



## **Dr. Vaishali Anandrao Sawant**

M.Sc. B.Ed. Ph.D.

Assistant Professor,  
Department of Technology  
Shivaji University, Kolhapur-416004.  
E-mail: vas\_tech@unishivaji.ac.in

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**Present position:** Assistant Professor, Department of Technology,  
Shivaji University, Kolhapur

**Research fields:** Coordination Chemistry, Coordination Polymers, Solid State  
Reaction

### **Academic Details:**

- 2006- 2010**      **Ph.D.** (Chemistry)  
**Thesis title,** "Synthesis and physico-chemical studies of some  
mixed-ligand 3d-transition metal complexes."
- 2005-2006**      **B.Ed.** with first class, Shivaji University Kolhapur, India.
- 2002-2004**      **M.Sc.** in Chemistry (Inorganic Chemistry), with first class, Shivaji  
University Kolhapur, India.
- 1999-2002**      **B.Sc.** in Chemistry, with first class, Shivaji University, Kolhapur,  
India.

### **Fellowships/Awards:**

- 2009-2011**      **Senior Research Fellowship** from Council of Scientific and  
**(2 Years)**      Industrial Research (**CSIR**), New Delhi, India.
- 2016**              **Science Academie's Summer Research Fellowship for teachers**  
**(2 Months)**      Host Institute: Jadavpur University, Kolkata
- 2017- 2018**      **SERB's Overseas Postdoctoral Fellowship**  
**(1 Year)**              Host Institute: National University of Singapore, Singapore

**Work Experience:**

- 16/05/2011-**         **Assistant Professor**, Department of Technology, Shivaji University, Kolhapur
- 04/2009-03/2011**   Senior Research Fellowship from Council of Scientific and Industrial Research (**CSIR**), New Delhi, India.
- 08/2008-03/2009**   Teaching Assistant, Department of Chemistry, Shivaji University, Kolhapur
- 07/2007-03/2008**   Lecturer (C.H.B.), The New College, Kolhapur

**Other Responsibilities/Member on committee/Judge/Resource Person**

- **Rector**, Girls Hostel, Department of Technology, Shivaji University, Kolhapur, 2011- 2016
- **NAAC Coordinator**, Department of Technology, Shivaji University, Kolhapur, 2013-2016, 2018-onwards
- **Member**, Shivaji University Meritorious Scholarship Scrutiny committee, 2014-2016
- **Coordinator**, Inspire Science Camp sponsored by DST, Govt. of India organized at Department of Technology, Shivaji University, Kolhapur during 29<sup>th</sup> May to 2<sup>nd</sup> June 2012
- **Organizing Committee Member**, National Conference on 'Emerging Technologies for Sustainable Developments' during 27<sup>th</sup> & 28<sup>th</sup> Dec. 2012 organized by Department of Technology, Shivaji University, Kolhapur
- **Organizing Committee Member**, one day technical symposium 'Tech-Fest2K13' at Department of Technology, Shivaji University, Kolhapur
- **Examiner/Judge** for Avishkar 2018-19, District level at Arts and Science College Peth vadgaon
- **Examiner/Judge** for Avishkar 2018-19, the mega university level research competition at Shivaji University, Kolhapur
- **Organizing Committee Member** for celebration of Womens Day at Department of Technology, Shivaji University, Kolhapur

**Details of Funds received:**

Science Camp under INSPIRE Internship component of INSPIRE program organized at Department of Technology, Shivaji University, Kolhapur during 29 May-2 June 2012  
Funding Agency: DST, Govt. of India (Funds received, Rs. 9,75,000/-

Research Project: Synthesis ..... of porous Metal Organic Frameworks  
Funding Agency: University Grant Commission, New Delhi, India (Funds, Rs. 6,00,000)

**Research papers published in International journals:**

**Citation Data**

**Total Citations: 139 h-index: 7 i-10 index: 7**

1. Characterization and electrochemical studies of Mn(II), Co(II), Ni(II) and Cu(II) complexes with 2-mercapto-3-substituted-quinazolin-4-one and 1,10-phenanthroline or ethylenediamine as ligands.  
V.A. Sawant, S.N. Gotpagar, B.A. Yamgar, S.K. Sawant, R.D. Kankariya, S.S. Chavan, *Spectrochimica Acta*, 72A (2009) 663-669. (Impact Factor: **2.353**)
2. Synthesis, structural characterization, thermal and electrochemical studies of mixed ligand Cu(II) complexes containing 2-phenyl-3-(benzylamino)-1,2-dihydroquinazolin-4(3H)-one and bidentate N-donor ligands  
V.A. Sawant, B.A. Yamgar, S.K. Sawant, S.S. Chavan, *Spectrochimica Acta*, 74A (2009) 1100-1106. (Impact Factor: **2.353**)
3. Synthesis, characterization and catalytic study of Schiff base copper(I) complexes for the amination of aryl halide.  
S.K. Sawant, G.A. Gaikwad, V.A. Sawant, B.A. Yamgar, S.S. Chavan, *Inorg. Chem. Commun.*, 12, (2009) 632-635. (Impact Factor: **1.777**)
4. Copper(II) complexes of thiazolylazo dye with triphenylphosphine and N<sub>3</sub><sup>-</sup> or NCS<sup>-</sup> as coligands: Synthesis, spectral characterization, electrochemistry and luminescence properties,  
B.A. Yamgar, V.A. Sawant, S.K. Sawant, S.S. Chavan, *J. Coord. Chem.* 62(14), (2009) 2367-2374. (Impact Factor: **2.012**)
5. Synthesis, structural characterization, thermal and electrochemical studies of Mn(II), Co(II), Ni(II) and Cu(II) complexes containing thiazolylazo ligands  
S.S. Chavan, V.A. Sawant, *J. Mol. Structure*, 965 (2010) 1-6. (Impact Factor: **1.602**)
6. Manganese(II), Cobalt(II) and Nickel(II) complexes with 2-phenyl-3-(benzyl amino)-1,2-dihydroquinazolin-4(3H)-one, pseudohalides and some bidentate N-donor ligands: Synthesis, structure, thermal and electrochemical studies  
V.A. Sawant, B.A. Yamgar, S.S. Chavan, *Transition Met. Chem.* 35 (2010) 357-361. (Impact Factor: **1.306**)
7. Synthesis, characterization and Photoluminescence properties of copper(II)-azido/thiocynato complexes of thiazolylazo dye and 1,2-bis(diphenylphosphino)ethane  
B.A. Yamgar, V.A. Sawant, A.N. Jadhav, S.S. Chavan, *Inorg. Chem. Commun.*, 13 (2010) 1207-1209 (Impact Factor: **1.777**)

8. Synthesis, characterization, thermal and electrochemical studies of Cobalt(II) and Copper(II) pseudohalide complexes with 2-mercapto-3-phenylquinazolin-4(3H)-one and 1,10-phenanthroline or ethylenediamine as ligands.  
**V.A. Sawant**, S.S. Chavan and V.B. Helavi, *Synth. React. Inorg. Met.-Org. Chem.* 40 (2010) 592-600. (Impact Factor: **0.533**)
9. Copper(I) complexes with Schiff base and 1,2-bis(diphenylphosphino) ethane as ligands: Synthesis, structure and catalytic properties for the amination of aryl halide, S.S. Chavan, S.K. Sawant, **V.A. Sawant**, G.K. Lahiri, *Inorganic Chimica Acta* 363 (2010) 3359-3364. (Impact Factor: **2.046**)
10. Synthesis, spectral characterization, thermal and photo luminescence property of Zn(II) and Cd(II)-azido/thiocyanato complexes with thiazolylazo dye and 1,2-bis(diphenylphosphino)ethane  
B.A. Yamgar, **V.A. Sawant**, S.S. Chavan, *Spectrochimica Acta Part A*, 78 (2011) 102-106 (Impact Factor: **2.353**)
11. Synthesis, characterization and luminescence properties of copper(I) complexes containing 2-phenyl-3-(benzylamino)-1,2-dihydroquinazolin-4(3H)-one and triphenylphosphine as ligands  
S.S. Chavan, G.A. Gaikwad, **V.A. Sawant**, G.K. Lahiri, *Polyhedron* 30 (2011) 1171-1175 (Impact Factor: **2.011**)
12. Mixed-ligand complexes of copper(I) with Schiff base and triphenylphosphine: Effective catalysts for the amination of aryl halide  
S.S. Chavan, S.K. Sawant, **V.A. Sawant**, G.K. Lahiri, *Inorg. Chem. Commun.*, 14(9) (2011)1373-1376 (Impact Factor: **1.777**)
13. Copper(II) complexes of N-(2-[[[(2E)-2-(2-Hydroxy-(5-substituted)-benzylidene)-hydrazino] carbonyl]phenyl]benzamide ligands and heterocyclic coligands  
S.S. Chavan, **V.A. Sawant**, A.N. Jadhav, *Spectrochimica Acta Part A* 117 (2014) 360-365 (Impact Factor: **2.353**)
14. Competition Between Head-to-Head and Head-to-Tail Photocycloaddition Reaction in Solid State: A Case Study Vaishali A. Sawant, Jien Wu, and Jagdese J. Vittal, *Crystal Growth and Design* 18(2018) 3661-3667 (Impact Factor: **4.055**)  
**Cover page Citation**

### **Presentations at National/International Conferences:**

1. The 13<sup>th</sup> Conference of the Asian Crystallographic Association during 5<sup>th</sup> to 8<sup>th</sup> December, 2015 Science City, Kolkatta
2. National Conference on 'Chemistry of Chalcogens' during 14<sup>th</sup> & 15<sup>th</sup> Jan. 2013 organized by Department of Applied Chemistry, at Defence Institute of Advanced Technology (DIAT), Pune.

3. National Conference on 'Emerging Technologies for Sustainable Developments' during 27<sup>th</sup> & 28<sup>th</sup> Dec. 2012 organized by Department of Technology, Shivaji University, Kolhapur
4. International Conference on Recent Research trends in Chemical Sciences, Dec. 2-6, 2009; **VIT University, Vellore, Tamil Nadu.**
5. UGC-SAP National Seminar on Advanced Synthetic Methodologies for Functional Materials, Dec. 23-24, 2009; **Shivaji University, Kolhapur.**
6. International Conference on Nanomaterial and Applications, Dec. 9-11 2008; **Shivaji University, Kolhapur.**
7. UGC-SAP National Seminar on "Synthesis of New Material for Industrial Application." on Feb. 1<sup>st</sup> and 2<sup>nd</sup> 2008, Dept. of Chemistry, **Shivaji University, Kolhapur.**

**National/International Conferences/Seminars/Consortium attended:**

1. International Conference on Advances in Chemical Sciences (ICACS 2018) organized by Department of Chemistry, Shivaji University, Kolhapur on - 1-3 Feb. 2018
2. National conference on Frontiers in Chemical and Material Sciences organized by Department of Chemistry, Shivaji University, Kolhapur on 16-17 Jan. 2015
3. National Symposium on 'Current Trends in Chemical and Nano Sciences' organized by Department of Chemistry, Shivaji University, Kolhapur on 17-18 Jan. 2014
4. RSC-Diat-Industry meet on 'impact of Chemistry on Nanotechnology (i-CNT-2013) 28-29 Oct. 2013 at Department of Applied Chemistry, DIAT, Pune
5. National Conference on "Current Research in Chemical Sciences" on 22<sup>nd</sup> and 23<sup>rd</sup> Jan. 2013, Department of Chemistry, **Shivaji University, Kolhapur.**
6. "5<sup>th</sup> Science Conclave" at IIT, Allahabad sponsored by DST, during 8<sup>th</sup> Dec. to 14<sup>th</sup> Dec. 2012
7. National seminar on "Recent advances in synthetic chemistry and nanomaterials" on 20<sup>th</sup> and 21<sup>st</sup> Jan. 2012, Department of Chemistry, **Shivaji University, Kolhapur.**
8. Symposium on 'Advanced in Synthetic Methodologies and New Materials' on 21<sup>st</sup> and 22<sup>nd</sup> Jan. 2011, Department of Chemistry, **Shivaji University, Kolhapur.**
9. National conference on "Biodiversity conservation in India: Status and approaches" on 8-10<sup>th</sup> Jan. 2010, Panhala, Kolhapur, organized by Indian Woman Scientists Association, Kolhapur.

**Refresher/Orientation/FDP/Training Programme Participation:**

1. NPTEL online course in Chemical Crystallography funded by MHRD, Govt. of India during Jul-Oct 2018, Consolidated Score- 81% (12 week course)
2. Completed Safety and Health training conducted by Office of Safety, Health and Environment at National University of Singapore, Singapore
3. One week duration Faculty Development Program (FDP) during 3<sup>rd</sup> Oct 2016 to 8<sup>th</sup> Oct. 2016 organized by Department of Education, Shivaji University, Kolhapur
4. 'Special Winter School in Chemistry' conducted at Department of Chemistry, Shivaji University, Kolhapur during 11<sup>th</sup> Nov. 2013 to 1<sup>st</sup> Dec. 2013

**Workshops/ Orientation attended:**

1. One day workshop on Intellectual Property Rights (IPR) organized by IPR Cell, Shivaji University, Kolhapur on 10<sup>th</sup> March 2018
2. One day workshop on Scientific Writing organized by Research Colloquium of Shivaji University, Kolhapur on 31<sup>st</sup> Jan. 2018
3. one day workshop for 'Coordinators of Avishkar Research Competitions' organized by Department of Technology, Shivaji University, Kolhapur on 7<sup>th</sup> Sept. 2016.
4. 'Department Safety Workshop on 6<sup>th</sup> and 7<sup>th</sup> Feb. 2017 organized by Department of Chemistry, National University of Singapore, Singapore
5. safety Orientation programme conducted in Sem-I 2016/2017 by Faculty of Science, National University of Singapore, Singapore
6. one day seminar on 'Hazop Management in Industry' on 23<sup>rd</sup> July 2015 organized by Department of Technology, Shivaji University, Kolhapur
7. 'Two-week ISTE Workshop on Environmental Studies' Conducted by IIT, Bombay at Department of Technology, Shivaji University, Kolhapur during 02/06/2015 to 12/06/2015
8. 'Awareness workshop of UGC-DAE Consortium for Scientific research' Organized by UGC-DAE Consortium for Scientific research. Mumbai Centre at Department of Physics, Rajaram College, Kolhapur on 20-21 Feb. 2015
9. 'Two-week ISTE Workshop on Cyber Security' Conducted by IIT, Bombay at Department of Technology, Shivaji University, Kolhapur during 10/07/2014 to 20/07/2014
10. Orientation programme on 'Sexual Harassment of Women at Workplace (prevention, Prohibition and Redressal) Act. 2013 on 7<sup>th</sup> March, 2014

11. one day workshop on 'organic electronic devices' organized by Department of Technology, Shivaji University, Kolhapur sponsored by TEQIP Phase-II on 24<sup>th</sup> Sept. 2013.
12. one day workshop on 'Discussion on F.E. Engineering Chemistry revised syllabus from the academic year 2013-14' at Bharti Vidyapeeth's College of Engineering, Kolhapur, on 30<sup>th</sup> July 2013
13. '3<sup>rd</sup> Workshop for Organizers of DST INSPIRE-Interns Science Camps' from 11<sup>th</sup> to 12<sup>th</sup> April, 2013 conducted by Pondicherry University, Brookashabad Campus and Department of Science and Technology, New Delhi, Government of India at Port Blair, A & N Islands.
- 14 A Workshop on "A Brain Storming session for Application of Technology for Sustainable Development in the State of Maharashtra" organized by Maharashtra academy of Sciences (MASc), and Shivaji University, Kolhapur. Dated 26<sup>th</sup> and 27<sup>th</sup> Nov. 2012.
- 15 10 days ISTE Workshop on "Introduction to Research Methodology" Conducted by Indian Institute of Technology, Bombay at Department of Technology, Shivaji University, Kolhapur sponsored by MHRD, during 25<sup>th</sup> June, 2012 to 4<sup>th</sup> July, 2012.
- 16 orientation programme on 'Advances in Teaching Strategies and Evaluation' organized by Department of Education, Shivaji University, Kolhapur, during 12<sup>th</sup> and 13<sup>th</sup> October, 2012.
- 17 One day Workshop "Next two decades of Chemical Sciences and Technology" at NCL, Pune jointly organized by Department Of Chemistry, University of Pune, National Chemical Laboratory, Pune and Maharashtra academy of Sciences on 23/9/2011.

### **Membership of Professional Bodies (India)**

- Life membership of Society for Materials Chemistry
- Life membership of Indian Crystallographic Association
- Life membership of Indian Society for Technical Education (ISTE)