BIO-DATA

1. **Name and full correspondence address:**

Dr. Sharadrao Anandrao Vhanalkar
Near Grampanchyat,
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2. **E-mail:** sharad.vanalakar@gmail.com

3. **Position and present Institution:** Assistant Professor,
Physics,
Karmaveer Hire Arts, Science, Commerce and Education College,
Gargoti, Tal-Bhudargad, Dist-Kolhapur (M.S.)

4. **Date of Birth:** 01-07-1977

5. **Gender (M/F/T):** Male

6. **Marital Status:** Married

7. **Academic Qualification (Undergraduate Onwards):**

Examinations	Board/ University	Subjects	Year	Merit %
B. Sc.	Shivaji University, Kolhapur	Physics	1999	53.96
M. Sc.	Shivaji University, Kolhapur	Physics	2001	67.25
Ph. D.	Shivaji University, Kolhapur	Physics	2011	-

8. **Ph. D. thesis title, Guide's Name, Institute/Organization/University, Year of Award:**

Title of thesis

"CHEMICAL SYNTHESIS OF CdS, ZnO AND CdS SENSITIZED ZnO THIN FILMS AND THEIR CHARACTERIZATION FOR PHOTO-ELECTROCHEMICAL SOLAR CELLS"

Online link:
http://shodhganga.inflibnet.ac.in/handle/10603/4031/browse?type=author&order=ASC&rpp=20&value=Vanalakar%2C+Sharadrao+Anandrao

Name and address of Ph.D. Supervisor:
Dr. P. S. Patil,
Professor and Head,
Thin Film Materials Laboratory,
Department of Physics,
Shivaji University, Kolhapur
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Email: psp_phy@unishivaji.ac.in

Ph. D. in Physics, awarded year- 2011
Thin Film Materials Laboratory,
Department of Physics,
Shivaji University, Kolhapur
India 416 004

9. Post-Doc Research

Total Research Experience, including Ph.D., Post-doc and Research project = 10 years

a) Post-Doc Research, 2016-17
Raman Post Doc Fellow,
Under the guidance of Prof. (Dr.) V. L. Dalal
Microelectronics Research Center,
Department of Electrical and Computer Engineering
Iowa State University
Scholl Road, Ames
USA 50011
Email: vdalal@iastate.edu

b) Post-Doc Research, 2013-14
Post Doc Fellow,
Under the guidance of Prof. (Dr.) J. H. Kim
Department of Materials Science and Engineering
Chonnam National University
300, Yongbong-Dong, Puk-Gu, Gwangju
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10. Work experience (in chronological order):

Total Teaching Experience = 13 years

Aug. 2001 to April 2004 – Lecturer at Jaysingpur College, Jaysingpur (India)
July 2004 to Sept. 2014 – Senior Lecturer at Institute of Civil and Rural Engineering, Gargoti (India)
Oct. 2014 to till to date – Asst. Prof. at Karamaveer Hire Arts, Science, Commerce and Education College, Gargoti (India)

11. Publications*:*

Research Publications:

	Published	Accepted	Communicated	Total
Book/Edited Books	04	--	02	06
Book Chapters	03	--	--	03
National/ International Journals	60	--	07	67
Proceedings of National /International Conferences	33	--	--	33
Grand Total	100	--	09	**109**
Google Citations	https://scholar.google.co.in/citations?user=Vm64-1AAAAAJ&hl=en			880

Edited Book/Book/Book chapter published and communicated

1) Emerging Trends in Basic and Applied Sciences (Bhumi Publication)- Book
   ISBN: 978-93-5212-526-6
2) Water Research and Technology (Bhumi Publication)- Book
   ISBN: 978-19-3124-721-1
3) Research Frontier in Science (Bhumi Publication)- Book
   ISBN: 978-81-9312-471-1
4) Emerging Research Trends in Life Sciences (Bhumi publication)- Book
   ISBN: 978-81-9312-470-3
5) Experimental Physics (Bhumi Publication)- Handbook
   ISBN: Communicated
6) Gas Sensing Technology (Bhumi Publication)- Book
   ISBN: Communicated
7) Polymer Assisted Synthesis of CdS Nanostructure for Photoelectrochemical Solar Cell Applications
   Book Chapter in (Book- Advanced Polymeric Materials: From Macro- to Nano-Length Scales)
   Publication: Apple Academic Press, USA ISBN: 978-17-718-809-61
8) CdS Sensitized ZnO Thin Films for Solar Cell Applications: A Short Review
   Book Chapter in (Book- Basic and Applied Science)
   Publication: Bhumi Publication, India ISBN: 978-93-5212-526-6
9) Modified Wet Chemical Deposited SnO_2 Thin Films for Gas Sensing Applications
   Book Chapter in (Book- Research Frontier in Sciences)
   Publication: Bhumi Publication, India ISBN: 978-81-9312-471-1

Paper published in International Journals

2018	
60.	Simplistic eco-friendly preparation of nanostructured Cu_2FeSnS_4 powder for solar photocatalytic degradation **Sharadrao A. Vanalakar**, Satish M. Patil, Vithoba L. Patil, Sagar A. Vhanalkar, Pramod S. Patil, Jin H. Kim Materials Science & Engineering B 229 (2018) 135–143 **Impact Factor: 2.552**
59.	Preparation, characterization of 1D ZnO nanorods and their gas sensing properties S. B. Jagadale, V. L. Patil, **S. A. Vanalakar**, P. S. Patil, H. P. Deshmukh Ceramics International 44 (2018) 3333-3340 **Impact Factor: 2.986**
58.	Single-step hydrothermally grown nanosheet-assembled tungsten oxide thin films for sensitive and selective NO_2 gas detection N. S. Harale, D. S. Dalavi, Sawanta S. Mali, N. L. Tarwal, **S. A. Vanalakar**, V. K. Rao, Chang Kook Hong, J. H. Kim, P. S. Patil Journal of Materials Science (2018) 1-8 **Impact Factor: 2.599**
57.	Fabrication of $Cu_2(Zn_xMg_{1-x})SnS_4$ thin films by pulsed laser deposition technique for solar cell applications G. L. Agawane, **S. A. Vanalakar**, A. S. Kamble, A. V. Moholkar, J. H. Kim Materials Science in Semiconductor Processing 76 (2018) 50–54 **Impact Factor: 2.359**
56.	Multi-applicative tetragonal TiO_2/SnO_2 nanocomposites for photocatalysis and gas sensing S. M. Patil, A. G. Dhodamani, **S. A. Vanalakar**, S. P. Deshmukh, S. D. Delekar Journal of Physics and Chemistry of Solids, 115 (2018) 127–136 **Impact Factor: 2.059**
2017	
55.	Fabrication of nanostructured ZnO thin films based NO_2 gas sensor via SILAR technique

	V. L. Patil, **S. A. Vanalakar**, P. S. Patil, J. H. Kim Sensors and Actuators B: Chemical, 239 (2017) 1185-1193 **Impact Factor: 5.401**
54.	Sensitive and selective NO_2 gas sensor based on WO_3 nanoplates S. S. Shendage, V. L. Patil, **S. A. Vanalakar**, S. P. Patil, N. S. Harale, J. L. Bhosale, J. H. Kim, P.S. Patil Sensors and Actuators B: Chemical, 240 (2017) 426–43 **Impact Factor: 5.401**
53.	NO_2 sensing properties of porous fibrous reticulated WO_3 thin films S. S. Shendage, V. L. Patil, S. P. Patil, **S. A. Vanalakar**, J. L. Bhosale, J. H. Kim, P.S. Patil Journal of Analytical and Applied Pyrolysis 125 (2017) 9-16 **Impact Factor: 3.471**
52.	Influence of surfactants on electrochemical growth of CdSe nanostructures and their photo-electrochemical performance A. S. Kamble, V. L. Patil, B. B. Sinha, **S. A. Vanalakar**, S. L. Dhere, S. S. Kale, P. S. Patil, J. H. Kim Journal of Solid State Electrochemistry 21 (2017) 2649-2653 **Impact Factor: 2.316**
51.	Photocatalytic degradation of methylene blue by hydrothermally synthesized CZTS nanoparticles Shilpa A. Phaltane, **S. A. Vanalakar**, T. S. Bhat, P. S. Patil, S. D. Sartale, L. D. Kadam Journal of Material Science: Materials for Electronics, 28 (2017) 8186–8191 **Impact Factor: 2.019**
50.	The green hydrothermal synthesis of nanostructured $Cu_2ZnSnSe_4$ as solar cell material and study of their structural, optical and morphological properties **S. A. Vanalakar**, G. L. Agawane, A. S. Kamble, P. S. Patil, J. H. Kim Applied Physics A 123 (2017) 782-7 **Impact Factor: 1.14**
49.	Effect of write voltage and frequency on the reliability aspects of Memristor-based RRAM T. D. Dongale, K. V. Khot, S. V. Mohite, N. D. Desai, S. S. Shinde, V. L. Patil,

	S. A. Vanalkar, A. V. Moholkar, K. Y. Rajpure, P. N. Bhosale, P. S. Patil, P. K. Gaikwad, R. K. Kamat International Nano Letters 7 (2017) 209-216 **SNIP : 0.612**
2016	
48.	Influence of laser repetition rate on the $Cu_2ZnSn(SSe)_4$ thin films synthesized via pulsed laser deposition technique **S. A. Vanalakar**, S. S. Mali, G. L. Agwane, P. S. Patil, J. Y. Kim, J. H. Kim Solar Energy Materials and Solar Cells, 157 (2016) 331-336 **Impact Factor: 4.784**
47.	Sulfur ion concentration dependent morphological evolution of CdS thin films and its subsequent effect on photo-electrochemical performance Archana Kamble, Bhavesh Sinha, Ganesh Agawane, **Sharad Vanalakar**, In Yung Kim, Jin Young Kim, Sampat S. Kale, Pramod Patil, Jin Hyeok Kim Physical Chemistry Chemical Physics, 18 (2016) 28024-28032 **Impact Factor: 4.123**
46.	Monodispersed wurtzite Cu_2SnS_3 nanocrystals by phosphine and oleylamine free facile heat-up technique Archana Kamble, Bhavesh Sinha, **Sharad Vanalakar**, Ganesh Agawane, Myeng Gil Gang, Jin Young Kim, Pramod Patil, Jin Hyeok Kim CrystEngComm, 18 (2016) 2885-2893 **Impact Factor: 3.474**
45.	Farming of maize-like zinc oxide via a modified SILAR technique as a selective and sensitive nitrogen dioxide gas sensor V. L. Patil, **S. A. Vanalakar**, A. S. Kamble, S. S. Shendage, J. H. Kim, P. S. Patil RSC Advances, 6 (2016) 90916-90922 **Impact Factor: 3.108**
44.	Spray pyrolyzed indium oxide thick films as NO_2 gas sensor S. P. Patil, V. L. Patil, S. S. Shendage, S. A. Vanalakar, J. H. Kim, P. S. Patil, Ceramics International, 42 (2016) 16160-16168

	Impact Factor: 2.986
43.	Compact nanoarchitectures of lead selenide via successive ionic layer adsorption and reaction towards optoelectronic devices T. S. Bhat, **S. A. Vanalakar**, N. S. Harale, J. H. Kim, P. S. Patil Journal of Materials Science - Materials in Electronics, 27 (2016) 4996-5005 **Impact Factor: 2.019**
42.	Sol-gel synthesized TiO_2-CeO_2 nanocomposite: An efficient photocatalyst for degradation of methyl orange under sunlight P. P. Hankare, T. M. Wandre, P. N. Gaikwad, K. M. Garadkar, **S. A. Vanalakar**, P. D. Lokhande, R. Sasikala Journal of Materials Science - Materials in Electronics, 27 (2016) 825-833 **Impact Factor: 2.019**
41.	Polyvinylpyrrolidone assisted wet chemical route to synthesize nanostructured cadmium sulfide thin film **S. A. Vanalakar**, M. G. Gang, P. S. Patil, J. Y. Kim, J. H. Kim, Indian Journal of Engineering and Materials Sciences, 23 (2016) 139-144 **Impact Factor: 0.485**
40.	Investigating the Temperature Effects on ZnO, TiO_2, WO_3 and HfO_2 Based Resistive Random Access Memory (RRAM) Devices T. D. Dongale, K. V. Khot, S. V. Mohite, S. S. Khandagale, S. S. Shinde, V. L. Patil, **S. A. Vanalkar**, A. V. Moholkar, K. Y. Rajpure, P.N. Bhosale, P. S. Patil, P. K. Gaikwad, R. K. Kamat Journal of Nano- and Electronic Physics, 8 (2016) 04030-4 **SNIP : 0.612**
2015	
39.	Controlled growth of ZnO nanorod arrays via wet chemical route for NO_2 gas sensor applications **Sharadrao A. Vanalakar**, Vithoba L. Patil, Namdev S. Harale, Sagar A. Vhanalakar, Myeng Gil Gang, Jin Young Kim, Pramod S. Patil, Jin Hyeok Kim Sensors and Actuators B 221 (2015) 1195–1201

	Impact Factor: 5.401
38.	Non-vacuum mechanochemical route to synthesis Cu_2SnS_3 nano-ink for solar cell applications **S. A. Vanalakar**, G. L. Agawane, S. W. Shin, H. S. Yang, P. S. Patil, J. Y. Kim, J. H. Kim Acta Materialia 85 (2015) 314-321 **Impact Factor: 5.301**
37.	Fabrication of Cu_2SnS_3 thin film solar cells using pulsed laser deposition technique **S. A. Vanalakar**, G. L. Agawane, A. S. Kamble, C. W. Hong, P. S. Patil, J. H. Kim Solar Energy Materials and Solar Cells, 138 (2015) 1–8 **Impact Factor: 4.784**
36.	Phase segregations and thickness of the $Mo(S,Se)_2$ layer in $Cu2ZnSn(S,Se)_4$ solar cells at different sulfurization temperatures S. W. Shin, K. V. Gurav, C. W. Hong, J. H. Gwak, H. R. Choi, **S. A. Vanalakar**, J. H. Yun, J. Y. Lee, J. H. Moon, J. H. Kim Solar Energy Materials and Solar Cells 143 (2015) 480-487 **Impact Factor: 4.784**
35.	Simplistic toxic to non-toxic hydrothermal route to synthesis of Cu_2ZnSnS_4 nanoparticles **S. A. Vanalakar**, A.S. Kamble, S.W. Shin, S.S. Mali, G.L. Agawane, V.L. Patil, J.Y. Kim, P.S. Patil, J.H. Kim, Solar Energy 122 (2015) 1146-1153 **Impact Factor: 4.018**
34.	A review on pulsed laser deposited CZTS thin films for solar cell applications **S. A. Vanalakar**, G. L. Agawane, S. W. Shin, M.P. Suryawanshi, K.V. Gurav, K.S. Jeon, P. S. Patil, C. W. Jeong, J. Y. Kim, J. H. Kim Journal of Alloys and Compounds, 619 (2015) 109-121 **Science Direct TOP 4 Hottest Article January to March 2015** **Science Direct TOP 7 Hottest Article October to December 2014** **Impact Factor: 3.133**
33.	A mild hydrothermal route to synthesis of CZTS nanoparticle inks for solar cell applications **S. A. Vanalakar**, G. L. Agwane, M. G. Gang, P. S. Patil, J. H. Kim and J. Y. Kim

	Physica Solidi State (C), 12 (2015) 500-503
32.	Pulsed electrodeposition of Cu_2ZnSnS_4 thin films: Effect of pulse potentials K. V. Gurav, Y. K. Kim, S. W. Shin, M. P. Suryawanshi, N. L. Tarwal, U. V. Ghorpade, S. M. Pawar, **S. A. Vanalakar**, I. Y. Kim, J. H. Yun, P. S. Patil, J. H. Kim Applied Surface Science, 334 (2015) 192–196 **Impact Factor: 3.387**
31.	Comparative study on the annealing types on the properties of Cu_2ZnSnS_4 thin films and their application to solar cells Chang Woo Hong, Seung Wook Shin, K.V. Gurav, **S. A. Vanalakar**, Soo Jung Yeo, Han Seung Yang, Jae Ho Yun, Jin Hyeok Kim Applied Surface Science 334 (2015) 180–184 **Impact Factor: 3.387**
30.	Improvement in the properties of CZTSSe thin films by selenizing single-step electrodeposited CZTS thin films K. V. Gurav, S. W. Shin, U. M. Patil, M. P. Suryawanshi, S. M. Pawar, M. G. Gang, **S. A. Vanalakar**, J. H. Yun, J. H. Kim Journal of Alloys and Compounds, 631 (2015) 178-182 **Impact Factor: 3.133**
29.	Synthesis of simple, low cost and benign sol-gel Cu_2ZnSnS_4 thin films: Influence of different annealing atmospheres G. L. Agawane, S. W. Shin, **S. A. Vanalakar**, M. P. Suryawanshi, A. V. Moholkar, J. H. Yun, J. H. Gwak, J. H. Kim Journal of Materials Science - Materials in Electronics, 26 (2015) 1900-1907 **Impact Factor: 2.019**
28.	Fabrication of 5.2% efficient $Cu2ZnSn(S,Se)_4$ solar cells using co-sputtered precursors followed by sulfo-selenization Han Sung Yang, Ganesh Agawane, Seung Wook Shin, **Sharadrao Vanalakar**, Woo Lim Jung, and Jin Hyeok Kim Physica Solidi State (C), 12 (2015) 708-712 **Cover Image of Physica Solidi State (C), 12 · No. 6 June 475–848 (2015), and**

	Most Accessed Article (Willey-VCH) June 2015
27.	A 5.1% efficient kesterite Cu_2ZnSnS_4 (CZTS) thin film solar cells prepared using modified sulfurization process Myeng G. Gang, Kishor V. Gurav, Seung W. Shin, Chang W. Hong, Jung H. Min, Mahesh P. Suryawanshi, **Sharad A. Vanalakar**, Dong S. Lee and Jin H. Kim Physica Solidi State (C), 12 (2015) 713-716 **Most Accessed Article (Willey-VCH) June 2015**
26.	Facile linker free growth of CdS nanoshell on 1-D ZnO: solar cell application Archana Kamble, Bhavesh Sinha, Kookchae Chung, Anup More, Changwoo Hong, **Sharad Vanalakar**, Jin Hyeok Kim, Pramod Patil Electronic Materials Letter, 11 (2015) 171-179 **Impact Factor: 1.790**
25.	Fabrication of 3.01% power conversion efficient high-quality CZTS thin film solar cells by a green and simple sol–gel technique G.L. Agawane, A.S. Kamble, **S.A. Vanalakar**, S.W. Shin, M.G. Gang, Jae Ho Yun, Jihye Gwak, A.V. Moholkar, Jin Hyeok Kim Materials Letters, 158 (2015) 58-61 **Impact Factor: 2.572**
24.	Controllable Synthesis of Stoichiometric Cu_2ZnSnS_4 Nanoparticles by Solvothermal Method and Its Properties **S. A.Vanalakar**, V. L. Patil, P.S. Patil, J. H. Kim AIP Conference Proceeding, 1665 (2015) 050061
23.	Synthesis and Characterization of Chemically Deposited ZnO Nanorods for NO_2 Gas Sensing Applications **Sharad A. Vanalakar**, Sagar A. Vhanalakar, Vithoba L. Patil, Namdev S. Harale, Bharat B. Kale, Pramod S. Patil, Jin H. Kim IEEE Xplore conference Proceeding, (2015) 245-248 DOI: 10.1109/ISPTS.2015.7220121
22.	Boosting the performance of ZnO/CdS core/shell nanorod arrays based solar cells by ZnS surface treatment

	A. S. Kamble, B. B. Sinha, K. C. Chung, S. S. Mali, **S. A. Vanalakar**, I. Y. Kim, C. K. Hong, J. Y. Kim, J. H. Kim, P. S. Patil Israel Journal of Chemistry, (2015) 1011-1016 **Impact Factor: 2.455**
2014	
21.	Improved photoelectrochemical performance of Cu_2ZnSnS_4(CZTS) thin films prepared using modified successive ionic layer adsorption and reaction (SILAR) sequence M. P. Suryawanshi, S. W. Shin, U. V. Ghorpade, K. V. Gurav, C. W. Hong, G. L. Agawane, **S. A. Vanalakar**, J. H. Moon, Jae Ho Yun, P. S. Patil, Jin Hyeok Kim, A. V. Moholkar Electrochimica Acta, 150 (2014) 136–145 **Impact Factor: 4.798**
20.	Effect of post-annealing atmosphere on the grain-size and surface morphological properties of pulsed laser deposited CZTS thin films **S. A. Vanalakar**, S. W. Shin, G. L. Agawane, M. P. Suryawanshi, K. V. Gurav, P. S. Patil, J. H. Kim Ceramics International, 40 (2014) 15097-15103 **Science Direct TOP 7 Hottest Article October to December 2014** **Science Direct TOP 10 Hottest Article July to September 201**4 **Impact Factor: 2.986**
19.	Photoluminescence quenching of a CdS nanoparticles/ZnO nanorods core–shell heterogeneous film and its improved photovoltaic performance **S. A. Vanalakar**, S. S. Mali, M. P. Suryawanshi, N. L. Tarwal, P. R. Jadhav, G. L. Agawane, K. V. Gurav, A. S. Kamble, S. W. Shin, A. V. Moholkar, J. Y. Kim, J. H. Kim, P. S. Patil Optical Materials, 37 (2014) 766-772 **Science Direct TOP 17 Hottest Article October to December 2014** **Impact Factor: 2.238**
18.	Simplistic surface active agents mediated morphological tweaking of CdS thin films for photoelectrochemical solar cell performance **S. A. Vanalakar**, M. P. Suryawanshi, S. S. Mali, A. V. Moholkar, J. Y. Kim, P. S. Patil, J. H. Kim

	Current Applied Physics, 14 (2014) 1669-1676 **Science Direct TOP 24 Hottest Article October to December 2014** **Impact Factor: 1.971**
17.	Non-toxic novel route synthesis and characterization of nanocrystalline $ZnS_xSe_{(1-x)}$ thin films with tunable band gap characteristics G. L.Agawane, SeungWook Shin, **S. A. Vanalakar**, A. V. Moholkar, K. V. Gurav, M. P. Suryawanshi, Jeong Yong Lee, Jae Ho Yun, Jin Hyeok Kim Materials Research Bulletin, 55 (2014) 106-113 **Science Direct TOP 25 Hottest Article October to December 2014** **Impact Factor: 2.446**
16.	Triton-X mediated interconnected nanowalls network of cadmium sulfide thin films via chemical bath deposition and their photoelectrochemical performance **S. A. Vanalakar**, S. S. Mali, E. A. Jo, J. Y. Kim, J. H. Kim, P. S. Patil Solid State Sciences, 36 (2014) 41-46 **Impact Factor: 1.811**
15.	Thickness Dependent Photoelectrochemical Performance of Chemo-Synthesized Nanostructured CdS Thin Films **Sharadrao A. Vanalakar**, Sawanta S. Mali, Mahesh P. Suryawanshi, Nilesh L. Tarwal, Ganesh L. Agawane, Kishor V. Gurav, Seung W. Shin, Annasaheb V. Moholkar, Jin H. Kim, Pramod S. Patil Zeitschriftfür Physikalische Chemie 228 (2014) 817-827 **Impact Factor: 1.356**
14.	Structural, Optical, Surface Morphological and Electrical Properties of Cu_2ZnSnS_4 Thin Film Synthesized by Drop Casting Technique **S. A. Vanalakar**, S. J. Yeo, P. S. Patil, J. Y. Kim, J. H. Kim Zeitschrift für Physikalische Chemie 228 (2014) 917-926 **Impact Factor: 1.356**
13.	Investigations on Chemo-Mechano Stabilities of the Molybdenum Thin Films Deposited by DC-Sputter Technique Ganesh L. Agawane, Seung W. Shin, **Sharadrao A. Vanalakar**, Mahesh P. Suryawanshi,

	Annasaheb V. Moholkar, Jin H. Kim Zeitschrift für Physikalische Chemie, 229 (2014) 377–393 **Impact Factor: 1.356**
12.	Next generation promising $Cu_2(Zn_xFe_{1-x})SnS_4$ photovoltaic absorber material prepared by pulsed laser deposition technique G. L. Agawane, S. W. Shin, **S. A. Vanalakar**, A. V. Moholkar, J. H. Kim Materials Letters, 37 (2014) 147-149 **Impact Factor: 2.572**
11.	Synthesis, structural, morphological, compositional and electrical transport properties of polyaniline/α-Fe_2O_3hybrid nanocomposites D. K. Bandgar, S. T. Navale, **S. A. Vanalkar**, J. H. Kim, N. S. Harale, P. S. Patil, V. B. Patil Synthetic Metals, 195 (2014) 350–358 **Impact Factor: 2.435**
2013	
10.	CdS sensitized ZnO nanorods for solar cell application: Synthesis and Characterization **S. A. Vanalakar**, S. S. Mali, D. S. Dalavi, M.P. Suryawanshi, A.V. Moholkar, P. S. Patil Bharati Vidhyapeeth Deemed University Research Journal, Vol. X, 1, 2013, 3-7 (ISSN: 2231-0975)
9.	Synthesis of EDTA mediated cadmium sulfide thin films **S. A. Vanalakar**, S. S. Mali, P. P. Vhangutte, A. V. Moholkar, P. S. Patil Bharati Vidhyapeeth Deemed University Research Journal, Vol. X, 1, 2013, 89-93 (ISSN: 2231-0975)
2012	
8.	Photoelectrochemical properties of CdS nanoparticles sensitized ZnO nanorod arrays: Effect of nanorod length **S. A. Vanalakar**, R. C. Pawar, N. L. Tarwal, S. S. Mali, A. V. Moholkar, J. H. Kim, P. S. Patil Journal of Applied Physics, 112 (2012) 044302 **Impact Factor: 2.068**
7.	Farming of ZnO nanorod arrays via aqueous chemical route for photoelectrochemical solar

	cell application **S. A. Vanalakar**, S. S. Mali, R. C. Pawar, D. S. Dalavi, A. V. Mohalkar, H. P. Deshamukh, P. S. Patil Ceramics International 38 (2012) 6461–6467 **Impact Factor: 2.986**
6.	Synthesis of Zinc Oxide Thin Films For Solar Cell Application **S. A. Vanalakar** International Journal of Advances in Management, Technology & Engineering Sciences, Vol. I, Issue 6 (IX), March 2012, 94-96 (ISSN: 2249-7455)
2011	
5.	Synthesis of Cadmium Sulfide Spongy Balls With Nanoconduits For Effective Light Harvesting **S A Vanalakar**, S S Mali, A V Moholkar, R C Pawar, N L Tarwal, Jin A Kim, Ye-bin Kwon, J H Kim, P S Patil Electrochimica Acta, 56 (2011) 2762-2768 **Impact Factor: 4.798**
4.	Nanoporous Nickel Oxide Thin Films and Its Improved Electrochromic Performance: Effect of Thickness D S Dalavi, M J Suryavanshi, D S Patil, S S Mali, A V Moholkar, S S Kalagi, **S A Vanalkar**, S R Kang, J H Kim, P S Patil Applied Surface Science, 257 (2011) 2647-2656 **Impact Factor: 3.387**
3.	Low Temperature Aqueous Chemical Synthesis of CdS Sensitized ZnO Nanorods **S A Vanalakar**, R C Pawar, M P Suryawanshi, S S Mali, D S Dalavi, A V Moholkar, K U Sim, Y B Kown, J H Kim, P S Patil Materials Letters, 65 (2011) 548-551 **Impact Factor: 2.572**
2.	Photoluminescence of Zinc Oxide Nanopowder Synthesized by a Combustion Method N. L. Tarwal, P. R. Jadhav, **S. A. Vanalakar**, S. S. Kalagi, R. C. Pawar, J. S. Shaikh, S. S. Mali, D. S. Dalavi, P. S. Shinde, P. S. Patil

	Powder Technology, 208 (2011) 185-188 **Impact Factor: 2.942**
2010	
1.	Quantum Size Effect in Chemosynthesized Nanostructured CdS Thin Films **S. A. Vanalakar**, S. S. Mali, M. P. Suryavanshi, P. S. Patil Digest Journal of Nanomaterials and Biostructures, 5 (2010) 805-810 **Impact Factor: 0.836**

13. Details of Patents:

1) Method of manufacturing multinary chalcogenide semiconductor nanoparticles via non-toxic hydrothermal route for photo-voltaic and photo-degradation applications
   (Under preparation)
2) Ternary chalcogenide nanocrystals for rapid dye-degradation
   (Under preparation)
3) Efficient and sensitive Wireless NO_2 Sensor using ZnO Interdigitated Electrode
   (Under preparation**)**

14. Papers presented at International/National conference /seminar/ symposium

1.	Studies on evolution of CuMO (M=1 and 2) phases by vacuum evaporation B. B. Dhale, S. D. Patil, **S. A. Vanalakar**, A. I. Inamdar, P. S. Patil International Conference on Advanced Materials and Applications-2007 Organized by Dept. of Physics, Shivaji University, Kolhapur
2.	Solution-based synthesis of CdS-ZnO composite and their photoelectrochemical performance **S A Vanalkar**, M P Suryawanshi, N D Koshti, N L Tarwal, R C Pawar, P R Jadhav, P S Patil National Conference on Commercialization of Renewable Energy Technology Organized by Dr. D. Y. Patil University, Kolhapur
3.	Wet chemical synthesized CdS-modified ZnO nanorod-arrays photoelectrode: preparation, characterization and application to photo-electrochemical cell's **S A Vanalakar**, R C Pawar, N L Tarwal, P R Jadhav, M P Survanshi, N D Koshti, P S Patil National Seminar on Advanced Materials-2010 (NSAM-2010)

	Organized by Dept. of Physics, Shivaji University, Kolhapur
4.	Chemical bath deposited CdS thin films for solar cell applications **S A Vanalakar**, S S Mali, D S Dalavi, A S Kamble, M P Survanshi, N D Koshti, P S Patil National Seminar on Advanced Materials-2010 (NSAM-2010) Organized by Dept. of Physics, Shivaji University, Kolhapur
5.	Growth of Chemo-synthesized nanostructured CdS spongy ball **S. A. Vanalakar**, S. S. Mali, P. S. Patil National Conference on Recent Trends in Harnessing of Non-Conventional Energy Resources Organized by Vivekanand College, Kolhapur
6.	Effect of deposition time on photoelectrochemical performance of CdS sensitized ZnO thin films **Sharadrao A Vanalakar**, Sawanta S Mali, and Pramod S Patil Advances in Synthetic Methodologies and New Materials Organized by Dept. of Chemistry, Shivaji University, Kolhapur
7.	Effect of annealing temperature on photoelectrochemical performance of CdS sensitized ZnO thin films **Sharadrao A Vanalakar**, Sawanta S Mali, and Pramod S Patil National Seminar on Physics of Materials and Materials Based Device Fabrication Organized by Dept. of Physics, Shivaji University, Kolhapur
8.	Photoelectrochemical properties of CdS sensitized ZnO: Effect of nanorod length **S. A. Vanalakar**, S. S. Mali, R.C.Pawar, N.L.Tarwal, A.V.Mohalkar, P. S. Patil 1st International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2012) Organized by Dept. of Physics, Shivaji University, Kolhapur
9.	CdS nanoparticles sensitized TiO_2 nano-polyp-particles: Synthesis and Characterization **S. A. Vanalakar**, S. S. Mali, P. S. Patil 1st International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2012) Organized by Dept. of Physics, Shivaji University, Kolhapur
10.	The effect of non-ionic surface active agents on the photo-electrochemical properties of CdS thin films **S. A. Vanalakar**, S. S. Mali, M. P. Suryanshi, A.V. Mohalkar, P. S. Patil

	National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials Organized by Dept. of Chemistry, Shivaji University, Kolhapur
11.	Synthesis of Zinc Oxide Thin Films for Solar Cell Application **S. A.Vanalakar** International Conference on Current Trends and Challenges in Management, Engineering, Computer Application and Technology (ICCTCMECAT-2012) Organized by Deogiri Institute of Engineering and Management, Aurangabad, Maharashtra
12.	Wet Chemical Synthesis and Photo-electro-chemical Performance of CdS Thin Films **S. A. Vanalakar**, S. S. Mali, P. P. Vhangutte, A. V. Moholkar, P. S. Patil Organized by Bharati Vidhyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli
13.	CdS sensitized ZnO nanorods for solar cell application: Synthesis and Characterization **S. A. Vanalakar**, S. S. Mali, D. S. Dalavi, M.P. Suryawanshi, A.V. Moholkar, P. S. Patil 2nd International Conference on Nanotechnology NANOCON 012 Organized by Bharati Vidyapeeth Deemed University, Pune Oct. 18-19, 2012
14.	Synthesis of EDTA mediated cadmium sulfide thin films **S. A.Vanalakar**, S. S. Mali, P. P. Vhangutte, A. V. Moholkar, P.S. Patil 2nd International Conference on Nanotechnology NANOCON 012 Organized by Bharati Vidyapeeth Deemed University, Pune Oct. 18-19, 2012
15.	Photoelectrochemical Solar Cell Performance of CdS Sensitized TiO_2 Thin Films: Effect of Deposition Time **S.A.Vanalakar,** P. S. Patil International Conference on Advanced Polymeric Materials (ICAPM 013) Organized by Mahatma Ghandhi University, Kottayam, Kerala October 11 to 13, 2013
16.	Synthesis and characterization of ZnO thin films via wet chemical route **S. A.Vanalakar**, S. S. Mali, R. C.Pawar, D. S. Dalavi, V.L. Patil, N. S. Harale, P. P. Vhangutte, A. V. Mohalkar, J. H. Kim, P. S.Patil 2nd International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2014) January 13-15, 2014

17.	Synthesis of flower like ZnO microstructure by using aqueous chemical route V. L. Patil, N. S. Harale, **S. A. Vanalakar**, P. P. Vhangutte, J. H. Kim, P. S. Patil National Conference of Material Future Technology 2014 Organized by Rajaram College, Kolhapur Sept. 26 to 27, 2014
18.	Fabrication of flower-like ZnO nanostructure for NO gas detection V.L. Patil, N.S. Harale, N.L. Tarwal, S.D. Patil, S.S. Jadhav, **S.A. Vanalakar**, J.H. Kim, P.S. Patil National Conference of Material Future Technology 2014 Organized by Rajaram College, Kolhapur Sept. 26 to 27, 2014
19.	Synthesis and characterization of TiO_2 thin films by successive ionic layer adsorption and reaction technique V. L. Patil, N. S. Harale, **S. A. Vanalakar**, P. P. Vhangutte, J. H. Kim, P. S. Patil 3^{rd} National Seminar on Physics of Materials and Materials Based Device Fabrications (3^{rd} NSPM-MDF 2014) Organized by Department of Physics, Shivaji University, Kolhapur Dec. 20 and 21, 2014
20.	Modified wet chemical deposited SnO2 thin films for gas sensing applications V. L. Patil, **S. A. Vanalakar**, J. Kim, P. S. Patil The International Symposium on Physics and Technology of Sensors (ISPTS-2) 2015 Organized by Centre for Materials for Electronics Technology (C-MET), Pune (India) Oct. 8 to 10, 2015
21.	Wet chemical synthesis and characterization of Cu doped ZnO nanostructured arrays for gas sensing applications **S. A. Vanalakar**, J. Kim, V. Patil, N. Harale, B. Kale, G. Agwane, A. Kamble, P. Patil The International Symposium on Physics and Technology of Sensors (ISPTS-2) 2015 Organized by Centre for Materials for Electronics Technology (C-MET), Pune (India) Oct. 8 to 10, 2015
22.	Synthesis and characterization of chemically deposited ZnO nanorods for NO2 gas sensing applications S. Vhanalakar, **Sharad Vanalakar**, J. Kim The International Symposium on Physics and Technology of Sensors (ISPTS-2) 2015 Organized by Centre for Materials for Electronics Technology (C-MET), Pune (India)

	Oct. 8 to 10, 2015
23.	Boosting the performance of ZnO/CdS core-shell nanorod array based semiconductor solar cells by ZnS surface treatment Archana S. Kamble, Bhavesh B. Sinha, **Sharad A. Vanalakar**, Myeng G. Gang, Pramod S. Patil, Jin Hyeok Kim International Conference on Emerging Trends in Basic and Applied Science (ETBAS-2015) Organized by Karmveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal-Bhudargad, Dist-Kolhapur 10 March 2015
24.	Next generation promising $Cu_2(Zn_xFe_{1-x})SnS_4$ absorber material prepared by pulsed laser deposition G. L. Agawane, **S. A. Vanalakar**, A. V. Moholkar, Jin Hyeok Kim International Conference on Emerging Trends in Basic and Applied Science (ETBAS-2015) Organized by Karmveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal-Bhudargad, Dist-Kolhapur 10 March 2015
25.	SILAR deposited TiO_2 thin films for gas sensor application V. L. Patil, N. S. Harale, N. L. Tarwal, **S. A. Vanalakar**, P. P. Vhangutte, J. H. Kim, P. S. Patil International Conference on Emerging Trends in Basic and Applied Science (ETBAS-2015) Organized by Karmveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal-Bhudargad, Dist-Kolhapur 10 March 2015
26.	NO_2 sensor based on PPY/SnO_2 hybrid nanocomposites R.D. Sakhare, A.T. Mane, M.A. Chougule, **S. A. Vanalkar**, J. H. Kim and V.B. Patil International Conference on Emerging Trends in Basic and Applied Science (ETBAS-2015) Organized by Karmveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal-Bhudargad, Dist-Kolhapur 10 March 2015
27.	Toxic NO_2 sensing performance of DBSA doped PPY-WO_3 hybrid nanocomposite sensor at room temperature A. T. Mane, S. T. Navale, P. S. Kulkarni, **S. A. Vanalkar**, J. H. Kim and V.B. Patil

	International Conference on Emerging Trends in Basic and Applied Science (ETBAS-2015) Organized by Karmveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal-Bhudargad, Dist-Kolhapur 10 March 2015
28.	Wet chemically synthesized TiO_2 nanocrystalline thin films for gas sensor applications **S. A. Vanalakar**, S. A. Vhanalkar, V. L. Patil, J. H. Kim, P. S. Patil International conference on Advances in micro/nanotechnologies for biological applications ICAMB-2015 Organized by PNG Institute of Technology, Coimbatore August 7 and 8, 2015
29.	Influence of metal dopants on structural and gas sensing characteristics of SnO_2 nanostructures **S. A. Vanalakar**, V. L. Patil, P. S. Patil 3rd International Conference on Nanostructured Materials and Nanocomposites (ICNM-2015) Organized by Hindustan College of Science and Technology, Farah (Mathura) U.P. December 12 to 14, 2015
30.	Synthesis and characterization of drop casted SnO_2 nanocrystalline thin films for gas sensor applications V. L. Patil, **S. A. Vanalakar**, P. S. Patil 3rd International Conference on Nanostructured Materials and Nanocomposites (ICNM-2015) Organized by Hindustan College of Science and Technology, Farah (Mathura) U.P. December 12 to 14, 2015
31.	Enhanced NO_2 gas sensing properties of flower-like ZnO microstructure V. L. Patil, P. M. Kadam, S. S. Kumbhar, **S. A. Vanalakar**, S. S. Shendage, J. H. Kim, P. S. Patil Proceeding of International conference on Advances in Materials Science (2016) 337-342 ISBN 978-93-5254-490-5
32.	Enhanced perovskite solar cells synthesized via controlled mixed solution route **S. A. Vanalakar** International Conference on Nanostructures for Energy Applications 2017

	Organized by EMN Society of Science and Technology, Orlando, USA February 19 to 23, 2017
33.	Fabrication of efficient perovskite solar cells via solution route **S. A. Vanalakar** Nano@IAState 2017 Organized by School of Chemical Sciences, Iowa State University, Ames, USA July 27, 2017

15. Other Information

1 Personal Objective

- To become a Good Teacher of Physics
- To innovate new Techniques of Teaching of Physics (FUN and LEARN)
- Seeking challenges towards successful Research and Development of Nanostructured Materials.
- To prepare Thin Films by Physical and Chemical routes and study its Structural, Surface Morphological, Optical, Electrical and Photoelectrochemical Properties.
- To improve the Thin Films Quality for its multiple use.

2 Technical Skills

2.1 Equipment's

Well versed with operation of equipment's used in the Manufacturing Process. Experience in handling of-

1) UV-Visible Spectrophotometer
2) Surface Profiler
3) Fourier Transform –Raman Spectrophotometer
4) Scanning Electron Microscope
5) Transmission Electron Microscopy
6) Fume Spectrophotometer
7) Atomic Absorption Spectrometer
8) Computer
9) M. S. Office
10) Windows
11) Internet Literature Search Techniques

2.2 Thin Film Deposition Techniques

Comprehensive knowledge and expertise in special hand in operation and maintenance of

- Pulsed Laser Deposition (PLD)
- Thermal Evaporation
- Sputtering
- Molecular Beam Epitaxy (MBE)
- Spray Pyrolysis Technique (SPT)
- Aqueous Chemical Method-Reflux
- Electrodeposition Technique
- Chemical Bath Deposition (CBD) technique
- Successive Ionic Layer Adsorption and Reaction (SILAR) method

2.3 Characterization Techniques

Experience in data analysis of

1) XRD (X-Ray Diffraction Spectroscopy)
2) UV-VIS spectroscopy (Ultra Violet and Visible Spectroscopy)
3) XPS (X-ray Photoelectron Spectroscopy)
4) EDAX (Energy Dispersive X-ray Analysis)
5) FT-Raman (Fourier Transform –Raman Spectroscopy)
6) SEM (Scanning Electron Microscopy)
7) TEM (Transmission Electron Microscopy)
8) AFM (Atomic Force Microscopy)
9) Fume Photometer
10 AAS (Atomic Absorption Spectrometer)

2.4 Participation in Extra-curricular activities

i) Worked as a News Reporter for 'Daily Lokmat' – A Leading Marathi Newspaper in Maharashtra (2001-2008)

ii) Editor: Journal of Science Research International, Asian Journal of Transdisciplinary Research

iii) Editorial Board Member: ACE Journal of Advance Research in Chemical Sciences, ACE Journal of Advanced Research Physical Sciences, Imaging and Radiation Research and The Scientific Pages of Photonics and Optics.

iv) Reviewer: Solar Energy, Journal of Industrial and Engineering Chemistry, Materials and Design, Analytical Chemistry, Physical Chemistry Chemical Physics, Journal of Materials Chemistry C, Applied Surface Science, Journal of Applied Electrochemistry, Thin Solid Films, Materials Research Express, Applied Physics: A, Asia-Pacific Journal of Chemical Engineering, Materials Science in Semiconductor Processing, Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry, Superlattices and Microstructures, Surface Review and Letters, Journal of

Nanomaterials, Advances in Materials Science and Applications, Progress in Nanotechnology and Nanomaterials, Research & Development in Material Science, etc.

v) Reviewer for the conferences: 57th DAE Solid State Physics Symposium 2012 at IIT, Mumbai, 58th DAE Solid State Physics Symposium 2013 at Punjab University, Jalandhar, International Conference on Advanced Electromaterials

vi) Chairperson, Session: 'Polymer for Energy-II' at International Conference on Advanced Polymeric Materials organized by Mahatma Gandhi University, Kottayam, Kerala

vii) Convener, International Conference on Emerging Trends in Basic and Applied Science (ETBAS-2015) at Karmaveer Hire Arts, Commerce, Science and Education College, Gargoti on 10 March 2015

viii) International Conference Organization Member: Baltic Conference Series 2017, Sweden

2.5 Invited Talks

Scientific/Research

1) Karmaveer Hire Arts, Science, Commerce and Education College, Gargoti,
Topic: Surface and Collides
15 March 2010

2) MSBTE sponsored CUP at Institute of Civil and Rural Engineering, Gargoti
Topic: Energy Resources: Need, Fact and Impact
5 Jan. 2012
Topic: Home Made Solar Cell
6 Jan. 2012

3) Indian Institute of Technology (IIT) Roorkee organized QIP on 'Essentials of Nanoscience and Nanotechnology'
Topic: Synthesis of 1-D Nanostructured Quantum Dot Sensitized Solar Cell
22 Feb. 2013

4) International Conference on Advanced Polymeric Materials (ICAPM 013)
Organized by Mahatma Ghandhi University, Kottayam, Kerala
Topic: Polyvinylpyrrolidone assisted wet chemical route to synthesize nanostructured cadmium sulfide thin film
October 11, 2013

Academic/Social/others

5) Yuva Gramin Vikas Sanstha, Gargoti (M.S.)
Topic: Employment through Science Education
2005-2008

6) Bhumi Gramin Vikas Sanstha, Nigave Khalasa (M.S.)
Topic: Science Education
2008-10

7) Directorate of Technical Education, Mumbai and Maharashtra State Board of Technical Education (MSBTE) sponsoredCareer Fair on Wheel
Topic: Opportunities in Technical Education
At a) Walva Sanik School, Walva
b) Doodhsakhar School and Jr. Collage, Bidri
c) N. Ranade School and Jr. Collage, Kapshi
Sept. 30 to Oct. 1, 2013

8) Directorate of Technical Education, Mumbai and Maharashtra State Board of Technical Education (MSBTE) sponsored Career Fair on Wheel
Topic: What after 10th standard?
At a) Hamidwada High School, Hamidwada, Tal-Kagal
b) Khorate High School and Jr. Collage, Sarwade, Tal-Radhanagari
Jan. 9, 2015

2.6 Minor/Major Projects completed

1. The project entitled "Synthesis and Characterization of Nanostructured Metal Oxides for Gas Sensor Applications" (SR/FTP/PS-083) under the Physical Sciences by the SERB-DST, New Delhi for three years duration (14.30 Lakhs Indian Rupees) has been completed as a Principal Investigator (P.I.)

2. The Indo-Egypt Collaborative Research Project (DST/INT/Egypt/P-10/2016) is ongoing till 20-10-2018 as Co-PI

2.7 Conference/Workshop/Training program attended

National Conference:	09	International Conference:	12
National Workshop:	11	International Workshop:	02
Training at National level:	07	Training at International level:	05

Sr. No.	Name of Conference	Level of Conference	Year	Organizer	Date
1.	Workshop on Maharashtra State Eligibility Test for Physics	Workshop	2002	Dept. of Physics, Shivaji University, Kolhapur	July 28 to 30, 2002
2.	First Convention of IAPT sub RC 5D	Workshop	2005	Vivekanand College, Kolhapur	December 10 to 11, 2005
3.	National Seminar on	National	2006	Dept. of Physics,	January 23

	Materials for Advanced Technologies (NASMAT-2006)	Seminar		Shivaji University, Kolhapur	to 25, 2006
4.	Campaign on University Research and Training (COURT-2006)	Workshop	2006	Dept. of Physics, Shivaji University, Kolhapur	October 6 to 7, 2006
5.	Preparation of Proposal of Minor and Major Research Projects	Workshop	2006	Doodhsakhar Mahavidyalaya, Bidri	17 October 2006
6.	International Conference on Advanced Materials and Applications-2007 (ICAMA-2007)	International Conference	2007	Dept. of Physics, Shivaji University, Kolhapur (India)	November 15 to 17, 2007
7.	Commercialization on Renewable Energy Technology	National Conference	2009	Dr. D. Y. Patil University, Kolhapur	October 21 to 23, 2009
8.	Maharashtra State Board of Technical Education (MSBTE), Mumbai sponsored Programme on "Solar Thermal and Solar PV System"	Workshop	2010	B. L. Patil Polytechnic, Khopoli	February 22 to 26, 2010
9.	National Seminar on Advanced Materials-2010 (NSAM-2010)	National Seminar	2010	Dept. of Physics, Shivaji University, Kolhapur	March 19 to 20, 2010
10.	Maharashtra State Board of Technical Education (MSBTE), Mumbai sponsored Programme on "Need of a New Energy Revolution"	Workshop	2010	Nutan Maharashtra Vidya Polytechnic, Talegaon, Pune	October 4 to 8, 2010
11.	National Seminar and	National	2010	Dept. of	October

	Exhibition on Emerging Trends in Renewable and Non Renewable Energy Technologies	Seminar		Technology, Shivaji University, Kolhapur	22, 2010
12.	National Conference on Recent Trends in Harnessing of Non-Conventional Energy Resources	National Conference	2010	Vivekanand College, Kolhapur	December 15 to 16, 2010
13.	Advances in Synthetic Methodologies and New Materials	National Conference	2011	Dept. of Chemistry, Shivaji University, Kolhapur	January 21 to 22, 2011
14.	National Seminar on Physics of Materials and Materials Based Device Fabrication	National Seminar	2011	Dept. of Physics, Shivaji University, Kolhapur	February 17 to 18, 2011
15.	National Institute of Technical Teacher Training and Research (NITTTR) sponsored programme on "Staff Development Programme-Induction Phase-I"	Workshop	2011	NITTTR, Extension Centre, Pune	July 4 to 15, 2011
16.	All India Council for Technical Education (AICTE) sponsored Centre for Development of Technical Education's Quality Improved Programme (QIP) on "Law and Economics"	Workshop	2011	Dept. of Humanities and Social Science, Indian Institute of Technology (I.I.T.), Kanpur (U.P.)	October 3 to 9, 2011
17.	All India Council for Technical Education (AICTE) sponsored Centre for	Workshop	2012	Dept. of Civil Engineering, Indian Institute of	January 9 to 13, 2012

	Development of Technical Education's Quality Improved Programme (QIP) on "Integrated Solid Waste Management"			Technology (I.I.T.), Guwahati (Assam)	
18.	1st International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2012)	International Conference	2012	Dept. of Physics, Shivaji University, Kolhapur (India)	January 17 to 19, 2012
19.	National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials	National Seminar	2012	Dept. of Chemistry, Shivaji University, Kolhapur (India)	January 21 to 22, 2012
20.	International Conference on Current Trends and Challenges in Management, Engineering, Computer Application and Technology (ICCTCMECAT-2012)	International Conference	2012	Deogiri Institute of Engineering and Management, Aurangabad (India)	March 23 to 25, 2012
21.	UGC sponsored National Seminar on Chemistry and its Role in Human Development	National Seminar	2012	Dr. Patangrao Kadam College, Sangali (India)	26 March 2012
22.	All India Council for Technical Education (AICTE) sponsored Centre for Development of Technical Education's Quality Improved Programme (QIP) on "Hazardous Waste, Batteries Waste and E-waste	Workshop	2012	Dept. of Chemical Engineering, Indian Institute of Technology (I.I.T.), Roorkee (Uttarkhand)	June 11 to 16, 2012

	Management"				
23.	Orientation Workshop of Physics	Workshop	2012	Dr. J. J. Magdum Polytechnic, Jaysingpur	13 August 2012
24.	IInd International Conference on Nanotechnology-Innovative Materials, Processes, Products and Applications (NANOCON 012)	International Conference	2012	Bharati Vidyapeeth University, Pune, Maharashtra (India)	October 18 to 19, 2012
25.	2-week ISTE Workshop on Engineering Thermodynamics	Workshop	2012	Indian Institute of Technology (I.I.T.), Bombay	December 11 to 21, 2012
26.	2 day's Workshop for Training Question Paper Setters	Workshop	2013	Government Polytechnic, Kolhapur	March 1 to 3, 2013
27.	All India Council for Technical Education (AICTE) sponsored Centre for Development of Technical Education's Quality Improved Programme (QIP) on "Essentials of Nanoscience and Nanotechnology"	Workshop	2013	Indian Institute of Technology (I.I.T.), Roorkee (Uttarkhand)	February 18 to 22, 2013
28.	One day Workshop on Organic Electronic Devices	Workshop	2013	Department of Technology, Shivaji University, Kolhapur	24 September 2013
29.	International Conference on	International	2013	Mahatma Ghandhi	October

	Advanced Polymeric Materials (ICAPM 013)	Conference		University, Kottayam, Kerala (India)	11 to 13, 2013
30.	Global Photovoltaic Conference 2013 (GPVC 2013)	International Conference	2013	Korea Photovoltaic Society, Korea at BEXCO, Busan (South Korea)	November 10 to 11, 2013
31.	19th International Conference on Ternary and Multinary Compounds (ICTMC-19)	International Conference	2014	Niigata University, Niigata (Japan)	September 1 to 5, 2014
32.	Asian Conference on Nanoscience and Nanotechnology (Asia NANO 2014)	International Conference	2014	Korea Printed Electronics Association, Jeju (South Korea)	October 26 to 29, 2014
33.	59th DAE Solid State Physics Symposium (DAE-SSPS-2014)	International Conference	2014	VIT University, Vellore, Tamilnadu (India)	December 16 to 20, 2014
34.	One day Workshop on Recent Trends in Nanotechnology	Workshop	2015	Bhogawati College, Kurukali	23 January 2015
35.	Indo-Japan Workshop on Sensing Mechanisms, Materials and Applications	Workshop	2015	Centre for Materials for Electronics Technology (C-MET), Pune (India)	7 March 2015
36.	The International Symposium on Physics and Technology of Sensors (ISPTS-2) 2015	International Conference	2015	Centre for Materials for Electronics Technology (C-MET), Pune (India)	March 8 to 10, 2015

37.	International conference on Advances in micro/nanotechnologies for biological applications ICAMB-2015	International Conference	2015	PSG Institute of Advanced Studies, Coimbatore, Tamilnadu (India)	August 7-8, 2015
38.	3rd international conference on nanostrctured materials and nanocomposites ICNM-2015	International Conference	2015	Hindustan College of Science and Technology, Farah, Mathura, Utter Pradesh (India)	December 12-14, 2015
39.	Worker Right-to-Know OSHA Hazard Communication Standard Training	International online training	2016	Iowa State University, Ames, Iowa state, USA	October 5 to 8, 2016
40.	Fire Safety and Extinguisher Training	International online training	2016	Iowa State University, Ames, Iowa state, USA	October 5 to 8, 2016
41.	Laboratory Safety: Laboratory Inspections	International online training	2016	Iowa State University, Ames, Iowa state, USA	October 5 to 8, 2016
42.	Laboratory Safety: Core Concept	International online training	2016	Iowa State University, Ames, Iowa state, USA	October 5 to 8, 2016
43.	Waste and Recycling Guidelines for Laboratory Personnel	International online training	2016	Iowa State University, Ames, Iowa state, USA	October 5 to 8, 2016
44.	International Conference on Nanostructures for Energy Applications 2017	International Conference	2017	EMN Society of Science and Technology, Orlando, USA	February 19 to 23, 2017
45.	Nano@IAState	International Conference	2017	Iowa State University, Ames,	July 27, 2017

				Iowa state, USA	

2.8 Conference/Workshop/Training program organized

1. Institute of Civil and Rural Engg. Sponsored and in association with Bhaba Atomic Research Centre (BARC), Mumbai
   "One day Workshop for Student and Farmers"
   24 Sept. 2005
2. Maharashtra State Board of Technical Education (MSBTE) sponsored One Week Content Updating Program (CUP) on
   "Harvesting of Non-Conventional Energy Resources: Research and Industrial Approach"
   January 2 to 6, 2012
3. Directorate of Technical Education (DTE), Mumbai and Maharashtra State Board of Technical Education (MSBTE) sponsored
   "Career Fair on Wheel"
   At 1) Mouni Maharaj (Banaras) Education Complex, Gargoti
   2) Shivraj School and Jr. Collage, Murgud
   3) Walva Sanik School, Walva
   4) Doodhsakhar School and Jr. Collage, Bidri
   5) N. Ranade School and Jr. Collage, Kapshi
   6) Uttur School and Jr. Collage, Uttur Sept. 30 to Oct. 1, 2013
4. International Conference on "Emerging Trends in Basic and Applied Sciences
   March 10, 2015

2.9 Memberships

i) Life Member, Indian Society for Technical Education, New Delhi
ii) Full Member, The international NanoScience Community, New Jearcy

2.10 Positions held

2.10.1 Academic

1) Academic Head, Department of Science and Humanities, ICRE (2008-2013)
2) Head, Physics Lab., K. H. College, Gargoti (2014-till to date)
3) Coordinator, MSBTE sponsored Content Updating Programme
4) Coordinator, MSBTE sponsored Career Fair on Wheel Programme
5) Coordinator, Second Shift and Increase in Intake Committee
6) Coordinator, MOU between Shree Mouni Vidhyapeeth, Gargoti and Chonnam National University, Gwangju (South Korea)
7) Head, Admission Committee (un-aided wing) 2012-13, 2013-14
8) Head, Scrutiny Committee (ARC) 2010-11, 2011-12, 2012-13, 2013-14

9) Chairman, Gymkhana, ICRE, 2012-13

10) Co-Coordinator, One day workshop for student and farmers held at I.C.R.E.

11) Co-Coordinator of Admission Committee 2010-11

12) Co-Chairman, Gymkhana, ICRE, 2011-12

13) Member, Gymkhana, ICRE, 2004-2011

14) Member, Time Table Committee 2008-11

15) Member, Internal Monitoring Committee, 2008-2013

16) Member, Internal Curriculum Implementation Unit (ICIU), Second Shift ICRE

6.2 Examination

1) Controller of Exam (MSBTE Examination), at

a) A.D. Shinde Institute of Technology, Bhadgaon, Tal-Gadhinglaj

b) Vidhyavardhini Institute of Technology, Pal, Tal-Bhudargad

c) Sant Gajanan Maharaj Rural Polytechnic, Mahagaon, Tal-Gadhinglaj

2) Member, Vigilance Committee

3) Head, Internal Test Exam. Semester I (2008-2009, 2012-13)

4) MSBTE Exam Paper Setter, G. P. Kolhapur Exam Paper Setter

5) Moderator (MSBTE): Basic Physics, Applied Physics, Engineering Physics, Applied Science-I, Biomedical Physics

6) Paper Examiner (MSBTE): Basic Physics, Applied Physics, Engineering Physics, Applied Science-I, Biomedical Physics