

Profile of the Faculty

1. General Information:

Name of the Faculty	:	Prof. (Dr.) Bhagwan Vitthal Jadhav
Name of the Department	:	Chemistry
Educational Qualifications	:	M.Sc.,B.Ed., Ph.D., SET
Present Position	:	Professor of Chemistry
Address for Correspondence	:	Department of Chemistry, Changu Kana Thakur Arts,
		Commerce and Science College, New Panvel
		(Autonomous), Plot-No.01, Sector-11, Khanda Colony,
		New Panvel (W), Dist. Raigad, Maharashtra, India-410206
E-mail	:	bvjadhav02@yahoo.com
Contact Number	:	9869653944
Specialization	:	Inorganic Chemistry
Total teaching experience	:	30 Years
Courses taught	:	UG- Inorganic Chemistry
		PG- Inorganic Chemistry
Research experience	:	13 years
Number of students registered	:	04
for Ph.D. degree		
Number of students awarded	:	01
Ph.D. degree		
Number of students registered	:	01
for P.G degree by research		
Number of students awarded	:	
P.G degree by research		
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2. Publication of Research Papers:

Peer reviewed journals	:	36
Non-peer reviewed journals	:	-
Conference proceedings	:	-

List of Publication of Research Papers:

- P.P.Hankare, B.V.Jadhav, P.A.Chate. Structural &Optoelectrical Properties of Molybdenum Diselenide thin films deposited by Chemical bath method, Journal of Crystal Growth 291 (2006) 40-44
- 2. P.P. Hankare, **B.V. Jadhav**, P.A. Chate, D.J. Sathe, M.R. Asabe, Comparative study of zinc selenide photoelectrode annealed at different temperatures, Solid State Sciences 10(2008)1970-1975
- 3. P.P. Hankare, P.A. Chate, **B.V. Jadhav**, D.J. Sathe, M.R. Asabe, Photoelectrochemical studies of CdSe thin films deposited by dip method, Journal of Alloys and Compounds, 474(2009) 347–350
- 4. P.P. Hankare, P.A. Chate, **B.V. Jadhav**, D.J. Sathe, Effect of temperature on various properties of Photoelectrochemical cell, Journal of Alloys and Compounds 490(2010)350–352
- 5. S.D. Delekar, M.K. Patil, **B.V. Jadhav**, K.R. Sanadi, P.P. Hankare , Synthesis and characterization of $Cd_{0.7}Pb_{0.3}Se$ thin films for photoelectrochemical solar cell, Solar Energy 84(2010)394-400
- 6. P.P. Hankare, **B.V. Jadhav**, P.A. Chate, D.J. Sathe, X-ray and optical properties of chemically deposited nanocrystalline CdSe thin films, Journal of Alloys and Compounds 503 (2010) 220–223
- 7. P.P. Hankare, **B.V. Jadhav**, P.A. Chate, D.J. Sathe, I.S. Mulla, Synthesis and characterization of chemically deposited nickel substituted CdSe thin film, Journal of Alloys and Compounds 509 (2011) 2948–2951
- 8. **B.V.Jadhav,** P.P.Hankare, S.D.Delekar, Investigation of structural, electrical and optical properties of nickel substituted CdSe thin films, Journal of Materials Science: Materials in Electronics 22 (2011)1433-1442
- 9. R.P. Patil, **B.V. Jadhav**, P.P. Hankare, Electrical and thermoelectric properties of nanocrystalline Mn-substituted lithium ferrites, Results in Physics, 3 (2013) 214-228
- 10. **B.V. Jadhav,** Analysis of Water Quality Parameters of Different regions of Panvel Tahasil, Dist-Raigad, ANUGOONJ, 3(2013-2014)7-11
- 11. **B.V. Jadhav,** Antimony- Doped Cd_{0.7}Ni_{0.3}Se Thin Films: Synthesis and Characterization Aarhat Multidisciplinary International Education Research Journal (AMIERJ) 5(2014) 208-224
- 12. B. V. Jadhav, R. P. Patil, P.C.Patil, V.D.Patil, Synthesis, Characterization and

- Catalytic Application of Magnetically Separable Zn–Cr Ferrite, Journal of Nanoengineering and Nanomanufacturing 6(2016)10-136
- 13. R. P. Patil, **B. V. Jadhav**, M. R. Kadam, D. R. Patil, P. P.Hankare, LPG Gas Sensing Application of Lithium Ferrite, American Scientific Publishers-Mater.Focus 2016, 5(2016)1-5
- 14. R.P.Patil, **B. V. Jadhav**, S.B.Patil , S.D.Delekar, P.P.Hankare, Structural and magnetic properties of Co substituted Li_{0.5}Fe_{2.5}O₄, Journal of Magnetism and Magnetic Materials, 401(2016) 870-874
- 15. **B.V. Jadhav**, R. P. Patil, Structural, Electrical and Thermoelectric Power Measurement Studies of Polyol Route Synthesized Li_{0.5}Fe_{2.5}O₄, Aarhat Multidisciplinary International Education Research Journal (AMIERJ) 5(2016)96-107, A Peer Reviewed UGC Journal 48178, 48818
- 16. S. F.Shaikh, **B. V. Jadhav**, R. P. Patil, Photocatalytic Activity of Zn-Co-Ferrite Nanoparticle Synthesized Using Lemon as Green Binding Agent by Sol-Gel Method, Indo American Journal of Pharmaceutical Sciences 05 (01),2018,
- 17. **B.V. Jadhav**, Photoelectrochemical applications of NiSe thin films prepared by Chemical Bath Deposition Method, Aarhat Multidisciplinary International Education Research Journal (AMIERJ), 9(2018)159-164, A Peer Reviewed UGC Journal 48178, 48818
- 18. **B.V. Jadhav**, S.F.Shaikh, R.P.Patil, Manganese Doped Co-Zn Ferrite Nanoparticle Synthesis and Characterization; Effects of Annealing Temperature on the Size of nanoparticles., Aarhat Multidisciplinary International Education Research Journal (AMIERJ), 9(2018)301-305 A Peer Reviewed UGC Journal 48178, 48818
- 19. S. F. Shaikh, **B.V. Jadhav**, Aditi Narvankar, Marvika Kamble , Quality Assessment of Kharamboli Dam Water by Studying Physico-Chemical Characteristics, Murud, Dist-Raigad (M. S.), An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies, V-7(39) (2018)10-15 (UGC 49366)
- 20 S. F. Shaikh, **B.V. Jadhav**, Juhee Nandgaonkar, Hrishikesh Vadka, Estimation of water quality physico-chemical parameters of drinking water sources of Usroli Village of Murud Tehsil, District- Raigad, Maharashtra, India, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies, V-7(39)(2018)21-27, (UGC 49366)
- S. F. Shaikh, **B.V. Jadhav** Anamika Virkud, Tasnim Malbari, Review on application of aloe vera in medicinal field and its Chemical composition, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies, V-7(40) (2018) 7-13, (UGC 49366)

- S. F. Shaikh, B.V. Jadhav, Rushda Hasware, Shubhangi Chavan, Does the drinking water sources available satisfies minimum required standards in Nandgaon Village of Murud Tehsil District- Raigad, Maharashtra, India, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies, V-7(40) (2018)17-23 (UGC 49366)
- 23. S. F. Shaikh, **B.V. Jadhav**, Anamika Virkud, Abhishek Nakti, Role of aloe vera extract in dirty water purification and in heavy metal removal, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies V-7(41) (2018)15-19
- 24. S. F. Shaikh, **B.V. Jadhav**, Tasnim Malbari, Aditya Wadkar, Determination of physico-chemical parameters of drinking water Sources of Majgaon Village of Murud Tehsil District- Raigad, Maharashtra, India, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies V-7(41) (2018) 25-32 (UGC 49366)
- S. F. Shaikh, **B.V. Jadhav**, Madiha Dakhni, Shifa Ulde, Analysis of water quality using physico-chemical parameters of drinking water sources of Murud Nagarparishad Area District Raigad, Maharashtra, India, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies V-7(42) (2018) 8-15 (UGC 49366)
- 26. S. F. Shaikh, **B.V. Jadhav**, R. P. Patil, Synthesis and characterizations of zinc cobalt ferrite (Zn0.5Co0.5Fe2O4) nanoparticle using green and organic chelating agents via sol-gel auto combustion technique: it's comparative study, An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies, V-7(42) (2018) 21-26 (UGC 49366)
- 27. S. F. Shaikh, **B.V. Jadhav**, Sonali Jayswal, Sanket Divekar, Physico-chemical parameters analysis of water quality of drinking water sources of Shighre Village of Murud Tehsil District- Raigad, Maharashtra, India. An International, Peer Reviewed & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies V-7(43) (2018) 11-17 (UGC 49366)
- 28. S. F. Shaikh, **B.V. Jadhav**, Zainab Jamadar, Ankita Gharat, Assesment of physicochemical characteristics of Garambi Dam Water In Murud, Dist-Raigad (M.S.) An International, Peer Reviewed, & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies, V-7(44) (2018) 1-6
- 29. S.F.Shaikh, **B.V. Jadhav**, Nawal Pangarkar, Hasham Chogale, Studies on physicochemical characteristics of drinking water sources of Vihour Village of Murud Tehsil District Raigad, Maharashtra, India, An International, Peer Reviewed, & Referred Quarterly Scholarly Research Journal for Interdisciplinary Studies V-7(44)(2018)23-29

- 30. R.P.Patil, **B.V. Jadhav**, A.D.Pinjarkar, S.L.Pawar, M.R.Aasbe ,B.B.Patil, Substitution effects of Cr³⁺ on magneto structural and semiconducting properties of the Lithium ferrites, International Journal of Research and Analytical Reviews (IJRAR) Peer Reviewed, Referred Journal, V-5 (4) (2018)167-177, (UGC 43602)
- Mane C.B., Pawar R.P., Tapase A.S., More H.S., **Jadhav B.V**., Patil R.P., Gas Sensing Application of Ceria, Cassiterite and Ceria-Cassiterite Nanocomposite, Research Journal of Chemistry and Environment, Vol.25(4) April (2021) 129-134
- 32 Shaikh S.F., **Jadhav B.V.***, Patil R. P., Patil J. S, Study of Application of Zn_{0.5}Mn_{0.5}Fe₂O₄ NP's prepared via Sol-gel Method for Dyestuff Industry Waste Water Purification, Research Journal of Chemistry and Environment, Vol.25(6) June (2021) 113-117
- 33 Birmule P.R., Chavan A. S., **Jadhav B. V**., Burungale A. S., Helavi-Reddy V.B., Patil R.P. Effect of Nickel Substitution on Structural and Magnetic Properties of Novel Polyol route Synthesized Cobalt Ferrite, Research Journal of Chemistry and Environment, Vol.25(8) August (2021) 17-22
- Arjun S. Chavan, Bhagwan V. Jadhav, Mohan R. Kadam, Akush V. Mali, C. B. Mane, and Rajendra P. Patil* Photodegradation of Dye Pollutants on Nanocrystalline Co Doped Li0.5Fe2.5O4 under UV-Visible Light Irradiation, Macromolecular Symposia, Dec(2021) 1-4, Macromol. Symp. 2021, 400, 2100201400
- 35 Sajid F. Shaikh, **Bhagwan V. Jadhav**, R. P. Patil, Effects of Annealing Temperature on the Size of Zinc Doped Cobalt Ferrite Nanoparticles Synthesized using Green Binder, International Journal of Advanced Research in Science, Communication and Technology (IJARSCT), Volume 2, Issue 3, March (2022) 86-92
- 36 B.V. Jadhav, R.P. Patil, and A.D. Pinjarkar*, Sol-gel Assisted Nano Structured Spinel Ferrite Co0.5Ni0.5Fe1.0Cr1.0O4 and its Catalytic Application for the Reduction of P-Nitrophenol to P-Aminophenol, Indian Journal of Natural Sciences, Vol.14 / Issue 78 / June (2023) 55922-55927

3. Minor Research Project Completed: 04

Title of the project	Date of	Duration	Grant	Funding agency
	sanction		received	
"Synthesis and Characterization of Transition Metal Chalcogenide thin films"	07/02/2009	1 Year	45,000/-	University of Mumbai
"Synthesis and Characterization of CdNiSe thin films deposited at room temperature by Solution growth"	26/11/2010	1 Year	20,000/-	University of Mumbai

"Synthesis and Characterization of Chemically Deposited Transition Metal Chalcogenide Thin Films"	23/02/ 2012	2 Year	1, 60,000/-	University Grant Commission (U.G.C.)
Synthesis and characterization of CdNiSe thin films for photoelectrochemical Solar Cells	10/12/2020	1 Year	100000/-	Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

4. Minor Research Project Ongoing: 02

Title of the project	Date of	Duration	Grant	Funding agency
	sanction		received	
Synthesis and Characterization of Nanosized mixed metal oxides by Sol-Gel method: Application as Catalyst	24/12/2022	1 Year	100000/-	Rashtriya Uchchatar Shiksha Abhiyan (RUSA)
Study of Photocatalytic activities of Green Synthesized metal oxide nanoparticles	02/02/2023	1 Year	100000/-	Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

5. Membership:

• Life Member, Indian Science Congress Association (ISCA)

6. Academic Staff College Orientation/Refresher courses attended: 06

Name of the Course	Place	Duration	Sponsoring Agency
Orientation Course on National Service Scheme (N.S.S.)	Tata Institute of Social Sciences and N. S. S. Unit	Dec. 5-14, 2002	Ministry of Youth Affairs & Sports, Govt. of India
Orientation Programme	UGC Academic Staff College, University of Mumbai, at Gogate Jogalkar College, Ratnagiri.	May 03-29, 2004	University Grants Commission (UGC)
Refresher Course	UGC Academic Staff College, University of Mumbai.	Sept. 25-Oct. 14, 2006	University Grants Commission (UGC)
Refresher Course	UGC Academic Staff College, University of Mumbai. (at Mithibai College, Vileparle)	Oct. 6- Oct.25, 2008	University Grants Commission (UGC)
Refresher Course	University of Kerala, Kariavattom, Kerala	28/11/2009 to 18/12/2009	University Grants Commission (UGC)
Short Term Course	University of Mumbai	16/10/2014 to	University Grants

		21/10/2014	Commission (UGC)			
Faculty Development Programmes attended: 04						
Name of the Course	Place	Duration	Sponsoring Agency			
FDP on Advanced	Ramanujan College,	July 02 - July	Ministry of Human			
Concepts for Developing	University of Delhi	17, 2020	Resource Development			
MOOCs 2.0			PMMMNMTT			
FDP on Managing online	Ramanujan College,	July 25 -	Ministry of Human			
classes and co-creating	University of Delhi	August 17,	Resource Development			
MOOCs 3.0		2020	PMMMNMTT			
NPTEL Online Course-	IIT Bombay	Jan-Feb 2020	University Grants			
Basics in Inorganic			Commission (UGC)			
Chemistry						
FDP on 'e-Content and	C.K.Thakur A.C.S.College,	18-09-2022	Rashtriya Uchchatar			
MOOCS Creations:	New Panvel (Autonomous)	to 23-09-	Shiksha Abhiyan			
Hands on Training'		2022	(RUSA)			

Participation in conferences, symposia, seminars and workshops:

Level	Presented paper	Only attended
International	08	10
National	18	37
State		19
University		10

7. Conferences, symposia, seminars and workshops organized as convener/co-convener:

Level	Convener	Co-convener
National	01	02
College		

8. Experience on the various committees at the college

- Head, Department of chemistry,
- Member, Library Committee (2022-23 to till date)
- N.S.S. Programme Officer- 05 Years (Chief Programme Officer- 02 years
 & as a Member- 03 Years)
- Examination 04 years as a member
- In-charge, Students' Council & Students' Welfare 02 years

- Member, Unfair Means Inquiry Committee- 04 year
- Member, Avishkar Research Association (2021-22 to till date)
- Chairman, Gymkhana committee (2009-10 to 2018-19)
- Chairman, Discipline committee
- Chairman, Staff academy
- Chairman, Placement cell (2019-20 to 2021-22)

9. Experience on the NAAC/ IQAC of the college

- Member, IQAC (2018-19)
- Member, Criterion III-Research, Innovation and Extension (2013-2019)
- Member, Criterion I-Curricular Aspects (2021-22 to till date)

10. Experience on the Various Committees at the University of Mumbai / Government

- Appointed as Vice-Chancellor's nominee on screening cum Evaluation committee for promotion of Teacher under CAS on Monday 4th July 2022.for stage 1 to 2 of MTE Society Goregaon Cooperative Urban Bank Science College, Goregaon, Tal- Mangaon, Dist-Raigad.
- Worked as a 'Judge for 17th Avishkar Research Convention (Zonal Round) for Zone 4
 (Thane), organized by University of Mumbai on Friday, December 16, 2022 at KBP
 college, Vashi, Navi Mumbai.
- Nomination as subject expert (Chemistry) management nominee for promotion under stage 3 to 4 by Gogate Joglekar College, Ratanagiri at ACS college, Lanja on 25/03/2023.
- Nominated as subject expert (Chemistry), University nominee for promotion under CAS stage 3 to 4 for faculty of KBP college, Vashi -24/04/2023.
- Nominated as subject expert on panel construed for selection of candidates for Ph.D in Chemistry at KMC College, Khopoli on 28th February-2023 at 3.00 pm.
- Worked as a Judge of poster presentation session in international conference on advanced material for physical, Chemical & Biological Applications organized by KBP College, Vashi, on March 3rd & 4th 2023, at Navi Mumbai.

11. Awards/recognitions received:

Level	Title	Year	Awarding agency
University	Recognized as Post Graduate Teacher of	May	University of Mumbai
	University of Mumbai for M.Sc. Degree	10,2004	
	(By Paper) in Chemistry		
	Recognized as Post Graduate Teacher of	May	University of Mumbai
	University of Mumbai for M.Sc. Degree	02,2012	
	(By Research) in Inorganic Chemistry		
	Recognized as Teacher of University of	August	University of Mumbai
	Mumbai for the Ph.D. Degree in	16,2012	
	Chemistry		