



Dr. Nana Lingappa Gavade

M.Sc. Ph.D. SET

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Personal Details

Date of birth: 09th June 1987

Gender: Male,

Nationality: Indian

Marital status: Married

Language Known: Hindi, English, Marathi

Blood Group: O^{+ve}

Academic Details

2017	Ph. D. Chemistry Awarded	Shivaji University, Kolhapur.
2011	M.Sc., Chemistry 62.75 %	Solapur University, Solapur
2009	B.Sc., Chemistry 60.24 %	Solapur University, Solapur

Research Specialization

- Biogenic synthesis of Metal nanoparticles by using plant leaf extract.
- Fabrication of environment friendly building materials
- Synthesis of mixed metal oxides and photocatalytic applications □

Teaching Experience

- U.G. : 01 years
- P.G. : 09 years.

Fellowships

Recipient of Research fellowships (DST-PURSE). New Delhi- 2014-2016 for Ph.D.

Worked for the Ph.D. degree in the Department of Chemistry, Shivaji University Kolkhapur, under the guidance of Prof. K. M. Garadkar for thesis entitled "Biogenic Synthesis of Metal Loaded Metal Oxide Nanocomposites for Catalytic Applications".

Honours/Rewards

- Qualified for **State Eligibility Test for lectureship (SET)** in chemical sciences conducted by University of Pune, (Held on Aug, 2013).

International Research Publications

- 1] Biogenic synthesis of gold anchored ZnO nanorods as photocatalyst for sunlight-induced degradation of dye effluent and its toxicity assessment,
Nana L. Gavade, Abhijit N. Kadam, Santosh B. Babar, Anna D. Gophane, Kalyanrao M. Garadkar, Sang-Wha Lee.
Ceramics International., 46 (2020) 11317-11327.
- 2] Fabrication of M@ Cu_xO/ ZnO (M= Ag, Au) heterostructured nanocomposite with enhanced photocatalytic performance under sunlight.
Nana L. Gavade, Santosh B. Babar, Abhijit N. Kadam Anna D. Gophane, Kalyanrao M. Garadkar
ACS. Ind. Eng. Chem. Res., 56 (2017) 14489.
- 3] Decoration of biogenic AgNPs on template free ZnO nanorods for sunlight driven photocatalytic detoxification of dyes and inhibition of bacteria,
N. L. Gavade, A. N. Kadam, Y. B. Gaikwad, M. J. Dhanavade, K. M. Garadkar,
J Mater Sci: Mater Electron., 27 (2016)11080.

- 4] Biogenic synthesis of multi-applicative silver nanoparticles by using Ziziphus Jujuba leaf extract,
N. L. Gavade, A. N. Kadam, M. B. Suwarnkar, V. P. Ghodake, K. M. Garadkar,
Spectrochimica. Acta Part A:, 136 (2015) 953.
- 5] Evolution of Waste Iron Rust into Magnetically Separable g-C₃N₄-Fe₂O₃ Photocatalyst: An Efficient and Economical Waste Management Approach,
Santosh Babar, Nana Gavade, Harish Shinde, Prasad Mahajan, Ki Hwan Lee, Narayan Mane, Ashish. Deshmukh, Kalyanrao Garadkar, and Vijaykumar Bhuse
ACS Appl. Nano Mater., 1 (2018) 4682–4694
- 6] Template free large scale synthesis of multi-shaped ZnO nanostructures for optical, photocatalytic and antibacterial properties,
A. N. Kadam, R. S. Dhabbe, M. R. Kokate, N. L. Gavade, P. R. Waghmare, K. M. Garadkar,
J Mater Sci: Mater Electron., 26 (2015) 8367.
- 7] An Innovative Transformation of Waste Toner Powder into Magnetic g-C₃N₄-Fe₂O₃ Photocatalyst: Sustainable e-waste Management
Santosh Babara, Nana Gavade, Harish Shinde, Anil Gore, Prasad Mahajan, Ki Hwan Lee, Vijaykumar Bhuse, Kalyanrao Garadkar.
J Environ Chem Eng., DOI org/10.1016/j.jece.2019.103041
- 8] Green synthesis of TiO₂ and its photocatalytic activity,
G. V. Khade, M. B. Suwarnkar, N. L. Gavade, K. M. Garadkar,
J Mater Sci: Mater Electron., 26 (2015) 3309.
- 9] Sol-gel microwave assisted synthesis of Sm-doped TiO₂ nanoparticles and their photocatalytic activity for the degradation of Methyl Orange under sunlight,
G. V. Khade, M. B. Suwarnkar, N. L. Gavade, K. M. Garadkar,
J. Mater Sci: Mater Electron., 27 (2016) 6425.
- 10] Modification of TiO₂ nanoparticles by HZSM-5 for the enhancement in photodegradation of Acid Green 25,
M. B. Suwarnkar, A. N. Kadam, G. V. Khade, N. L. Gavade, K. M. Garadkar,
J Mater Sci: Mater Electron., 27 (2016) 843.
- 11] Effect of leavening agent on structural and photocatalytic properties of ZnO nanorods,
S. B. Babar, N. L. Gavade, J. Park, K. M. Garadkar, V. M. Bhuse,
J Mater Sci: Mater Electron., 28 (2017)8372.
- 12] Enhanced photocatalytic activity of europium doped TiO₂ under sunlight for the degradation of methyl orange,
G. V. Khade, N. L. Gavade, M. B. Suwarnkar, M. J. Dhanavade, K. D. Sonawane, K. M. Garadkar
J Mater Sci: Mater Electron., 28 (2017)11002.
- 13] Green synthesis of ZnO nanoparticles by using Calotropis Procera leaves for the photodegradation of methyl orange,
V.V. Gawade, N. L. Gavade, H. M. Shinde, S. B. Babar, A. N. Kadam, K. M. Garadkar.
J. Mater Sci: Mater Electron., 28 (2017)14033.
- 14] Biosynthesis of SnO₂ nanoparticles by aqueous leaf extract of Calotropis gigantea for photocatalytic applications,
T. T. Bhosale, H. M. Shinde, N. L. Gavade, S. B. Babar, V. V. Gawade, S. R. Sabale, R. J. Kamble, B. S. Shirke, K. M. Garadkar.
J Mater Sci: Mater Electron., 29 (2018) 6826.
- 15] Biosynthesis of ZrO₂ nanoparticles from Ficus benghalensis leaf extract for photocatalytic activity.
H.M. Shinde, T.T. Bhosale, N.L. Gavade, S.B. Babar, R.J. Kamble, B.S. Shirke,
K.M. Garadkar.
J Mater Sci: Mater Electron, 29 (2018), 6826-6834
- 16] An efficient fabrication of ZnO-carbon nanocomposites with enhanced photocatalytic activity and superior photostability,
S. B. Babar, N. L. Gavade, D. P. Bhopate, A. N. Kada^d, S. B. Kokane, S. D. Sartale, A. Gophane, K. M. Garadkar, V. M. Bhuse.
J Mater Sci: Mater Electron, 30 (2019) 1133–1147.

Conferences/Workshops/Seminars

- 1] Presented Paper (poster) at National Symposium on “Current Trends in Chemical and Nano Sciences” held on 17th and 18th January 2014, organized by Department of Chemistry, Shivaji University Kolhapur.
- 2] Presented paper (poster) at National conference on “Frontiers in Chemical and Material Sciences” held on 16th and 17th January 2015, organized by Department of Chemistry Shivaji University Kolhapur.
- 3] Presented paper (poster) at National Seminar on “Applications of Chemical and Material Sciences for Sustainable Development” held on 20th February 2016, organized by Department of Chemistry Shivaji University Kolhapur.
- 4] Presented paper (poster) at National Conference on “Innovative Research In Chemical Sciences” held on 1st and 2nd February 2017, organized by Department of Chemistry Shivaji University Kolhapur.