

CURRICULUM VITAE

Mr. Vijay Subhash Ghodake

M.Sc., SET, (Ph.D. Pursuing)

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Educational Credentials

Sr. No.	Degree/ Competitive Examination	University/Board	Year	%
1	Ph.D. (Pursuing) Research Supervisor: Prof. (Dr.) Sagar. D. Delekar Thesis Title: "Mixed Metal-Oxides Nanocomposites For Catalytic And Antibacterial Studies".	Shivaji University Kolhapur(MS) India	Jan 2019 - till date	--
2	SET (Chemical Sciences)	Pune University	2019	---
3	M.Sc. (Organic Chemistry)	Shivaji University, Kolhapur (MS) India	2018	65.79
4	B.Sc. (Chemistry)	Yashwantrao Chavan Institute of Science, Satara	2016	68.16
5	Higher Secondary Certificate	Pune Divisional Board	2013	56.00
6	Secondary School Certificate	Pune Divisional Board	2011	80.00

Professional Experiences

Sr. No.	Positions Held with Organization / Institution	Period		Nature of Duties and Responsibilities
		From	To	
Professional Experience				
1.	Assistant Professor, Department of Chemistry, Yashwantrao Chavan Mahavidyalaya, Halkarni.	05/April/2023	Till Date	Teaching, research and extension activities for graduate
2.	Assistant Professor, Department of Chemistry (Applied), Shivaji University, Kolhapur.	11/Feb/2023	04/April/2023	Teaching, research and extension activities for post-graduate
3.	Assistant Professor, Department of Chemistry (Applied), Shivaji University, Kolhapur.	29/Oct/2022	15/Dec/2022	Teaching, research and extension activities for post-graduate
4.	Assistant Professor, Department of Chemistry (Applied), Shivaji University, Kolhapur.	13/Nov/2021	12/Oct/2022	Teaching, research and extension activities for post-graduate

5.	Departmental Research Fellow, Department of Chemistry, Shivaji University, Kolhapur.	7/Sep/2021	12/Nov/2021	Teaching, research and extension activities for post-graduate
6.	Research Assistant, Department of Chemistry, Shivaji University, Kolhapur.	11/Mar/2021	26/Jul/2021	Teaching, research and Project endeavors
7.	Research Assistant, Department of Chemistry, Shivaji University, Kolhapur.	1/Jan/2020	30/Nov/2020	Teaching, research and Project endeavors
8.	Project Fellow, Department of Chemistry, Shivaji University, Kolhapur.	19/Sep/2019	31/Dec/2019	Teaching, research and Project endeavors

Courses Taught

Sr. No.	Course with Paper Titles	Major Topics/Chapters Taught	Mode of Teaching
B.Sc. Chemistry Degree (Under-graduate Degree Course Syllabus)			
1.	Inorganic Chemistry	Periodic Table (F-block, P-block), CFT & MOT, Acid-Bases & Solvents, Co-ordination Compounds, Organometallic compounds.	L+ ICT
M.Sc. Chemistry/Applied Chemistry Degree (Post-graduate Degree Course Syllabus)			
1.	Organic Chemistry	Elimination Reactions, Study of organic reactions synthesis	L+ ICT
2.	Analytical Chemistry	Electro Analytical Techniques, Organic pollutants and their analysis	L+ ICT
3.	Advanced Spectroscopic Methods	C^{13} NMR (Nuclear Magnetic Spectroscopy), Ultraviolet Spectroscopy, IR Spectroscopy	L+ ICT
4.	Advance Organic Chemistry	Chemistry Of Natural Products, Application of the reducing & oxidizing reagents and reaction in synthesis.	L+ ICT
5.	Practical courses	Nanomaterial's synthesis, Nephelometry, Alloy-ore analysis, Spectrophotometry, complexes preparation with their characterization, etc.	Practical's

Exam Duties

- Worked as **Paper Assessment** for **M.Sc. II** theory Examination.
- Worked as **Paper Assessment** for **B.Sc. III** theory Examination.
- Worked as **External Examiner** for B.Sc. III Practical Examination.
- Worked as **Lab Expert** for **B.Sc. II** Practical Examination.
- Worked as **Lab Expert** for **B.Sc. I** Practical Examination
- Worked as **Internal Junior Supervisor** for **B.Sc. II** theory Examination.
- Worked as **Internal Junior Supervisor** for **M.Com. I** theory Examination

Patents Filled

Sr. No.	Title of the IP (patent, design, trademark/copyright/GI)	Name of the inventor/inventors	Date of application	IPR application No. (IPO, Mumbai-India)
1.	Microbicidal Functional Nanocomposites for Conformal Leather Coatings	Sagar D. Delekar, Vijay S. Ghodake & Sonali P. Sadavar	20/12/2022	202221073852

Technical Skills

- **Synthesis Techniques:**
Hydrothermal synthesis method, Solvothermal method, Sol-Gel synthesis Method.
- **Characterization Techniques:**
Expertise in UV-Visible Diffused Reflectance Spectroscopy (UV-DRS), Spectrophotometer, LABINDIA ANALYTICAL.
- **Software's :**
Expert High Score Plus, FP_Suite, Origin, UV Win Software, VESTA, Microsoft Office, Mendeley, End Note, Chemdraw, etc.

Faculty Induction/ Orientation/Faculty Development Programme

- Successfully completed 4-Week **Faculty Induction/** Orientation Programme from, 23-May to 21-June 2023.

Certification

- Completed, “**Workshop and Hands on Training Programme on Bio-Atomic Force Microscopy (BIO-AFM)**” during 04th - 05th Jan. 2022, by SAIF (CFC), Shivaji University, Kolhapur.
- Completed, “**Workshop and Hands on Training Programme on XRD**” during 11th-12th Nov. 2021, by SAIF (CFC), Shivaji University, Kolhapur.
- Completed Value Added Course on, ‘**Hands on Training of Instrumental Methods for Chemical Analysis**’ during 23rd to 29th Dec. 2019, Department of Chemistry, Shivaji University, Kolhapur.
- Completed Two Days “**Hands on Training Programme on GC-MS/MS**” during November 20-21, 2017, organized by **USIC (CFC)**, Shivaji University, Kolhapur collaboration with **Toshvin Analytical LTD. Mumbai.**
- Completed ‘**Share Market Business**’ course under continuing Education Program from 16th Oct. 2015 to 25th Oct. 2015, Department of Adult, Continuing Education and Extension work, Shivaji University, Kolhapur.
- Completed course ‘Maharashtra State Course in Information Technology’ (**MS-CIT**).

Conferences / Workshops / Webinar

- Actively participated in panel discussion on “University Industry Linkages: Employability & Entrepreneurship Development” at Rajarshi Shahu Cenate hall, Shivaji University Kolhapur.
- Actively participated in National level workshop on “Spectroscopy and Chromatography” at Devchand College, Arjunnagar.
- Presented a Paper (Poster) in, International Conference on sustainable development in chemistry and scientific applications (**ICSDCSA-2021**) **International** conference.

- Participated in the workshop hands on training on XRD organized by SAIF (Shivaji University, Kolhapur. (**UGC-STRIDE**))
- Participated in the workshop & hands on training on BIO-ATOMIC FORCE MICROSCOPY (BIO-AFM) organized by SAIF (**CFC**), Shivaji University, Kolhapur. (**UGC-STRIDE**)
- Participated in international webinar on Empowering Diversity in Science (**GWB-2022**), International webinar.
- Participated in international E-conference on sustainable and Futuristic Materials (**SFM-2021**).
- Presented a Paper (Poster) in, International Conference on Interdisciplinary Approaches in Chemical Sciences (**IACS - 2021**) International conference.
- Participated in the webinar on “Mesoporous Nanomaterial’s in Cancer Therapeutics”.
- Participated in Virtual International Conferences on Multifunctional Advanced Materials (**VICMAM-2021**).
- Participated in One day online webinar on, Next Energy Storage devices (**NGESD-21**).
- Participated in National level Virtual seminar on, ‘Coronavirus and Chemistry: Its Research and Response’.
- Participated in International E-conference on, ‘Recent Advances in Chemical, Physical and Biological Sciences’ (**RACPBS-2021**).
- Participated in National webinar on, ‘Laboratory Safety Management’.
- Participated in National level one week faculty development Programme on research methodology.
- Participated in International Webinar on Sustainable chemistry (**IWSC-2021**).
- Participated in International Webinar on Empowering Diversity in Science (**GWB-2021**).
- Actively participated in the, ‘Online Lecture Series Program’ under **UGC STRIDE component – I**.
- Participated in International Conferences on Recent Advances in Chemical Sciences.
- Participated in one week faculty development Programme on, ‘Advances in Synthesis of Nanomaterial’s and their applications in field of science and engineering’.
- Participated in ACT National webinar on Instrumental Methods of Analysis (**NWIMA-2020**).
- Participated in Two days National Virtual conferences on advanced nanomaterial’s and applications for futuristic development.
- Attended Full Agenda of **DST** and **ACS** Virtual Workshop.
- Actively participated in online quiz on, Chemistry in Everyday Life’.
- Successfully completed, ‘INTERCOLLEGIATE ONLINE CHEMISTRY APTITUDE TEST-2020’.
- Participated in the One day webinar on "**Enhancing Research Effectiveness using Scopus, Science direct and Mendeley**".
- Presented a Paper (poster) in 2nd International twitter conference **#Nanobio20**.
- Presented a Paper (Poster) in Emerging Trends in Chemical and Material Sciences (**ETCMS - 2020**) national conference.
- Participated in faculty development program on “**Nanoscience and Nanotechnology – Current Perspective**”.
- Attended a Science Academies Lecture Workshop on “**Recent Advance in Catalysis**”.
- Participated in the “**Hands on Training Programme on GC-MS/MS**”.
- Participated in One Day workshop of “**Student Enrichment Programme**” @ YCIS, Satara.
- Completed Course on “**Water Analysis**”.
- Attended a “**Share Market Business**” Programme.

Research Projects

1. Worked as project fellow under **RGSTC** research project entitled, “**Designing of Metal-Oxide Nanocomposites as an Antibacterial Additives and their use in Paint Formulations**”.
2. Synthesis of Novel aldehyde from Dihydropyrimidine – “**A facile and expeditious method for the synthesis of novel aldehyde using Vilsmeier-Hack Reaction from Various dihydropyrimidine**”.

Research Presentations National / International Conferences

1. “Designing and Characterization of Mixed Metal Oxide Nanocomposites for Antibacterial Studies”, M. H. Shinde Mahavidyalaya, Tisangi, Tal-Gaganbavda, Dist-Kolhapur, (ICAMA 2023) (**International Conference**) [**Oral Presentation**].
2. “Designing and Characterization of Metal Oxide Nanocomposites for antibacterial coating”, Karmveer Hire College, Gargoti, Shivaji University, Kolhapur, (ETBAS 2023) (**International Conference**) [**Oral Presentation**].
3. “Functional Nanocomposites based Antimicrobial Formulation for Leather Products”, Kuvempu University, Jnana Sahyadri, Shankaraghatta, Shivmoga district, Karnataka (ICBSI 2022) (**National Conference**) [**Oral Presentation**].
4. “Synthesis, Characterization of metal oxide based nanocomposites for energy storage conversion and biomedical applications”, Rajarshi Chhatrapati Shahu College, Kolhapur, Shivaji University, Kolhapur, (ICAST 2022) (**International Conference**) [**Poster Presented**] [**Third Rank**].
5. “Designing and Characterization of Binary or Ternary Nanocomposites for Antibacterial Coating”, Sadguru Gadage Maharaj College, Karad, Shivaji University, Kolhapur, (December 2021) (**International Conference**) [**Poster Presented**].
6. “Synthesis of Bis-Indolyl Methane by Aqueous Mediated Acid Catalyzed through Clean and Green Approach”, Abasaheb Garware College, Pune, (October 2021) (**International Conference**) [**Poster Presented**].
7. “Designing and Characterization of Binary or Ternary Nanocomposites for Antibacterial Paint Formulation”, New College Kolhapur, Shivaji University, Kolhapur (April 2020) (**International Twitter E-Conference**) [**Poster published in Compendium**].
8. ETCMS, national conference, Department of Chemistry, Shivaji University, Kolhapur (February 2020) (**National Conference**) [**Poster Presented**].
9. “Synthesis of Novel Aldehydes from Dihydropyrimidine”, Department of Chemistry, Shivaji University, Kolhapur (February 2018) (**International Conference**) [**Poster Presented**].
10. Presented a Paper (Poster) in an “**AVISHKAR 2017-18**” in Pure Science Category, Shivaji University, Kolhapur.
11. “Clean and Green Approach: Aqueous mediated Acid Catalysed Synthesis of Bis Indolyl Methane”, D.P.Bhosale College, Koregaon (February 2016) (**National Seminar**) [**Poster Presented**].

Research Article / Book Chapter / Poster Publications

1. P. S. Pawar, P. A. Koyale, **V. S. Ghodake**, S. V. Mulik, Kapdi, Yash, Soni, Saurabh, N. B. Mullani, Delekar, Sagar, “Designing and Photovoltaic Studies of $W@TiO_2/rGO$ Nanocomposites with Polymer Gel Electrolyte”, **New Journal of Chemistry (RSC-2023)** [**In press**]
2. O. S. Nille, H. A. Mirgane, S. V. Koparde, A. G. Kolekar, A. R. Pawar, P. J. Pawar, A. Waghmode, T. Dhage, **V. S. Ghodake**, P. M. Swami, S. D. Shinde, G. B. Kolekar, “Synthesis and

Characterization of Plant-Mediated CuO Nanoparticles”, **Journal of Shivaji University: Science and Technology 2023, 49 (01), 95.**

3. S. V. Koparde, A. G. Kolekar, S. S. Shendage, A. H. Sawant, R. S. Lohar, S. D. Patil, S. S. Patil, R. B. Darekar, A. B. Pandhare, **V. S. Ghodake**, S. P. Pawar, G. B. Kolekar, “Green Synthesis of NiO Nanoparticles from Parthenium hysterophorus Plant”, **Journal of Shivaji University: Science and Technology 2023, 49 (02), 12.**
4. A. B. Pandhare, P. S. Pawar, **V. S. Ghodake**, S. V. Mulik, P. A. Koyale, A. K. Dhukate, D. B. Mohite, K. Shikhare, R. P. Patil, S. D. Delekar, “A review on current advancements in magnetic nanomaterials for magnetic hyperthermia applications”, **Journal of Shivaji University: Science and Technology 2023, 49 (02), 62.**
5. P. S. Pawar, P. A. Koyale, A. B. Pandhare, **V. S. Ghodake**, S. V. Mulik, A. K. Dhukate, W. Dabdoub, S. D. Delekar, “Third Generation Solar Cells and Measurements Techniques for knowing Photovoltaic Device Performance”, **Journal of Shivaji University: Science and Technology 2023, 49 (02), 48.**
6. P. A. Koyale, P. S. Pawar, S. V. Mulik, **V. S. Ghodake**, A. B. Pandhare, A. K. Dhukate, S. D. Delekar, “Synthesis and Characterization of g-C₃N₄ decorated ZnO Nanorods and their Binder Free Deposited Photoanodes for Photoelectrochemical Water Splitting Studies” **Journal of Shivaji University: Science and Technology 2023, 49 (01), 01.**
7. S. V. Mulik, D. K. Panda, S. Dhas, A. V. Moholkar, V. Parale, H. H Park, P. A. Koyale, **V. S. Ghodake**, S. D. Delekar, “ Square-Facets Nanobars MOF-derived Co₃O₄@Co/N-doped CNT Core-Shell based Nanocomposites as Cathode Materials for High Performance Supercapacitor Studies”, **ACS Omega 2022, [Impact Factor = 4.132 (2023)]**
8. **V. S. Ghodake**, S. P. Deshmukh, S. D. Delekar, “Metal Oxide Nanocomposites: Designing and Their Use in Antimicrobial Coatings”, *Advances in Metal Oxides and Their Composites for merging Applications. Elsevier 2022, 549-599 [Book Chapter]*
9. S. P. Deshmukh, V. B. Koli, A. G. Dhodamani, S. M. Patil, **V. S. Ghodake**, S. D. Delekar, “Ultrasonochemically Modified Ag@TiO₂ Nanocomposites as Potent Antibacterial Agent in the Paint Formulation for Surface Disinfection”, **Chemistry Select 2021, 6, 113. [Impact Factor = 2.109 (2020)]**
10. **V. S. Ghodake**, S. D. Delekar “Designing and characterization of Binary and Ternary Nanocomposites for Antibacterial Paint Formulations”, poster published in Compendium of 2nd International Twitter Conference #NANOBI020.

Professional Honors, Awards and Fellowships

- Award of Dr. Babasaheb Ambedkar National Research Fellowship (**BANRF**).
- Award of Golden Jubilee Research Fellowship (**GJRF**), Shivaji University Kolhapur.
- **DST-PURSE** Fellowship (**Research Assistant**) [Twice].
- **RGSTC** research project fellow –
Project Entitled: “Designing of Metal-Oxide Nanocomposites as an Antibacterial Additives and their use in Paint Formulations”.
- **SET** (2019) Qualified.
- **NSS** [Volunteer]
- **NCC [CERTIFICATE - A, 38 MH BN NCC Solapur].**

References

- 1. Prof. (Dr.) Sagar D. Delekar (*Research Supervisor*),**
Professor, Department of Chemistry,
Shivaji University, Kolhapur-416004 (INDIA).
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Contact no. +91 9890291575
- 2. Prof. (Dr.) S. S. Kolekar,**
Professor, Department of Chemistry,
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Mr. Vijay S. Ghodake