

## *Resume*

### ***Personal:***

**Name** : Neelima Kulkarni  
**Present position** : Assistant Professor in Microbiology , Department of Microbiology,  
Modern College of Arts, Science and Commerce, Ganeshkhind  
Pune -411053

***Educational Qualifications:*** M. Sc. (Microbiology), Ph. D. (Microbiology)

***Research experience:*** Eleven years

***Teaching experience:*** 16 years PG and 14 years UG

### ***Fellowships and awards:***

- Awarded Junior research Fellowship on the basis of National Entrance Test conducted by Council of Scientific and Industrial Research (CSIR), Government of India 1994-1996
- Awarded Senior research Fellowship on the basis of National Entrance Test conducted by Council of Scientific and Industrial Research (CSIR), Government of India 1996-1999.
- Graduate aptitude test in Engineering 1993, score 92.25 percentile

### ***Memberships:***

- Life member of Association of Microbiologists India.
- Life member of Indian Women Scientists association.
- Life member of Society of Biological chemists.

### ***Workshops and conferences attended:***

- Participated in workshop on “ Molecular Biology and Genetic Engineering of Industrial fungi” held at Osmania University, Hyderabad, between 25<sup>th</sup> July- 13<sup>th</sup> August, 1994.
- Participated in workshop on “ Genetic Engineering” conducted by Department of Microbiology, Modern College of Arts, Science and Commerce, Ganeshkhind Pune -411053, on 12<sup>th</sup> and 13<sup>th</sup> March, 2005.
- Participated in seminar on “ Statistical ecology” conducted by, Modern College, Shivajinagar, Pune -411005, 10<sup>th</sup> and 11<sup>th</sup> December, 2005.
- Participated in workshop on “Microbial Taxonomy” organized by MACS- Agharkar Research Institute, Pune, during December 21-22, 2006.
- Worked as **Organizing Committee member** for symposium on “ Recent Trends in Life Sciences” conducted by Department of Microbiology, Modern College of Arts, Science and Commerce, Ganeshkhind Pune -411053, on 8<sup>th</sup> and 9<sup>th</sup> January, 2007.

- Participated in workshop on “Recent Trends in Biotechnology” conducted by Department of Biotechnology, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune - 411053, on 17<sup>th</sup> and 18<sup>th</sup> January, 2007.
- Participated in the Faculty Development programme on “How to effectively guide P. G. students in their research Project” organized by Marathwada Mitra Mandal’s College of Commerce on 28<sup>th</sup> February 2007.
- Participated in scientific deliberations at International conference on the “Biology of Yeasts and filamentous Fungi”. During 15<sup>th</sup> to 17<sup>th</sup> February 2007.
- Participated in the workshop on “Revised syllabus of Microbiology M. Sc. Part I” organized by Department of Microbiology KTHM college Nashik on 12<sup>th</sup> and 13<sup>th</sup> August 2008.
- Worked as **Organizing Committee member** for 50<sup>th</sup> Annual conference of Association of Microbiologists India Between December 15-18 2009.
- Worked as **Subject expert** for State level conference on Microbiology in 21<sup>st</sup> Century organized by Modern college of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 25<sup>th</sup> -26<sup>th</sup> February 2011.
- Worked as member of organizing committee for Workshop titled “Physicochemical and Microbiological analysis of soil’ organized by Department of Microbiology under DBT STAR college scheme on 25<sup>th</sup> and 26<sup>th</sup> June 2016
- Worked as resource person For two day workshop/ training program ‘Research Induction Program’ under DST- FIST program organized by Modern college, Ganeshkhind, on 6<sup>th</sup> and 7<sup>th</sup> September, 2016.
- Worked as member of organizing committee and participated in the third meeting of ‘Bergey’s International society for microbial Systematics on Microbial systematics and Metagenomics’ held from September 12 to 15<sup>th</sup> September, 2016.
- Worked as member of organizing committee and participated in for two day international symposium on “Microbial Ecology and Systematics’ jointly organized by AMI, Pune unit, MCC NCCS and NCL, on 16<sup>th</sup> and 17<sup>th</sup> September 2016.
- Participated in State level conference on ‘Occupational lifestyle disorders- An Emerging Issue.’ Organized by H. V. Desai College, on 28<sup>th</sup> February 2017.
- Worked as resource person for skill development course ‘Quality control in Laboratories and industries’ organized by Department of Microbiology, Modern College Ganeshkhind, from 19<sup>th</sup> June to 4<sup>th</sup> July 2017.
- Science academies’ lecture workshop on ‘Understanding and Exploring the Interfaces between biology and biotechnology’ organized by department of Biotechnology, Modern College, Ganeshkhind, November 1-3, 2017.
- Oral presentation at National Conference on “Chemical Sciences: An interdisciplinary Approach”; organised by Department of Chemistry, Modern College of Arts, Science and Commerce, Ganeshkhind, 18<sup>th</sup>- to 20<sup>th</sup> January 2018.
- Poster Presented at International Conference on “Recent trends in Life Sciences” organized by Department of Zoology, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune on 2<sup>nd</sup> and 3<sup>rd</sup> February 2018.
- Worked as resource person for skill development course ‘Quality control in Laboratories and industries’ organized by Department of Microbiology, Modern College Ganeshkhind, from 19<sup>th</sup> June to 4<sup>th</sup> July 2017.

- Worked as member of organizing committee for workshop on Soft skill development: 'Life skills, Goal setting and Stress Management' University level workshop Funded by Board of Students' Development, SPPU on 12<sup>th</sup> February 2018.
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**Area of research:** Microbial enzymes, Microbial taxonomy, Biodiversity, Biofuels

***Master's degree project:***

Title: Screening of actinomycetes with protoplasting abilities using *Trichoderma* system.

***Ph. D. Thesis title:*** "Studies on lipase enzyme from *Pseudomonas fluorescens* NS2W". Please see thesis abstract at the end of the resume.

***Thesis highlights:***

1. Isolation, identification and characterization of alkaline lipase producing strain of *Pseudomonas fluorescens*
2. Optimization of Lipase production in shake flask by using factorial design approach from *Pseudomonas fluorescens* NS2W.
3. Purification and characterization of lipase enzyme from *Pseudomonas fluorescens* NS2W.
4. Production of lipase from *Pseudomonas fluorescens* NS2W in fermenter in batch mode of operation.
5. Optimization of separation and concentration of lipase from fermentation broth using foam separation as technique.
6. Development of an assay method for lipase enzyme using gas chromatography.

**M. Sc. Projects guided:**

15 independent and 5 collaborative M. Sc. projects guided on topics such as

- Production of microbial enzymes including alkaline protease, amylase, cellulase and Nucleases
- Studies on Microbial diversity of gut flora of honeybees.
- Production of Bioethanol by yeasts using agricultural waste.
- Production of Polyalcohols using yeasts.
- Isolation of PGPR from rice rhizosphere.

**Projects completed: 1**

**Title of project:** Production of ethanol and polyalcohols by yeasts, using cellulosic and non-cellulosic agricultural and forest waste.

**Funding agency:** BCUD

Duration: January 2008 to December 2010.

***Publications:***

**Neelima Kulkarni,**Tejashree Vaidya, Gunjan Rathi (2018) Optimization of cellulase production by *Aspergillus* species under solid state fermentation. The Pharma Innovation 7(1) 193-196.

**Neelima Kulkarni**, Yogita Patil, Gayatri Sahasrabuddhe (2016) Screening of actinomycetes for production of anticancer enzyme L-Asparaginase, In: International E-publication, pp-76, ISBN-978-93-84659-28-8.

**Neelima Kulkarni** and Sneha Ogale (2015) ICT in higher education:A case study. *Dnyanamay*, 1(1):50-54. ISSN No. 2395-6898.

**Kulkarni N.** and Gadre R. V. (2002) Production and properties of an alkaline thermophilic lipase from *Pseudomonas fluorescens* NS2W. *J. Ind. Microbiol. Biotechnol.*, **28:344-348**.

**Kulkarni N.** and Gadre R. V. (1999) A novel alkaline thermostable, protease free lipase from *Pseudomonas* sp. *Biotechnol. Lett.*, 21:897-899.

**Kulkarni N.** and Gadre R. V. (1998) Simple gas chromatography method for lipase assay. *Biotechnol. Tech.*, 12: 627-628.

#### **Poster presentation:**

1. Kulkarni Girish, Raut Ambadas, Wakhale D. M. and **Kulkarni Neelima** (2005) Isolation and characterization of yeasts from honey and their application for ethanol production. At International conference on Bioscience, Biotechnology and Biodiversity analysis 8<sup>th</sup>-10<sup>th</sup> August 2005 organized by Modern College of Arts, Science and Commerce, Shivajinagar, Pune -411005.
2. **Neelima Kulkarni** and R. V. Gadre (2008) Synthesis of ricinolic acid using immobilized lipase from *Pseudomonas fluorescens* NS2W. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.
3. Ganesh Kale, Vishal Kadam, Girish Kulkarni, D, M. Wakhale, Yogesh Shouche and **Neelima Kulkarni** (2008) Identification and characterization of yeas flora present in honey based on sequence analysis of ITS region. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.
4. Husen Bhorl, Vikas Mallav, Abhay Soman and **Neelima Kulkarni** (2008) Studies on bacterial diversity of gut flora of *Apis cerena*. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.
5. Deshpande Vrushali, **Neelima Kulkarni** and Gadre R. V. (2008) Production of B-galactosidase by a low sporulating mutant of *Asperillus oryzae* in solid substrate fermentation. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.
6. Pragati Karnik, Sayali Sabale **Neelima Kulkarni** (2008) Screening and Production of cellular Deoxyribonuclease from actinomycetes. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.

7. Menon V., Ghogare P, **Kulkarni N** and Dakephalkar P(2008) Production of alkaline protease from *Bacillus sphaericus*. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.
8. **Neelima Kulkarni and** Nandita Shenoy (2008) Isolation and screening of osmotolerant and osmophilic yeasts for ethanol production. At 'Innovation -2008' held at VPASC and VSBT Baramati on 12<sup>th</sup> and 13<sup>th</sup> November 2008.
9. **Neelima Kulkarni**, Nandita Shenoy, Mayur Patil and Sachin Nagane (2009) Screening of yeasts for Erythritol and Xylitol production. At 50<sup>th</sup> Annual conference of Association of Microbiologists India Between December 15-18 2009.
10. **Neelima Kulkarni**, Shreyas Kumbhare, Pandurang Lahare, Hussain Khokhawala (2011) Optimization of growth parameters for ethanol production by yeasts at State level conference on Microbiology in 21<sup>st</sup> Century organized by Modern college of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 25<sup>th</sup> -26<sup>th</sup> February 2011.
11. Sneha Ogale and **Neelima Kulkarni (2015)** ICT in higher education. At International Conference On Application Of Advanced Technology For Enhancing Quality Of Science Education, conducted by Modern College Shivajinagar,

***Paper presentation:***

**Neelima Kulkarni** and Gadre R. V. (2008) Optimization of physicochemical parameters for downstream processing of alkaline lipase from *Pseudomonas fluorescens* NS2W. At National symposium on Emergence of Modern Techniques and Development in Biobusiness, organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -411053.

**Neelima Kulkarni and** Nandita Shenoy (2009) Production of ethanol and polyalcohols by yeasts using cellulosic and noncellulosic agricultural and forest waste. At 'Innovation -2009' held at VPASC and VSBT Baramati in November 2008