Resume

***Personal*:**

Name : Neelima Kulkarni
Present position : Head Department of Microbiology
Assistant Professor in Microbiology ,
Modern College of Arts, Science and Commerce, Ganeshkhind
Pune -411016
e-mail- kulkarni.neelima@moderncollegegk.org

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

Research experience: Eleven years

Teaching experience: 20 years PG and 18 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
- Best poster award for poster titled 'ICT in higher education'. at International Conference On Application Of Advanced Technology For Enhancing Quality Of Science Education, conducted by Modern College Shivajinagar, on 26th and 27th February 2015.
- Best poster award in International conference 'Innovative trends in Chemical, Physical and Biosciences' organized by Annasaheb Magar college Pune, on 9th and 10th February 2016.
- Best poster award in two days national conference on Phage a boon in disguise 2020, conducted by Abeda Inamdar senior college of Arts Science and Commerce, Pune

Memberships:

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

Area of research: Microbial enzymes, Microbial taxonomy, Biodiversity, Biofuels

Master's degree project:

TitlWe: 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 falsk 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. Optimizaition 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:

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

- Production of microbial enzymes including alkaline protease, amylase, cellulase Nucleases, L-Asparaginase.
- 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.
- Biosurfactant production.

Projects completed: 2

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.
2. Isolation, Screening, Characterization, of PGPR (Plant Growth Promoting Rhizobacteria) from Rice rhizosphere soil. In collaboration with Agharkar Research Institure, 2015-17

Contribution as Resource person/subject expert:

- Contributed as **Resource person** in skill development course in microbiology titled 'Quality control in laboratories and Industries' organized by Department of MIcrobiologyModern college of Arts, Science and Commerce, Ganeshkhind, between 19th June to 4th July, 2017.

- Contributed as **Resource person** for two-day workshop/ training program for life science post graduate students titled 'Research induction program' organized under DST-FIST program of Department of Science and technology, Government of India,

organized by Modern college of Arts, Science and Commerce, Ganeshkhind on 6th and 7th September 2016.

- Worked as **Subject expert** for State level conference on Microbiology in 21st Century organized by Modern college of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 25th -26th February 2011.

Workshops and conferences Organized:

- Worked as member of **organizing committee** for two-day national seminar on 'Breaking the barriers in Sciences- Feb 2019' Organized by department of Microbiology, Modern College Ganeshkhind, on 1st and 2nd February 2019.
- Worked as member of **organizing committee** for DBT –STAR workshop on 'Research methodology and Scientific Communication' Organized by department of Microbiology, Modern College Ganeshkhind, on 5th January 2019.
- Worked as member of **organizing committee** for seminar on 'National Biodiversity Act and Its Implications in Biodiversity Research' jointly organized by Association of Microbiologists India, Pune unit and department of Microbiology, Modern College Ganeshkhind, on 5th October 2018.
- Worked as **Organizing committee member** for the two-day international symposium on Microbial Ecology and Systematics held from September 16 to 17, 2016 at CSIR-National Chemical Laboratory Pune, India.
- Worked as **Organizing committee member** for third meeting of Bergey's International Society for Microbial Systematics on Microbial Systematics and Metagenomics held on 12th to 15th September 2016 at MCC-NCCS, Pune India.
- Worked as member of organizing committee for three day DBT STAR hands on training workshop on 'Biochemical Techniques and Instrumentation'. Organized by department of Microbiology, Modern College Ganeshkhind beween 1st to 4th July, 2016.
- Worked as **organizing committee member** for two-day DBT –STAR hands on training workshop on 'Physicochemical and Microbiological analysis of soil' organized by Department of microbiology, Modern College Ganeshkhind on 24th and 25th June 2016.
- Worked as **organizing committee member** for two-day DBT –STAR hands on training workshop on 'Biosafety Principles and ELISA technique' organized by Department of microbiology, Modern College Ganeshkhind on 11th and 12th December, 2015.
- Worked as **Organizing Committee member** for 50th Annual conference of Association of Microbiologists India Between December 15-18 2009.
- 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 8th and9th January, 2007.

Publications:

1. Vaishali Prabhune, **Neelima J. Kulkarni**, Pragati S. Abhyankar, Rajashree B. Patwardhan (2022) Food Microbiology Paper 6 (MB-366) (Third Year TY BSc Semester 6) textbook, Nirali Prakashan,**ISBN 9789354516832**

2. Vaishali Prabhune, **Neelima J. Kulkarni**, Pragati S. Abhyankar, Rajashree B. Patwardhan (2021) Agricultural Microbiology Paper 6 (MB-356) (Third Year TY BSc Semester 5) textbook, Nirali Prakashan**, ISBN 9789354511660**

3. **Neelima Kulkarni,** Tejashree Vaidya, Gunjan Rathi (2018) Optimization of cellulose production by *Aspergillus* species under solid state fermentation. ***The Pharma Innovation*** 7(1) 193-196. ISSN (E): 2277- 7695, ISSN (P): 2349- 8242
4. **Neelima Kulkarni,** Yogita Patil, Gayatri Sahasrabuddhe (2016) Screening of actinomycetes for production of anticancer enzyme L-Asparginase**,** In: International E-publication, pp-76, ISBN-978-93-84659-28-8.
5. **Neelima Kulkarni** and Sneha Ogale (2015) ICT in higher education:A case study. *Dnyanamay*, 1(1):50-54. ISSN No. 2395-6898.
6. **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.**
7. **Kulkarni N.** and Gadre R. V. (1999) A novel alkaline thermostable, protease free lipase from *Pseudomonas* sp. ***Biotechnol. Lett.***, 21:897-899.
8. **Kulkarni N.** and Gadre R. V. (1998) Simple gas chromatography method for lipase assay. ***Biotechnol. Tech.***, 12: 627-628.

Poster presentation:

1. **Neelima Kulkarni**, Shamli Kulkarni, Mayri Patil, Sayali Zurange and Shweta Waghole (2020) Screening and optimization of Bioemulsifier Production by *Streptomyces* species. At 2 days national conference NCPBID-2020.
2. **Kulkarni Neelima**, Patil Yogita and Sahasrabuddhe Gayatri (2016) Screening of actinomycetes for production of anticancer enzyme L-asparaginase. At International conference on 'Innovative Trends in Chemical, Physical and Biosciences' Held at annasaheb Magar Mahavidyalaya,Pune on 9th and 10th February 2016.
3. 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.
4. **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 21st Century organized by Modern college of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 25th -26th February 2011.

5. **Neelima Kulkarni,** Nandita Shenoy, Mayur Patil and Sachin Nagane (2009) Screening of yeasts for Erythritol and Xylitol production. At 50th Annual conference of Association of Microbiologists India Between December 15-18 2009.
6. **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.
7. 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.
8. Husen Bhori, 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 Commerece, Ganeshkhind, Pune -411053.

9. 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 Commerece, Ganeshkhind, Pune -411053.

10. 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.

11. Menon V., Ghogare P, **Kulkarni N.** and Dakephalkar P(2008) Production of alkaline protease fro *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.

12. **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 12th and 13th November 2008.

13. 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 8th-10th August 2005 organized by Modern College of Arts, Science and Commerce, Shivajinagar, Pune -411005.

Paper presentation:

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

Neelima Kulkarni and Gadre R. V. (2008) Optimization of physicochemical paramenters for downstream processing of alkaline lipase from 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.