

<p>Name and Designation: Dr. M. V. Kulkarni Associate Professor Division of Biochemistry, Dept. of Chemistry University of Pune</p>	<p>Photograph:</p>
<p>Academic Background: Ph.D. (University of Pune, Pune, 1991) M.Sc. (University of Pune, Pune, 1983) B.Sc. (University of Pune, Pune, 1981)</p>	<p>Professional Experience: 1. Worked as an analytical chemist in Garware Nylons Ltd., Pimpri, Pune (two years). 2. Lecturer in Ahmednagar college (one year) 3. Head & Reader, Dept. of Biotechnology, North Maharashtra University, Jalgaon (17 years).</p>
<p>Research Interests:</p> <ul style="list-style-type: none"> • Environmental Biotechnology • Abiotic stress • Medicinal Biochemistry • Bioremediation 	
<p>Awards and Fellowships:</p> <ul style="list-style-type: none"> • State Government open merit scholarship in 1977-78. • National Merit Scheme Certificate 1978. • Qualified in the NET Examination conducted by UGC in 1984 for JRF. • Junior Research Fellowship (UGC) 09/08/85 to 08/08/87 • Senior Research Fellowship (UGC) 09/08/87 to 18/07/90 	
<p>Research Schemes, collaborative ventures and consultancy)</p> <p>Completed</p> <ul style="list-style-type: none"> • A strategy for reclamation of saline land of Sangali and Vasai region of Maharashtra” Co-investigator funded by AICTE (Rs.5.75 lakhs). • Microbial degradation of xenobiotics & aromatic pollutants resulting into clean up of contaminated environmental sites” funded by U.G.C. (Rs.0.15 lakhs) • Screening of indigenous microflora for exploitation as biofertilizers for cotton (<i>Gossypium herbaceum</i>) funded by UGC (Rs. 0.14 lakhs) • Development of biotechnological process for decolourisation of distillery spent wash, (Major research project) UGC, New Delhi. (9.40 lakhs, 2007). <p>Ongoing</p> <ul style="list-style-type: none"> • Development of indigenous Mycorrhizal inoculant, for improving the productivity of sugar cane under salt stress conditions”. (Major research project) DBT, New Delhi. (22.62 lakhs, April 2009). • Indigenous drought tolerance mycorrhizal inoculant for improving agricultural productivity” (Major research project) (UGC, New Delhi, 9.46 lakh, from 01/02/2010) 	

Research Publications (last 10 years)

Paper Published:

1. Antifungal potential of some culturable cyanobacterial species isolated from terrestrial environments. Patil LS, Kulkarni MV, Puranik PR. *Asian journal of chemical and environmental research* Vol 3(2), 27-30, 2010.
2. Formulation and in vitro evaluation of dextrin matrix tablets of albendazole for colon specific drug delivery. Kulkarni MV., Salunkhe K.S., Shendage R.S. *Journal of Pharmacy Research*. Vol. 2(3), 429-431 2009.
3. Development in microbial technology for the treatment of distillery waste water. Chavan MN, Kulkarni MV, Disawal D. *Biotechnology: emerging Trends*. Ed. R.Z. Sayyad and A.S Patil. Scientific Publisher, Jodhpur. pp- 295-313. 2009.
4. Assessment of anti-bacterial properties of indigenously isolated culturable *cynobacteria*. Patil L.S., Kulkarni MV, and Puranik P.R. *Journal of Pharmacy Research*. Vol. 3 (2), 1116-1118, 2009.
5. Evaluation of toxicity of decolorized reactive textile dyes towards various agriculturally important microbial strains. Zope V. P. and Kulkarni M. V. *Adv. Pharmacol. Toxicol.* 10(3), 2009, 85-88.
6. Comparative study of antioxidant activity of fruits of *Lycopersicon esculentum* cultivars. Promita Datta, Mohan Kulkarni. *Biosciences, Biotechnology Research Asia.*, Vol 2. 2009, 753-758.
7. Technique for rapid micro-propagation of *Alternanthera bettzichiana* (Regels) Nichol. Hundiwale JC and Kulkarni MV. *Biosci Biotech Res Asia*, Vol. 5(1); 407-410 (2008).
8. Evaluation of *Alternanthera bettzichiana* (Regel) Nicols for antimicrobial activity. Hundiwale JC, Kulkarni MV, Hivrle AU, Patil DA, Mali RG. *Pharmacologyonline*, vol 2, 631-636, 2009.
9. Anthelmintic effects of extracts of some indigenously isolated culturable cyanobacterial species. Patil LS, Kulkarni MV, Puranik PR, *Pharmacologyonline*, vol 2, 879-886, 2009.
10. A sustainable agro-biotechnology for bioremediation of saline soil. Patil D. P., Kulkarni

- M. V., Maheshwari V. L. and Kothari R. M. (2002). *J. Sci. Ind. Res.* , 61, 517- 528.
11. Antibacterial activity in vitro of Plumbagin isolated from *Plumbago zeylanica*. Zambare V. P., Kothari P. S. and Kulkarni M. V. (2004), In '*Biotechnological Approaches for sustainable development* (ed. M. Sudhakar Reddy and Sunil Khanna.), Allied publishers Pvt. limited, 2004, 196-200.
 12. Effect of *Achyranthes aspera* extract on phagocytosis by human neutrophils. Mali R. G. Hundiwale J. C. Gavit R. G. patil K. S. Kulkarni M. V. (2006), *J of Natural Remedies*, Vol. 6/2 pp 115-119.
 13. "Microbial degradation of melanoidins in distillery spentwash by an indigenous isolate. Chavan M.N. and Kulkarni M.V. (2005). ". *Indian journal of biotechnology Vol 5 (suppl)*, July 2006, pp 416-421.
 14. Enhancement of antibiotic activity and antibiotic resistance reversal by Plumbagin from *Plumbago zeylanica* Pande A., Agrawal S., Chavan M.N.& Kulkarni M.V. (2006) *Indian Journal of natural products* 22(3), 3-7.
 15. Biodegradation of synthetic textile dyes reactive red 195 and reactive green 11 by *Aspergillus niger* - an alternative approach. Varsha Zope, Mohan Kulkarni, Maya Chavan, (2007). *Journal of Scientific and Industrial Research*, Vol 66, May 2007, pp 411-414.
 16. Plasmid curing activity of plumbagin and its application in bacterial antibiotic resistance. Zambare V. P., Kothari P. S. and Kulkarni M. V. (2007) *Journal of Pure and Applied Microbiology*, Vol. 1(2) Oct. 2007, pp 285-288.
 17. Formulation and in vitro evaluation of dextrin matrix tablet of paracetamol for colon specific drug delivery. Salunkhe K.S. and Kulkarni M. V. *Journal of Pharmaceutical Research* (Oct 2007) Vol. 6(4), 248-250.
 18. Technique for rapid propagation of *Alterantheria bettzichiana* (Regel) Nicols. Hundiwale J.C., Kulkarni M.V., Vadnere G.P., Muli R.G. and Patil S.R. *Biosciences Biotechnology Research asia* Vol. 5(11), 407-410 (2008).
 19. Formulation and in vitro evaluation of dextrin matrix tablet of ibuprofen for colon specific drug delivery, Kulkarni M.V., Salunkhe K.S. *Pak. J. Pharm, Sci.* Vol 21(1), Jan. (2008), 17-20.
 20. Developments in Microbial Biotechnology for the Treatment of Distillery waste water. M.

N. Chavan, D. S. Disawal and Dr. M. V. Kulkarni, Review accepted for publication in book “*Emerging Trends In Biotechnology*” by publisher I.K. International Publisher New Delhi and Scientific publisher, Jodhpur, India (2009). 295-313.

21. Biodegradation of para chloro meta cresol from pesticide intermediate synthesis industry. Korde, P. E., Nikam, S. B., Patil, D. P. and Kulkarni, M. V. (2000). *J. Environment and Pollution*, **7** (1), 13-16.
22. Biodecolourisation of members of triphenylmethane and azo groups of dyes. Mali, P. L., Mahajan, M. M., Patil, D. P. and Kulkarni, M. V. (2000). *J. Scientific and Industrial Research*, **59**, 221-224.
23. Pesticidal potency of some common plant extracts. Kumbhar, P. P., Salunkhe, D. H., Borse, M. B., Hiwale, M. S., Nikam, L. B., Bendre, R.S., Kulkarni, M. V. and Dewang, P. M. (2000) *Pestology*, XXIV (6) 51-53.
24. Biotechnological treatment of textile industry effluent containing dyes – An alternative approach. Patil, D. P. and Kulkarni, M. V. (2000). *Chemical Weekly*, XLVI (12), 171-172.
25. Biotechnological treatment of textile industry effluent containing dyes – An alternative approach. Patil D. P. and Kulkarni M. V. (2000). Reproduction in *CSIR-PTC Quarterly*, 3(4), Oct. 2000, 20-22.
26. Biotechnological treatment of textile industry effluent containing dyes – An alternative approach. Patil D. P. and Kulkarni M. V. (2001). Reproduction in *CSIR-PTC Quarterly*, 4(1), Jan. 2001, 16-18.
27. Technology for improving fertility and productivity of saline soil. Patil D. P., Kulkarni M. V., Maheshwari V. L. and Kothari R. M. (2001). *Chemical Weekly*, XLV (44), 151-152.
28. Improved yield of bengal gram (*Cicer arietinum*) in saline soil ameliorated with soil conditioner, halophiles and plant growth regulator. Patil D. P., Kulkarni M. V., Maheshwari V. L. and Kothari R. M. (2001). *J. Plant Biol.*, 28, 207-211.
29. Recycled agrowaste and modified industrial byproduct with halophiles for improved yield of wheat (*Triticum aestivum* L.) in saline soil. Patil D. P., Kulkarni M. V., Maheshwari V. L. and Kothari R. M. (2002). *J. Physiol. Mol. Biol. Plants*, 8(1), 117-124.
30. Recycling of after-extraction-residues and fly ash through composting for amelioration of alkaline soil. Kumbhar P. P., Patil Y. M., Chavan C. D. and Kulkarni M. V. (2002). *J. Scientific and Industrial Research*, **61**, 286-288.
31. A sustainable agro-biotechnology for bioremediation of saline soil. Patil D. P., Kulkarni M. V., Maheshwari V. L. and Kothari R. M. (2002). *J. Sci. Ind. Res.*, **61**, 517- 528.

In Press/ Accepted:

1. Impact of synthetic dyes in effluent on life. Kulkarni MV and Zope V.S., (Review accepted for publication in *Environmental security : Human and animal health*). Ed. Dr. S.R.Garg. CCS Haryana Agriculture University, Hissar. Published by IBDC publishers, Lucknow.
2. Studies on microbial degradation of synthetic dyes present in textile effluent. Zope V.S. Kulkarni MV. (Accepted, *Journal of Environmental Science and Engineering*)
3. Antifungal potential of some culturable cyanobacterial species isolated from terrestrial environments. Patil LS, Kulkarni MV Puranik PR. *Asian journal of Chemistry and Environmental Research* (accepted).
4. Microbial decolorisation of distillery spent wash by *Aspergillus oryzae* MTCC 7691. M. N. Chavan and M. V. Kulkarni. *Journal of Chemo and Biosphere*.
5. Antioxidant activity of methanolic extract of *Solanum melongena* fruit varieties. Promita Datta and Mohan Kulkarni. *Indian Journal of Agricultural Biochemistry* (Accepted).

Patent:

A. Patent has been granted No. 229515 (758/MUM/2006). Method for decolorization of distillery spent wash by using dead fungal biomass.