

Teacher's Profile

Dr. Sushama A. Patil

Assistant Professor
Department of Biotechnology,
Shivaji University, Vidyanagar,
Kolhapur- 416 004
Maharashtra, India
[Email:sushamapatil87@gmail.com](mailto:sushamapatil87@gmail.com)



1. PERSONAL DETAILS:

Name : Dr. Sushama A. Patil
Date of Birth : June, 09, 1987
Sex : Female
Marital Status : Married
Languages known : English, Marathi, Hindi
Postal Address : Department of Biotechnology,
Shivaji University, Vidyanagar,
Kolhapur 416004.
E. mail : sushamapatil87@gmail.com
Mob. No. : 9049808404

2. EDUCATIONAL QUALIFICATION:

Certificate Degree	Subjects	Name of Institution	Year	Class
N-PDF	Biotechnology	Shivaji University Kolhapur	2016-2018	--
Ph. D	Biotechnology	Shivaji University Kolhapur Maharashtra, India	2014	Thesis
GATE	Biotechnology	IIT Guwahati	2010	--
M. Sc.	Biotechnology	Shivaji University, Kolhapur, Maharashtra, India	2010	First
B. Sc	Chemistry	Rajaram Kolhapur, Maharashtra, India	2007	First

3. TITLE OF Ph. D. THESIS:

“Biotechnological approach for the production of L-DOPA and Melanin”

MEMBERSHIPS

- BOS member of Department of Biotechnology at SUK, Kolhapur.

WORK EXPERIENCE AND TRAINING

- ✓ Sr. Supervisor for M.Sc. Examinations, Department of Biotechnology, SUK
- ✓ Temporary Assistant Professor (July, 2018- May, 2019) Department of Biotechnology, SUK
- ✓ Temporary Assistant Professor (July, 2015- April, 2016) Department of Biotechnology, SUK
- ✓ Temporary Assistant Professor (Feb, 2015-May, 2015) Department of Biotechnology, SUK
- ✓ Temporary Assistant Professor (Aug, 2014-Feb, 2015) School of Nanoscience and Technology, SUK
- ✓ Temporary Assistant Professor (2010-2011) Department of Biotechnology, SUK

Training

- ✓ Completed a part of thesis work in National Toxicological Center (NTC), Pune, India
- ✓ Worked on Biacore X100 and T200 at GE healthcare research lab (GE Healthcare Life Sciences, John F Welch Technology Centre, Bangalore, India)
- ✓ Completed workshop on Basic Biacore Introduction and kinetics courses including small molecules assay development, JFWTC, Bangalore, June, 23-25, 2015

Current research work:

1. Enzyme kinetics: Enzyme inhibition studies, CD spectroscopy and fluorescence studies.
2. Surface Plasmon Resonance: Affinity/Binding studies, association and dissociation kinetics of various molecules towards targeted protein.
3. Sample analysis on LCMS/MS Q-TOF

AREAS OF EXPERTISE

- ✓ Biotransformation
- ✓ Enzyme kinetics
- ✓ Label free interactions
- ✓ Protein chemistry

ACHIEVEMENTS

- **National Post-Doctoral Fellowship from SERB, 2016-2018**
- 2010 GATE Qualified in Biotechnology, GATE Score: 0337
- Research fellowship, DST-PURSE, 2011-12
- Junior Research Fellowship, UGC, New Delhi, 2012-2014.

Financial Grant:

Received financial grant from International Travel Support (ITS), SERB to attend the international conference in Paris, France 2017. Reference no. (ITS/1006/2017-2018)

ACCEPTED MANUSCRIPTS

1. Patil DN, Yadav SR, **Patil SA**, Bapat VA, Jadhav JP (2020) Multidimensional studies of *Pancreaticum parvum* Dalzell against acetylcholinesterase a potential enzyme for Alzheimer's management. **Journal of the American College of Nutrition**, Accepted manuscript.
2. J J Tabassum Mulla, **Sushama Patil**, Srinivas Sistla (2019) The Binding Affinity of Small Molecules with Yam Tyrosinase (Catechol Oxidase): A Biophysical Study. **Biochemistry Research International**, Article ID 8284968, 9 pages.
3. DN Patil, **SA Patil**, S Sistla, JP Jadhav(2019) Comparative biophysical characterization: A screening tool for acetylcholinesterase inhibitors. **PLOS one** 31;14(5):e0215291(IF: 2.7).
4. **SushamaPatil**, SistlaSrinivas,JyotiJadhav, VishwasBapat, (2018) Structure-Function studies of Fungal Tyrosinase using Surface Plasmon Resonance. **Proceedings of National Academy of Sciences: Biological Sciences**. DOI: 10.1007/s40011-018-1047-0Accepted article(IF: 0.4).
5. Rashmi D, Sharmila T, **Patil S**, Apine O, Sistla S, Jadhav J (2018) Isolation detection and characterization of syringolin a produced from the probiotic strain bacillus cereus isolated from donkey milk. **Journal of Analytical Chromatography and Spectroscopy**. DOI: 10.24294/jacs.v1i2.626 Accepted article
6. PrajkaKamble, M Kore, **SushamaPatil**,JyotiJadhav, Yamin Attar (2018) Statistical optimization of process parameters for inulinase production from Tithonia weed by *Arthrobactermysorens strain no. 1* .**Journal of microbiological methods**. 7012(18)30209-4(IF:1.8).
7. **SushamaPatil**, SistlaSrinivas,VishwasBapat,JyotiJadhav(2018) Bacterial melanin mediated functional nanoparticles and its affinity towards tyrosinase. **Applied Biochemistry and Microbiology**54 (2), 163-172(IF:0.7).
8. TabassumMulla, **SushamaPatil**,JyotiJadhav (2017) Exploration of surface plasmon resonance for yam tyrosinase characterization. **International Journal of Biological Macromolecules**. 109, 399-406(IF:4.7).
9. **SushamaPatil**, SistlaSrinivas, JyotiJadhav (2016) Interaction of small molecules with human tyrosinase: A SurfacePlasmon Resonance and molecular docking study. **International Journal of Biological Macromolecules**. 92, 1123-1129 (IF: 4.7).
10. **SushamaPatil**, SistlaSrinivas, JyotiJadhav (2014) Screening of inhibitors for mushroom tyrosinase using Surface Plasmon Resonance. **Agricultural and food chemistry**. 62 (47), 1594–1601(IF:3.5).
11. **SushamaPatil**, SistlaSrinivas, JyotiJadhav (2014) Evaluation of crocin and curcumin affinity on mushroom tyrosinase using surface plasmon resonance. **International Journal of Biological Macromolecules**. 65, 163–166 (IF: 4.7).
12. **SushamaPatil**, OnkarApine, ShripadSurwase, JyotiJadhav (2013) Biological sources of L-DOPA: An alternative approach. **Advances in Parkinson's disease** 2(3), 81-87.
13. **SushamaPatil**, ShripadSurwase, ShekharJadhav, JyotiJadhav (2013) Optimization of medium using response surface methodology for L-DOPA production by *Pseudomonas* sp. SSA. **Biochemical Engineering**. 74, 36-45 (IF: 3.3).
14. Swati Surwase, **SushamaPatil**, SrinivasSistla, JyotiJadhav (2015) Interaction of small molecules with fungal laccase: A Surface Plasmon Resonance based study. **Enzyme and Microbial technology**. 28, 110-114 (IF: 3.5).
15. BhumikaBhalkar, PriyankaBedekar, SwapnilPatil, **SushamaPatil**, Sanjay Govindwar (2015) Production of camptothecine using whey by an endophytic fungus: standardization using response surface methodology. **RSC Advances**, 62828-62835(IF: 3.0).
16. SiddheshwarKshirsagar, PankajWaghmare, PrakashLoni, **SushamaPatil**, SanjayGovindwar (2015) Dilute acid pretreatment of rice straw, structural characterization and optimization of enzymatic hydrolysis conditions by response surface methodology.**RSC Advances** 5 (58), 46525-46533(IF: 3.0).
17. Swati Gurme, ShripadSurwase, **SushamaPatil**, ShekharJadhav, JyotiJadhav (2013) Optimization of Biotransformation of L-tyrosine to L-DOPA by *Yarrowialipolytica*-NCIM 3472 using Response Surface Methodology. **Indian Journal of Microbiology**. 53(2), 194-198 (IF: 1.5).
18. ShripadSurwase, **SushamaPatil**, ShekharJadhav, JyotiJadhav (2012) Optimization of L-DOPA production by *Brevundimonassp*. SGJ using response surface methodology. **Microbial Biotechnology**. 5(6), 731-737 (IF: 4.8).

19. ShripadSurwase, **SushamaPatil**, OnkarApine, JyotiJadhav (2012) Efficient Microbial Conversion of L-Tyrosine to L-DOPA by *Brevundimonas* sp. SGJ. **Applied Biochemistry and Biotechnology**. 167(5), 1015-1028 (IF: 2.1)
20. Swati Gurme, ShripadSurwase, **SushamaPatil**, JyotiJadhav (2014) Evaluation of Various Factors Affecting Bioconversion of L-Tyrosine to L-DOPA by Yeast *Yarrowialipolytica*-NCIM 3450 Using Response Surface Methodology, **Nat. Prod. Bioprospect**. DOI 10.1007/s13659-014-0017-3.

POSTER PRESENTATION AND WORKSHOP ATTENDED

- Presented a poster in “Biotech France 2017-International Conference and Exhibition”, held in the "PôleUniversitaire Léonard de Vinci"France, Paris, 28-30 June, 2017
- Participated in workshop held at IIT, Mumbai, on Gel-based proteomics, December, 9-10, 2014
- Presented a poster in International conference on proteomics society of India (PSI), IIT, Mumbai, December, 7-9, 2014
- Presented a poster in International conference on emerging trends in biotechnology (ICETB), JNU, Delhi, November, 6-9, 2014
- Participate in workshop under DBT-IPLS program on Use of DNA Barcoding techniques for species identification organized by Department of Biotechnology, SUK, August, 16-18, 2013
- Presented a poster in International conference on industrial biotechnology (ICIB), Patiala, November, 21-23, 2012.
- Presented a poster in the new horizons in Biotechnology (NHBT) International conference held at Trivandrum, Kerala, November, 2011.
- Presented a poster in the Biotechnology for Better Tomorrow (BTBT) International conference held at Aurangabad, February 2011.
- Presented a poster in XXXIII Conferance of Indian Botanical Society and International Symposium on The New Horizons of Botany. Department of Botany, Shivaji University, Kolhapur, India. November 10-12, 2010
- Presented a poster in 50th Association of microbiologist (AMI) International conference held at National Chemical Laboratory, Pune,December15, 2009.
- Presented a poster in National conference on Recent trends in food technology and management CNCVCW, CSIBER, Kolhapur, March, 28-29, 2014
- Participated in various national and international conferences.

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