

Bio-data

Dr. Mrs. Vidya Kalpesh Kalyankar

Professor

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A. Personal Profile:

Date of Birth: 09/06/1980

Residence Address: Flat No.10, Alisha Apartment, Pashan-NDA road, Bavdhan Kh,
Pune 411021

Employed Place: MES's Abasaheb Garware College, Karve Road, Pune 411004

Teaching experience: 16Years

B. Educational Profile:

Degrees Conferred:

Degree	Institution	Subject	Year
B. Sc.	H. V. Desai College, Pune	Chemistry	2000
M. Sc.	S. P. College, Pune	Organic Chemistry	2002
Ph.D	Savitribai Phule Pune University (SPPU)	Chemistry	2017

- Qualified UGC-CSIR NET for lectureship in Chemical Sciences in December 2001.
- A recipient of Lady Tata Trust (LTMT) Junior Research Fellow Award in 2004 for cancer research
- In 2002 joined as R&D officer in bulk drug department at Cipla Pvt. Ltd., Kurkumbh
- In Aug 2003, joined as Project assistant (PA-II) at National Chemical Laboratory (NCL) Pune

- Dec 2003- Aug 2005 worked as Junior Research Fellow (JRF) at National Chemical Laboratory (NCL) Pune
- Since Aug 2005 working as a professor at MES Abasaheb Garware College

C. Research Profile:

Ph. D. Thesis Title: “Studies on Superoxide dismutase enzyme from seeds of *Papaver somniferum L.* and SOD Mimics”

Field of interest: Synthetic organic chemistry, Organometallic Chemistry, Bio Inorganic Chemistry, Catalysis

Research Interest:

Organic Synthesis, Coordination chemistry, Coupling reaction Catalysis, nanotechnology, Bio inorganic chemistry, Photochemistry, Organocatalysis

Research Projects sanctioned:

I. Principal Investigator

Title of project: Correlation of Isolated Super oxide dismutase enzyme with it's metallic model compounds

Funding Agency: BCUD Minor Research Project

Project Tenure: 2014-16

Amount sanction: Rs. 2,30,000 /-

Working place: Dept of Chemistry, MES's Abasaheb Garware College, affiliated to S.P.P.U., Pune 411007

II. Co-Investigator:

Title of project: Splitting of CO₂ into O₂ and Carbon moiety using biomimetics of biological catalyst involved in photosynthesis

Funding Agency: ISRO

Project Tenure: 2012-14

Amount sanction: Rs. 9,15,000 /-

III. Co-Investigator:

Title of project: Synthesis and characterization of biomimics of SOD enzyme

Funding Agency: UGC-WRO

Project Tenure: 2011-13

Amount sanction: Rs. 1, 05,000 /-

Patents: 02

1. Patent Agency: Indian
1. Title: Synthesis of Lipase mediated metal nanoparticles as a selective distaining detergents, S. A.Waghmode, S. P. Dagade, V. K. Kalyankar and H. K. Meroliya, IP, 201721019044, (Publication date: June 16, 2017). Patent granted, patent no-376577 (20 years) 16th June 2021 letter
2. Conversion of carbon dioxide into fuel molecules by visible light driven photocatalysis over MOF supported bimetallic nanoparticle, Shobha A.Waghmode, S. P. Dagade, V. K. Kalyankar, H. K. Meroliya and Vaishali Patil. IP: 202121041199, publication date-14th September 2021.

Book Chapter: 02

1. Title: Metal-Organic-Framework-Based Materials for Renewable Energy Applications ISSN 2471-8890 (Print) ISSN 2471-8904 (Online)
2. Statistics of Silver Nanos ISBN

Research Publications:

1. Kalyankar VK, Honmore VS, Waghmode SA, Dagade SP. Green Synthesis and in vitro Anti-Tubercular Activity of Monometallic and Bimetallic Oxide Nanoparticles. Asian Journal of Chemistry. 2022(4):923-30.scopus
2. Thote Vaishnavee, Sharda Dagade-Gadale, Vidya Kalyankar and Shobha Waghmode, 'Interaction between Nanoparticles and Soil Microflora', Research & Reviews in Biotechnology & Biosciences ISSN No: 2321-8681, Volume-8, Issue No: 1, Year: 2021 (January-June) PP: 140-147, <http://doi.org/10.5281/zenodo.5118424>.
3. Bacterial Empire journal of SciCell Publishing, "Greener methods of control for microbial diseases of pomegranate using Copper oxide nanoparticles and betel

UGC

- leaf extract".2021. Kalyankar , V. K. .; Meroliya , H. K. .; Shete , S. S. .; Gandhi , N. .; Kamble , R. R. .; Khater, M. S. .; Arora , B. .; Waghmode , S. A.. *BE* **2021**, 4, e306. <https://doi.org/10.36547/be.306>
4. Heena Meroliya, Vaishali Patil, Nilesh Jadhav, Vikram Deshmukh, Vidya Kalyankar,Sharda dagade and Shobha Waghmode, Lipase mediated nanoparticles as a robust catalysts for VLPC assisted trans-esterification reaction. *The Pharma Innovation Journal* 2018; 7(1): 205-207. Peer Reviewed
 5. Heena Meroliya,Vidya Kalyankar, and Shobha Waghmode, Synthesis of novel metal complexes of lawsone derivative and their applications in CO₂ utilization. *The Pharma Innovation Journal* 2018; 7(1): 132-135. Peer Reviewed
 6. Sarika Pawar, Vidya Kalyankar, Bela Dhamangaonkar, Sharada Dagade, Shobha Waghmode and Abhishek Cukkemane, Biochemical profiling of antifungal activity of betel leaf (*Piper betle* L.) extract and its significance in traditional medicine, *J Adv Res Biotech*, 2017, 2(1): 4. Peer Reviewed
 7. Bhide Gauri,Kalyankar Vidya, Dagade Sharada and Waghmode Shobha,Synthesis and characterization of Ag/AgO nano particles as alcohol sensor, , *Research J.of Chem.and Environment*,Vol.20(10) October 2016.**SCOPUS**
 8. Kalyankar V. K., Dagade P. M, Dagade S.P and Waghmode S. A. Biosynthesis of Silver nanoparticles using isolated superoxide dismutase enzyme from novel source *Papaverum somniferum* L. Vol. 19 (3) March (2015) *Res. J. Chem. Environ.* **Scopus**
 9. Shobha Waghmode, Pooja Chavan,Vidya Kalyankar,and Sharada Dagade.Synthesis of Silver Nanoparticles Using *Triticum aestivum* and Its Effect on Peroxide Catalytic Activity and Toxicology. **Journal of Chemistry**, Volume **2013**, Article ID 265864, 5 pages, <http://dx.doi.org/10.1155/2013/265864>. **Scopus**
 10. Shobha Waghmode, Vidya Kalyankar, and Sharada Dagade, B.J Bhadbahde, S.Sabharwal. Synthesis and characterisation of novel bimetallic Cu II –Zn II complexes: Antimicrobial and superoxide dismutase activity. Page 60-66, *Res. J. Chem. Environ.*, Volume 17, No. (2), Pages 1-83, February (2013), **Scopus**

11. In Vitro Antitubercular Screening And In Silico Study Of Germacradienolide From *Blainvillea Latifolia*, Varsha S Honmore, Vidya K Kalyankar, Supada R Rojatkar, Arun D Natu, Vijay M Khedkar, Dhiman Sarkar, Asian Journal of Chemistry, Vol 33, No. 12 (2021), 140-176
12. Quinoline-infused graphene carbon cages: an ecofriendly approach towards environmental remediation, UD Patil, S Waghmode, SS Pingale, S Gadale, V Kalyankar, H Meroliya, Research on Chemical Intermediates, 2023, 49 (10), 4217-4237.

International conference:

- A poster presented on “ Synthesis and characterization of Cu conjugates of substituted Inidazoles as nanozymes of SOD at Sustainable materials for advanced research in technology **SMART 2019**, Baburaoji Gholap College, Pune
- A poster presented on “Artificial photosynthesis using Super oxide dismutase model” at **HSDS-2016** held at Abeda Inamdar College, Pune
- A poster presented on “Antimicrobial and antitumor activity of tagged 2-amino 1,4 naphthaquinone with silver nanoparticles” at **HSDS 2014**, Abeda Inamdar College, Pune. Received best poster award in International conference.
- “Synthesis of silver nanoparticles using *Papaver somniferum L.*: An investigation on the effect of plant variety in reduction mechanism and particle size” Presented a poster in **International conference on Nanomaterials, 2014** at NCL, Pune

National conferences:

- “Correlation of SOD from *Papaver somniferum L.* with it’s with its Cu Zn Biomimics” Presented a poster in **National Conference on Chalcogens 2013** at DIAT, Pune.

- “Synthesis and spectral analysis of a Naphthaquinone dye: a solvent sensitive dye” received a best oral presentation award in at **National Conference 2016**, held at Shrirampur, Maharashtra

Online Conferences:

- Participated in Virtual Conference on “Materials for Energy Harvesting and Catalysis” 1st- 3rd May 2020 via Zoom Platform
- Presented a poster in International Conference on Multifunctional Electronic Material and Processing (MEMP-2021) entitled, “Cu-Zn and Cu-Mn oxide nanozymes of Super oxide dismutase (SOD) as a potential glucose sensor” from 8-10th March 2021.

Invited Talks:

- Delivered a talk on ‘Nanotechnology in water purifier’ at Nanotechnology workshop 2018
- Guided the students for NET/ SET preparation for Heterocyclic Chemistry at IQAC coordinated NET/ SET workshop 2020
- Delivered a talk on ‘Roadmap to industry’ to our post graduate student at Saturday meet event.
- Delivered a talk on ‘Bio mimicking of enzymes’ at Summer Internship Programme in Nanotechnology workshop 2020.

Orientation and Refresher courses:

- Successfully completed Orientation Programme conducted by SP Pune University from 07/09/2010 to 04/10/2010

- Successfully completed Refresher Course in Chemistry conducted by SP Pune University from 08/11/2011 to 28/11/2011
- Successfully completed Refresher Course in Chemistry conducted by SP Pune University from 17/12/2014 to 21/12/2014
- Successfully completed Ten Days Faculty Development Programme in Instrumentation techniques for nanomaterials conducted by Instrumentation Department, SP Pune University from 20/06/2019 to 29/06/2019
- Successfully completed Six Days Faculty Development Programme in “Instrumentation techniques for nanomaterials” conducted by Instrumentation Department, SP Pune University from 20/06/2019 to 29/06/2019
- Successfully completed Five Days National Level Workshop on “Sophisticated analytical instrumentation for advanced research” conducted by Central Instrumentation Facility (CIF), Department of Chemistry, SP Pune University, 5th to 9th March, 2019
- Successfully completed One Week Faculty Development Programme on "Open Source Tools for Research" conducted by teaching learning Centre, Ramanujan College, Delhi University, from June 08 - June 14, 2020
- Successfully completed One Week Faculty Development Programme on "Entrepreneurship, Incubation and Innovation" conducted by teaching learning Centre, Ramanujan College, Delhi University, from June 23 to June 29, 2020.

D. Extra Co- Curricular Activities:

1. Worked as a Subject expert for promotion under CAS for Assistant Professor, Associate Professor and Professor.

2. Successfully executed 2 days study Tour of M.Sc. part II (Organic and Analytical Chemistry) students as part of their curriculum of SPPU
3. Organized different workshops such as natural dyes for solar cell, Perfume making, Paper bags making and Jewellery making etc.
4. In charge of Skill Development committee from 2019 - Till Date
5. Committee member of Criteria VI from 2020 - Till date
6. Committee member of Website committee from 2021.
7. Chairman of BOS of Additional Credits
8. Coordination of Summer Internship Programme In Nanotechnology: Level I
9. BOS member of Department of Chemistry, H.V. Desai College, Pune
10. Received Best Teacher Award -2025 by Om Garmannye Institute of Skill Development.