis and characterization of Manganese and zinc Nanoparticles" Uni. J. Environ. Res. and Technol. 1, 64-69.
- Shingade B.M., Waghmare S.S., A.M. Deshmukh 2008 "Ethanol Production from Sugarcane juice" J. Curr. Sci. 12 (2): 543-546.
- Waghmare S.S., 2007. "Antimicrobial activity of Allum satium (Garlic) Extract". J. Microbial World. 9 (1): 178-180.

Participations in Conferences/Seminars/Sympos ia/Workshop

- 1. Worked as Volunteer in workshop on "Biotechniques" Organized by Y.C. College of Science, Karad, (M.S.) and Bangalore Biogeni Pvt. Ltd. Bangalore at Karad on 4th Sep. 2004.
- 2. Worked as Volunteer in "Environmental Pollution and Control", One day seminar on 3rd Oct. 2004. for School going children, Organized by Microbiologist's society, Karad.
- 3. Participated in One day workshop on "Molecular Biology Techniques" on 18th Nov. 2005, Organized jointly by Dr. B.A.M.U. subcampus Osmanabad and Bangalore Genei, Pune Division.
- 4. Attended National level conference on "Frontiers in Biofertilizers and Biopesticides" On 19th -21st Feb 2006 sponsored by UGC, CSIR and Department of Microbiology, Dr. B.A.M.U. subcampus, Osmanabad.
- 5. Participated in the workshop on "Microbial Taxonomy" organized by MACS- Agharkar Research Institute, Pune during Dec. 21st -22nd, 2006.
- 6. Presented Poster in "National Symposium on Genomics, Proteomics and Bioinformatics on "Antimicrobial activity of Garlic extract" held on 9th

- and 10th Feb. 2007 at Osmanabad, (M.S.) INDIA.
- 7. Attended one day seminar on "Advances in Biotechnology" on Mar 25th 2007, Sponsored by Microbiologist society and organized by Dr. B.A.M.U. subcampus, Osmanabad, (M.S.) INDIA.
- 8. Participated in the UGC sponsored state level seminar on "Role of microorganisms in industrial effluent treatment" on 22nd Sep. 2007, Organized by Department of microbiology, Mrs. K.S.K. College, Beed. (M.S.) INDIA.
- 9. Participated in seminar on "Environmental Pollution and Control", for School going children, on 20th Jan. 2008, organized by Dept. of Microbiology, Dr. B.A.M.U. subcampus, Osmanabad, (M.S.) INDIA.
- 10. Presented Paper in the two days National Symposium on "Recent advances in nano science" on 23rd and 24th Feb 2008, jointly organized by Dept. of Chemistry, Dr. B.A.M.U. subcampus Osmanabad and Dept. of Chemistry, R.P. College, Osmanabad, (M.S.) INDIA.
- 11. Participated in workshop on "Nano World 2008" at National Chemical Laboratory on 22nd Mar 2008 organized by Rotary club of Pune, Sinhagad Road, (M.S.) INDIA.
- 12. Participated in workshop on "Practical aspect in electrophoresis and immunology Technique" at Hotel Vishwamitra International, Latur, (M.S) INDIA on 12th Apr 2008 organized by BioEra System.
- 13. Participated in State level seminar on "Nanobiotechnology-2008" 6th Oct. 2008, organized by Dept. of Physics, Shri. Chhatrapati Shivaji College, Omerga, Dist-Osmanabad (M.S.) INDIA.
- 14. Participated in International level conference on "Nanomaterials and applications-2008" on 9th -11th Dec. 2008 jointly organized by Department of Chemistry and Department of Physics, Shivaji University, Kolhapur, (M.S.) INDIA.
- 15. Participated in UGC sponsored national level seminar on "Nanotechnology: The big world of small things" on 10th Jan. 2009 organized by Dept. of Microbiology, Royal college of Art's, Science and Commerce, Thane, (M.S.) INDIA.
- 16. Participated and presented research work at UGC, DBT and DST sponsored National workshop on "Biology and biotechnology of actinomycetes on 12th -14th Feb 2009 organized by Department of microbiology, Dr. B.A.M.U. sub campus, Osmanabad, (M.S.) INDIA.

- 17. Participated in U.G.C. sponsored seminar on "Global Worming: Problems and Solutions" on 22nd Mar. 2009 organized by Department of Zoology, V.M. College, Osmanabad, (M.S.) INDIA.
- 18. Participated and presented poster in National conference on nanobiotechnology: Applications and prospects" on 8th -10th Oct. 2009, organized by Dept. of Microbiology, Abeda Inamdar College, M.C.E. Society, Pune, (M.S.) INDIA.
- 19. Attended a "Nobel Laurette lecture series in Biology" in honor of Dr. Venkatraman Ramkrishnan on 11th Oct. 2009. Organized by Department of microbiology Dr. B.A.M.U. sub campus, Osmanabad (M.S.) INDIA.
- 20. Participated in State level seminar on Biotechnological applications to microbial siderophores" on 21st March 2010 organized by Dept. of Microbiology, Dayanand Science College, Latur, (M.S.) INDIA.
- 21. Participated in Colloquium on "Multi-disciplinary Research Opportunities in Nanotechnology: A Few case studies" by Prof. V. Ramgopal Rao held on 15th April, 2010 at Department of Biophysics, University of Mumbai, Mumbai, (M.S.) INDIA.
- 22. Presented a research paper (oral) entitled "Biosynthesis of gold nanoparticles by Streptomyces sp. in International conference on "Biology and Biotechnology for Better Tomorrow- 7th Feb. 2011" organized by Dept. of Microbiology, Dr. B.A.M.U. Aurangabad subcampus, Osmanabad.
- 23. Presented a research work in the form of poster entitled "Screening of endophytes from leaves of Curcuma longa and their antimicrobial activity" in international conference on "Biology and Biotechnology for Better Tomorrow- 6th Feb. 2011" organized by Dept. of Microbiology, Dr. B.A.M.U. Aurangabad subcampus, Osmanabad.
- 24. Participated in one day seminar on "Energy Conservation and Environmental Protection" organised by Environmental Science Department, FCP and Petroleum Conservation Research Association, Mumbai (Under Ministry of Petroleum and Gas, Govt. of India), on 20th July 2011.
- 25. Participated in State level Workshop on "e-Learning in Microbiology" on 21st August, 2011, organized by Department of Microbiology, Dr. B.A.M.U. subcampus, Osmanabad, Aurangabad.
- 26. Participated in two days seminar on "Vedic Science

- day" on 10th and 11th Jan. 2012 organized by Deccan Education Society's Fergusson College Pune and Pradnya Vikas Shikshan Sansthan, Pune.
- 27. Attended and participated in workshop on "Methodology and Details of Teaching and Learning in M.Sc. Microbiology" on Feb. 17th, 2012 organized by Department of Microbiology, Abasaheb Garware College, Pune.
- 28. Attended and participated in conference of Indian Science Congress, India on 3rd Jan 2013 to 7th Jan 2013 held at Kolkata.
- 29. Participated in one day workshop on "Detailing of Reconstructed F.Y.B.Sc. (Microbiology) syllabus in association with BOS University of Pune on 4th Feb. 2013 organized by H.V. Desai College, Pune.
- 30. Presented research by oral in the International Conference of "Biotechnology for Better Tomorrow (BTBT-2013)" on 11th -12th Nov. at Mauritius.
- 31. Participated in UGC sponsored International Conference on "Emerging Horizons in Biochemical Sciences (EHBCSN-2013)" on 28th -30th Nov. 2013 at Shivaji College Barshi, Dist- Solapur.
- 32. Participated in DBT sponsored National Conference on "Modern Analytical Techniques in Microbiology (MATM-2014)" on 17th -18th Jan. 2014 at Fergusson College, Pune.
- 33. Participated in One Day "ASM Workshop of Art of Science Communication" on 22nd Jan. 2014 at Modern College, Shivaji Nagar, Pune.
- 34. Participated in DBT-PURSE sponsored one day National seminar on "Future perspective of Biological Science (FPBS-2014)" organized by Shivaji University Kolhapur on 4th March 2014.
- 35. Participated in Microbial Diversity Assessment Club (MDAC) River project since 2012 to 2014 conducted by Microbial Culture Collection, Pune.
- 36. Participated in a seminar on "Recent Trends in Biotechnology" on 20th July 2014 at Dr. B. A. M. University, Aurangabad.
- 37. Participated in workshop on "Nanotechnology: Energy and Health" sponsored by Indian Academy of Sciences, New Delhi and Allahabad on 10th -11th Oct. 2014 held at Fergusson College, Pune.
- 38. Participated in One day symposium on Entrepreneurship: A gateway for Biologists 2014 on 30th Sept 2014 at Fergusson College, Pune.

- 39. Participated in in One day State level Inter University Microbiology Teachers Meet on 25th June 2017 at H.V. Desai College, Pune.
- 40. Participated in National Science Teacher's Congress during India International Science Festival on 5th to 8th 2018 organized by Indira Gandhi Pratishthan, Lucknow.
- 41. Participated in National Webinar on "Fighting Pandemics with Artificial Intelligence" organized by Department of Microbiology, University of Delhi, India on 29th May 2020.
- 42. Participated in Three days National Webinar on "Life Sciences 2020-Education and Innovation for Future" organized by Annasaheb Magar Mahavidyalaya, Pune on 5th to 7th May 2020.
- 43. Participated in Webinar on "Molecular Biology in Food Testing Laboratory" organized by Department of Nutraceuticals Guru Nanak Khalsa of Arts and Science and Commerce, Mumbai under the aegis of RUSA on 29th May 2020.
- 44. Participated in National Webinar on "Preventive Measures for Cyber Threats in Vitual Learning Environment" organized by Department of Computer Applications and Department of Mathematics, Dr. Ambedkar College, Nagpur, on 15th July 2020.
- 45. Completed One Week Pedagogical Training for Teachers on Tools for Online Teaching Learning and Evaluation, organized by School of Mathematical Sciences, Swami Ramanand Teerth Marathwada University, Nanded from 1st July to 6th July 2020.
- 46. Participated in the OpenWHO online Course on "Antimicrobial Stewardship: A competency-based approach" organized by World Health Organization (WHO) held on April 29th 2020.
- 47. Participated in the OpenWHO online Course on "Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)" organized by World Health Organization (WHO) held on April 13th 2020.
- 48. Participated in the OpenWHO online Course on "Severe Acute Respiratory Infection (SARI) treatment Facility Design" organized by World Health Organization (WHO) held on April 13th 2020.
- 49. Participated in National Workshop on "Fine tuning research planning using Elsevier tools: Science direct, Scopus and Mendeley" organized by K.J. Somaiya College of Science and Commerce, Mumbai in Collaboration with Elsevier held on April 25th 2020.

50. Participated in the Open WHO online Course on "Antimicrobial Stewardship: A competency-based approach" organized by World Health Organization (WHO) held on April 29th 2020. 51. Participated in the Five day National FDP entitled "Innovative teaching and research in science: exploring the new horizons" organized by Science forum, Vijaynagar, Karnataka held from 10th to 15th June 2021. 52. Participated in the National Seminar 'Implementation of Multi and Trans – Disciplinary Education under NEP 2020' from 18th – 20th January 2023 organized by Fergusson College (Autonomous), Pune U.G.C. sponsored workshop on "Intellectual property Event Organized/Conference/ right and patenting" on 23rd Oct. 2007 organized by Seminar/ Workshops coordinated Dept. of Microbiology, Dr. Babasaheb Ambedkar Marathwada University, Subcampus, Osmanabad, (M.S.) INDIA. International conference on "Biotechnology for better Tomorrow (BTBT-2011) organized by Dept. of Microbiology, Dr. B.A.M.U. Aurangabad subcampus, Osmanabad, held on 6th -9th Feb. 2011. National level seminar on "Recent trends in Applied Statistics an Interdisciplinary approach" organized by Dept. of Statistics, Fergusson College, Pune, held on 15th -16th Mar. 2013. International Conference on Biotechnology for better Tomorrow (BTBT-2013) held at Rajiv Gandhi Science Centre, Mauritius on 11th to 12th Nov. 2013. Poster Competition AMI Best paper Award for Master's Students in Microbiology 2014 held at Department of Microbiology, Fergusson College, Pune on 26th Feb 2014. National conference on "Modern Analytical Techniques in Microbiology (MATM-2014)" held at Fergusson College, Pune, on 17th -18th Jan. 2014. 5th Bharatiya Vigyan Sammelan and Expo held at Fergusson College from 11th -14th June 2017. Additional Skills/Activities Delivered invited talk in National conference on "Nanotechnology: by a panacea" organized Sharadchandraji Pawar Pharmacy College, Otur, Dist. Pune on 14th Jan. 2011. Delivered invited talk in National level workshop "Fundamentals of Nanotechnology" and

- conducted second session on "Practical aspects of synthesis of metal nanoparticles" organised by Lokmangal College of Agricultural Biotechnology, Wadala, Solapur, on 10th Feb 2012.
- Delivered a lecture in Marathi on the topic of "Sukshmajiv aani aapan" for N.S.S. student camp on 10th Dec. 2012.
- Worked as referee in DBT-PURSE sponsored one day National seminar on "Future perspective of Biological Science (FPBS-2014)" organized by Shivaji University Kolhapur on 4th March 2014.
- Delivered invited talk at State level conference on Exploring the Microbiome Interaction in Environment and Health" at Sanjivani College, Kopargaon, Dist-Ahmednagar on 9th Dec. 2017.
- Delivered invited talk in the National Webinar on "Nanobiotechnology" organized by Sanjivani College, Kopargaon, Dist-Ahmednagar. on 15th Oct. 2018.
- Science popularization scheme on "Nanotechnology: trend An upcoming in multidisciplinary research and entrepreneurial avenues" organised by Dept. of Biosciences, Acropolis Institute of Management Studies & Research, Indore on 28th Feb. 2022.
- National Conference on "Frontiers in Biological Research-2022" for students and research scholars of biological sciences organized by Department of Biotechnology and Microbiology, K.L.E's P.C. Jabin Science College (Autonomous), Hubbali, Karnataka. 1st and 2nd July 2022

Coordinator/Member of various Committees at Fergusson College:

- Research Coordination Committee (Coordinator)
- Core Committee NAAC
- Examination Committee
- Discipline Committee
- Unfair means committee
- Institutional Biosafety Committee

Member of Selection committee for Ph.D. admission /Assistant Professor:

• Worked as subject expert for selection of assistant

professor in microbiology at H.V. Desai College, Pune on 9th June 2017.

- Worked as external subject expert for Ph.D. admission of Environmental Science under faculty of science at H.V. Desai College, Pune on 5th Mar 2020.
- Worked as subject expert for selection of assistant professor in microbiology at H.V. Desai College, Pune on 29th June 2018.
- Worked as external subject expert for Ph.D. admission of Microbiology under faculty of science at Abasaheb Garware College, Pune on 3rd Feb 2022.
- Worked as external subject expert for Ph.D. admission of Microbiology under faculty of science at Abasaheb Garware College, Pune on 8th June 2022.