

# CURRICULUM-VITAE

## Personal Particular



**Full Name** : Dr. Sharad Bhimrao Patil (M.Sc. Ph.D.)(UGC Project Fellow)

**Permanent Address** : A/P: Girad  
Tq.- Bhadgaon, Dist.- Jalgaon

**Email ID** : [sharadpatil123@yahoo.co.in](mailto:sharadpatil123@yahoo.co.in), [sharadbpatil123@gmail.com](mailto:sharadbpatil123@gmail.com)

**Research Paper Publications:** 37(Published in International reputed journal included in UGC care list)

**National/International Conference attended** : 16

**h -index** : 06

**Reviewer** : 03 International Journals (IJRAR, JETIR, International Journal of Nano dimension)

**Research Gate Score** : 24.41 (Online)

**Teaching Experience** : 10 Years (CHB)

**Book Published** : 1 (*Thin film technology and it's Novelties in Material Science*)

**Research Scholar** : Work as Research Fellow at G. D. M. Arts, K. R.Com. and M.D. Science College, Jamner , Dist: Jalgaon.  
*File No. 38-64/2009(SR), Date-19th Dec.2009*  
Duration 3 years From **01. 02. 2010 to 31. 01. 2013**

**Present Position** : Assistant Professor in Physics at S. S. M. M. College, Pachora (Permanently Appointed)

**Date of Birth** : 1<sup>th</sup> June, 1983

**Marital Status** : Married

**Caste** : Hindu

**Nationality** : Indian

**Domicile** : Maharashtra

**Language Known** : Marathi, Hindi, English

**Contact No.** : 9960984562, 8788659302

## Academic Qualifications

Examination	University / Board	Percentage (%)	Class
Ph.D. (Physics)	KBCNMU, Jalgaon	---	Awarded
M.Sc.	NMU, Jalgaon	66.75	I <sup>st</sup> Class
B.Sc.	NMU, Jalgaon	64.83	I <sup>st</sup> Class.
H.S.C.	Nasik	55.67	II <sup>nd</sup> Class
S.S.C.	Nasik	72.00	I <sup>st</sup> Class with Dist.

## Research Activities

**a) Project at Graduation:**

Study of water and soil pollution and their global warming.

**b) Project at Post Graduation:**

Synthesis and characterization of Zn doped CdS thin film by chemical bath deposited.

**c) Interest in Trust Area of Research:**

1) Gas sensor [Ammonia (NH<sub>3</sub>), Carbon dioxide (CO<sub>2</sub>), Chlorine (Cl<sub>2</sub>), Hydrogen (H<sub>2</sub>), Ethanol (C<sub>2</sub>H<sub>5</sub>OH) and Liquefied petroleum gas (LPG)], 2) Thick films physics, 3) Thin films physics, 4) Photoconducting and photoluminescent material, 5) Sunscreen lotions & creams.

**d) Techniques:**

1) Spray pyrolysis 2) Chemical bath deposition 3) Sol-gel 4) Spin coating and 5) Screen printing.

**e) Instrument Handling:**

1) Spray Pyrolysis System 2) Static Gas sensing System 2) TEP set up 3) Low and High resistivity measurement set up 4) Ultrasonic Sonicator 5) Multimeter 6) Hall measurement set up.

**f) Avishkar:**

Actively participated in Avishkar 2019 as College Team leader conducted by KBCNMU, Jalgaon organized by Nutan Maratha College, Jalgaon

**g) Activities at college level:**

- Actively participated and guide to the student for the Aavishkar, summer camp.
- Actively participated and Nomination of member of IQAC-NAAC
- Co-ordinator of Criteria IV for NAAC also take the in charge of Science co-ordinator
- Actively participated and Panel of Judges program conducted by Nirmal International School Pachora
- Co-ordinator of Criteria II for NAAC
- Appointed as Nodal officer for PM-UHSA proposal

- Appointed as Nodal officer for AISHE

1. **S.B. Patil**, R. H. Bari, R.S. Khadayate , S.B. Patil, A.R. Bari, G.H. Jain, L.A. Patil, B.B. Kale, *Preparation, characterization and H<sub>2</sub>S sensing performance sprayed nanostructured SnO<sub>2</sub> thin films*, **ISRN Nanotechnology**, Article ID 734325, Vol.2012,1-5, 2012.
2. **S.B. Patil**, R. H. Bari, A.R. Bari, G .E. Patil, J. Aambekar, *Spray Pyrolysed Nanostructured ZnO Thin Film Sensors for Ethanol Gas*, **Sensors & Transducers Journal**, Vol. 140, Issue 5, May 2012, pp. 124-132.
3. **S.B. Patil**, R. H. Bari, A. R. Bari, *Influence of precursor concentration solution on CO sensing performance of sprayed nanocrystalline SnO<sub>2</sub> thin films*, **Optoelectronics and advanced materials- rapid communication**, Vol-6, No.9-10, 887-895, 2012.
4. **S.B. Patil**, R. H. Bari, P. P. Patil, A. R. Bari, *Detection of H<sub>2</sub>S gas at lower operating temperature using sprayed nanostructured In<sub>2</sub>O<sub>3</sub> thin films*, **Bull. Mater. Sci.**, (2012).
5. **S.B. Patil**, R. H. Bari, A. R. Bari, *Chemically sprayed SnO<sub>2</sub>-ZnO nanocomposites thin films for ethanol gas sensor*, **Journal of Nanoengineering and Nanomanufacturing**, Vol. 3, pp. 1-5, doi:10.1166/jnan.2013,1104 2013.
6. **S.B. Patil**, R. H. Bari, A. R. Bari, *Effect of molarity of precursor solution on physical, structural, microstructural and electrical properties of nanocrystalline ZnO thin films*, **Material Technology** .Doi.10.1179/1753555712Y,17 Oct.2012.
7. **S.B. Patil**, R. H. Bari, A. R. Bari, *Spray pyrolysed nanostructured CuO thin films for H<sub>2</sub>S gas sensor*, **International Nano letter**, 3:12, doi:10.1186/2228-5326,-3-12.2013.
8. **S.B. Patil**, R. H. Bari, R. H. Bari\**"Spray pyrolysed prepared CuO-ZnO nanocomposites thin films for ethanol sensor"* **Material Focus**, 2014, 3, 119-124.
9. **S. B. Patil**, A. R. Bari, R. H. Bari\**"Synthesis, characterization and gas sensing performance of sol-gel prepared nanocrystalline SnO<sub>2</sub> thin films"* **International journal on smart sensing and intelligent systems**, 2014, 7(2), 610-629.
10. **S. B. Patil**, R. H. Bari\**"Studies on spray pyrolysed nanostructured SnO<sub>2</sub> thin films for H<sub>2</sub> gas sensing application"* **International Letters of Chemistry, Physics and Astronomy**, 2015, 36, 125-141.
11. **S. B. Patil**, R. H. Bari\**"Nanostructured CdO thin films for LPG and CO<sub>2</sub> gas sensor prepared by spray pyrolysis technique"* **International Letters of Chemistry, Physics and Astronomy**, 2014, 37 31-46.
12. **S. B. Patil**, R. H. Bari\**"Low temperature NO<sub>2</sub> sensing performance of nanostructured SnO<sub>2</sub> thin films"* **Archives of Physics Research (Scholars Research Library)**, 2014, 5 (6), 1-11.
13. **S. B. Patil**, R. H. Bari\**"Room temperature cigarette smoking sensing performance of nanostructured SnO<sub>2</sub> thin films"* **International Journal of ChemTech Research**, 2015, 8 (3), 1189-1202.
14. **S. B. Patil**, R. T. Chaudhary, R. H. Bari\* *"LPG gas sensing performance of nanostructured CdSnO<sub>3</sub> thin films"* **International Letters of Chemistry, Physics and Astronomy**, 2015, 42 51-62.
15. **S. B. Patil**, R. H. Bari\**"Pervoskite nanostructured CdSnO<sub>3</sub> thin films as Cl<sub>2</sub> gas sensor operable at room temperature"* **Sensors Letters**, 2015, 13, 1-10.
16. **S. B. Patil**, R. H. Bari\**"Studies on chemically spray deposited pervoskite nonostructured CdSnO<sub>3</sub> thin films: Effect of thickness"* **Material Focus**, 2015, 4, 232-237.
17. **S. B. Patil**, R. H. Bari\**"Improved NO<sub>2</sub> sensing performance of nanostructured Zn doped SnO<sub>2</sub> thin films"* **International Journal of TechnoChem Research**, 2015, 1, 86-96.
18. **S. B. Patil**, R. H. Bari\**" Ethanol sensing performance of nanostructured Zn doped CdSnO<sub>3</sub> thin films"* **International Journal of Chemical Concept**, 2016, 2, 1-11.
19. **S. B. Patil**, R. H. Bari\**" Nanostructured spray pyrolyse Zn doped CdO thin films for LPG gas sensor"* **Journal of nanoscience and technology**, 2(2) (2016) 104-108.
20. **S. B. Patil**, R. H. Bari\**" Ethanol sensing performance of nanostructured Zn doped CdSnO<sub>3</sub> thin films*, **International Journal of Chemical Concept**, 2(1) (2016) 1-11

21. **S. B. Patil**, R. H. Bari\* “*Synthesis, characterization and gas sensing performance of spray pyrolysed nanostructured CuInS<sub>2</sub> thin films*” **International Journal of Chemical Concept**, 2016, 2, 88-95.
22. J. M. Patil\*, **S. B. Patil**, R. H. Bari, A. N. Sonar Studies on structural, morphology and electrical properties of chemically sprayed WO<sub>3</sub>- V<sub>2</sub>O<sub>5</sub> nanocomposites thin films, **International Letters of Chemistry, Physics and Astronomy**, 53 (2015) 71-78.
23. J. M. Patil\*, **S. B. Patil**, R. H. Bari, A. N. Sonar, Nanostructured V<sub>2</sub>O<sub>5</sub> thin films prepared spray pyrolysis technique for NO<sub>2</sub> sensor, **International Journal of ChemTech Research**, 8 (2015) 1232-1242.
24. J. M. Patil\*, **S. B. Patil**, R. H. Bari, A. N. Sonar Conventional gas sensor application of nanostructured WO<sub>3</sub> thin films, **Sensor letters**, 13 (2015) 1–8.
25. J. M. Patil\*, **S. B. Patil**, R. H. Bari, R. T. Chaudhari, A. N. Sonar, *Influence of film thickness on structural, surface morphology and electrical properties of spray pyrolyse nanostructured WO<sub>3</sub> thin films*, **Journal of Advanced Physcis**, 5(2015)1-5.
26. J. M. Patil\*, **S. B. Patil**, R. H. Bari, A. N. Sonar, *SO<sub>2</sub> sensing performance of chemically sprayed WO<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> nanocomposites thin films*, **International Journal of Chemical Concept**, 2, (2016)12-23.
27. R. H. Bari\*, **S. B. Patil** and S. B. Deshmukh, *Comparative Study of Temperature Dependent H<sub>2</sub>S Gas Sensing Performance of M-ZrO<sub>2</sub> Thick Film Resistors (M = Cd, Cu, Cr)*, **Sensor Lett.** 15, (2017)196–203
28. **S.B.Patil**, R.H.Bari, “*Fast detection and highly H<sub>2</sub>S sensing performance of chemically sprayed nanocomposites thin films*”, *Journal of Information and Computational Science*, 9 (2019) 7–31.
29. **S.B.Patil**, R.H.Bari, “*Sprayed nanostructured TiO<sub>2</sub> thin films and its application for gas sensor*”, *Journal of Information and Computational Science*, 9 (2019) 33–49.
30. R. H. Bari, **S. B. Patil** and S. B. Deshmukh, “*Studies on ZrO<sub>2</sub> thick and thin films: Structural, morphological, optical and microstructure behavior*” Accepted *Journal of nanoscience and technology*, (2019)
31. D. S. Patil, **S. B. Patil**, K. P. Joshi, P. H. Pawar, *Studies on CIS thin films as solar base material*, *Journal of Information and Computational Science*, Volume 11 Issue 9 – (2021).
32. K.P. Joshi, **S.B.Patil**; *Growth of Copper Sulphide Crystal in Gel and its Thermal Spectroscopic Semiconducting Characterisations and its Kinetic Parameters*, YMER ISSN 044-00477 page 246-256 Vol20 issue 12 ,2021.
33. M.M. Patil, K.P. Joshi, **S.B. Patil**, P.V. Dalal ; *Studies on nanocomposites Nano plates and Perovskites Nano rod thin films*, YMER ISSN 044-00477 page 303-313 Vol 20 Issue 12 ,Dec 2021,
34. D.S.Patil, K.P.Joshi ,S.B.Deshmukh, **S.B.Patil**, P.H.Pawar, *Non stoichiometric Chemically deposited Cd<sub>x</sub>Pb<sub>1-x</sub>S Thin films* Vol-8-issue-4, IJRAR E-ISSN2348-1269, PAGE 551-559, 2021.
35. D. S. Patil, S.B.Deshmukh, **S. B. Patil**, P. H. Pawar, *Photosensing properties of nanocube CuInSe<sub>2</sub> thin films*, *International Journal for Research Trends and Innovation*, Volume 7, Issue 8(2022)773-779.
36. D. S. Patil, **S. B. Patil**, P. H. Pawar, *Photoluminescence, microstructure and electrical properties of CuInSe<sub>2</sub> thin films*, *JETIR* Volume 9, Issue 9 (2022), 538-550.
37. D. S. Patil, **S. B. Patil**, P. H. Pawar, “*Studies on quaternary X<sub>2</sub> base CIS thin films for the optoelectronic devices*”, *International Journal for Innovative research in multidisciplinary field* Volume 9, Issue 10 (2023), 93-99.

### Conference & Seminar Attended

Sr. No.	Details	Paper Title	Level	Place	Period
1	State level seminar Project presentation for M.Sc. and T.Y.B.Sc. (Physics) Students	Water, Soil Pollution; Global Problem	State	S.S.V.P.S's L.K.Dr.P.R.Ghogrey Science College, Dhule	5 <sup>th</sup> Feb.2005
2	National Conference on 'C.V.Raman Memorial Seminar-2007	--	National	NMU, Jalgaon	28 <sup>th</sup> Feb.2007
3	State level seminar on Recent Advances In nanocrystalline materials and Applications-2009	Studies on CBD technique	State	P.S.G.V.P.Mandal' ACS College, Shahada	6 <sup>rd</sup> & 7 <sup>th</sup> Feb.2009
4	National Conference on 'Preparation of nanomaterials and their application	Synthesis and characterization of Zn doped CdS thin film by CBD	National	ACS College, Nandgaon	20 <sup>th</sup> 21 <sup>th</sup> & 22 <sup>th</sup> Feb.2009
5	National Conference on 'Recent Advances in materials Synthesis and Characterization-2011	Effect of Zn doping o optical, electrical properties of CdS tin films prepared by CBD	National	D.D.N,Bhole College, Bhusawal	21 <sup>nd</sup> & 23 <sup>rd</sup> Jan.2011
6	National conference on "Nanoscience and Nanotechnology"	Study on spray pyrolysed ZnO thin films for ethanol sensor	National	Amity University, Lucknow	21 <sup>st</sup> & 23 <sup>rd</sup> Dec..2010
7	2 <sup>nd</sup> International conference on Advanced nanomaterials and nanotechnology (ICANN-2011)	Gas sensing performance of nanomaterials metal oxides	<b>International</b>	IIIT, Guwahati	8 <sup>st</sup> & 9 <sup>th</sup> Dec..2010
8	National Conference on Indian Development In recent and ideal semiconductor for Novel application (NC INDRIS-2012)	Synthesis, characterization and gas sensing performance of nanocrystalline thin films of zinc oxide	National	ACS College, Navapur,	6 <sup>th</sup> & 7 <sup>th</sup> Oct.2012
9	National Seminar on Advanced materials and it's application	Preparation, characterization and CO sensing performance of chemically sprayed nanostructure SnO <sub>2</sub> thin films	National	Art's and Science College, Dondaicha	1 <sup>st</sup> & 2 <sup>nd</sup> Feb..2013
10	State level seminar on "Thin and Thick films (Deposition, characterization and applications)	Sprayed pyrolysed nanostructured CdO thin films for LPG and CO <sub>2</sub> gas sensor	National	Arts, Science and Commerce College, Ozar (Mig),Nasik	21 <sup>st</sup> & 22 <sup>nd</sup> March 2014
11	National Conference On Emerging Trends In Nanoscience And Nanotechnology	Effect of applied voltage on NO <sub>2</sub> sensing performance of	National	Arts, Science and Commerce College, Ozar (Mig),Nasik	23 <sup>rd</sup> & 24 <sup>th</sup> March 2015

		nanostructured SnO <sub>2</sub> thin films prepared by spray pyrolysis technique			
12	National Conference On Non Conventional Energy sources for rural Development of India	Nanocrystalline Materials growth by CBD technique and use for solar antireflection coating	National	Uttamrao Patil Arts and Science College, Dahivel	6 <sup>th</sup> Jan. 2018
13	State level seminar on “New trends in recent materials NTIRM-2018	Nonstoichiometric Cd <sub>x</sub> Pb <sub>1-x</sub> S thin films by CBD	National	Nutan Maratha College, Jalgaon	30 <sup>rd</sup> Jan. 2018
14	National Seminar On Recent Emergence in science and technology	--	National	Seva Sadan Education Society's Burhanpur (M.P)	11 <sup>th</sup> & 12 <sup>th</sup> Jan. 2018
15	National Conference On Historiography: New trends in History writing –Local History of khandesh	--	National	A.R.B.Garud ACS College, Shendurni	14 <sup>th</sup> Feb. 2019
16	One day National Symposium on Advanced e- technologies for societal Application [NSAET-2023]	---	National	KBCNMU, Jalgaon	7 <sup>th</sup> July 2023

### Workshop and Webinar Attended

Sr. No.	Details	Level	Place	Period
1	Workshop On ‘Indian patenting and Filing Procedures’	University	N.M.U.Jalgaon	23 <sup>rd</sup> Aug.2016
2	Workshop On “Research methodology and use of SPSS”	University	A.R.B.Garud ACS College, Shendurni	21-22 <sup>th</sup> Jan.2016
3	Workshop On “Role of IQAC in Revised NAAC accreditation”	University	A.R.B.Garud ACS College, Shendurni	6 <sup>th</sup> Feb. 2019
4	Workshop On “Development of E-content for effective teaching and Learning”	University	KBCNMU, Jalgaon	26 <sup>th</sup> & 27 <sup>th</sup> Aug.2019
5	International Webinar On “Overseas Postdoctoral Fellowship Program”	University	Madural Kamaraj University	29 <sup>th</sup> March 2022
6	F.Y.BSc. Physics (NEP-2020) Syllabus Restructuring Workshop	University	R.C. Patel Arts, Commerce and Science College, Shirpur, Dist: Dhule	30 <sup>th</sup> September 2023
7	Webinar on Intellectual Property Right	University	Dr. S.D.D. Arts College, Commerce and Science College, Wada Dist: Palghar	14 <sup>th</sup> Oct. 2023
7	Webinar on Association of mutual funds in India (AMFI)	University	S.S.M.M. Arts, Science and Commerce College, Pachora	5 <sup>th</sup> January 2024

**Ph.D. Thesis Title**

*“Synthesis, Characterization And Gas Sensing Performance Of Nanostructured SnO<sub>2</sub>, CdO And Perovskite CdSnO<sub>3</sub> Thin Films”*