



Rayat Shikshan Sanstha's

Yashavantrao Chavan Institute of Science, Satara (Autonomous)
Lead College of Karmaveer Bhaurao Patil University, Satara

Faculty Profile

❖ **General information**

Name : Dr. Vishvanath B. Ghawnat

Designation : Assistant Professor (CHB)

Department : Department of Chemistry

Educational Qualification : M.Sc., Ph.D.

Date of Appointment : 30/7/2016

Teaching Experience : UG: 7 years
PG: 7 years

Research Experience : 12 years

Research Area : Thermoelectric, Chalcogenide materials, thin films deposition and characterizations, arrested precipitation technique (APT), microwave assisted synthesis, successive ionic layer adsorption and reaction (SILAR), and solar cell.



❖ **Educational Qualification Details (undergraduate onwards)**

Sr. No.	College/University	Degree	Subjects	Year	Class/Percentage
1	Department of Chemistry, Shivaji University, Kolhapur	Ph.D.	Chemistry	2016	
2	Department of Chemistry, Shivaji University, Kolhapur	M.Sc.	Inorganic Chemistry	2011	First Class
3	Mudhoji College, Phaltan, Shivaji University, Kolhapur	B.Sc.	Chemistry	2009	First Class
4	Malojiraje Sheti Vidyalaya and Junior College, Phaltan	HSC	PCB	2006	Second Class
5	Mudhoji High School, Phaltan	SSC	Compulsory subjects	2004	Second Class

❖ **Academic and Administrative Responsibilities**

Sr. No.	Position	Organization	Date/Duration
1	Assistant Professor	Yashavantrao Chavan Institute of Science, Satara Autonomous	30 th July 2016 to till date
2	Research Officer	Yashavantrao Chavan Institute of Science, Satara Autonomous	1 st November 2022 to till date

❖ **Awards/Honors/Recognitions/Scholarship etc.:**

Sr. No.	Name of the award/honor/recognition	Awarding Organization	Date and year
1	Innovative Teacher	Yashavantrao Chavan Institute of Science, Satara Autonomous	2022
2	UGC-BSR Fellow	UGC, New Delhi, research fellowship in science for meritorious	2012
3	AVISHKAR 2010-11	III rd rank at Shivaji University, Kolhapur for PG level	2011

❖ **Worked as Editor/Reviewer to Journals/Books/Proceedings etc.**

Sr. No.	Name of the Journal	ISSN No.	Assignment	Publisher	Publication year
1	Journal of Inorganic and Organometallic Polymers and Materials	1574-1451	Reviewer	Springer	2023

❖ **Details of Research Publications**

A) Patent

Sr. No.	Title	Patent No.	Indian/US/Any other	Granting date
1	Ein System zur Synthese von 1,2,4-Triazolidin-3-Thionen. (A system and composition for synthesis of 1,2,4-triazolidine-3-thiones)	DE202022100931U1	German	8 th March, 2022

D) Research papers:

Sr. No	Title of paper	Journal/proceeding details	ISSN No	Listed in	Impact factor
1	Room temperature deposition of nanostructured Bi ₂ Se ₃ thin films for photoelectrochemical application: effect of chelating agents. S. D. Kharade, N. B. Pawar, V. B. Ghanwat, S. S. Mali, W. R. Bae, P. S. Patil, C. K. Hong, J. H. Kim and P. N. Bhosale	Journal: New Journal of Chemistry Vol.: 37 Year: 2013 Page: 2821-2828	1369 - 9261	Scopus	3.3
2	Novel Synthesis of Interconnected Nanocubic PbS Thin Films by Facile Aqueous Chemical Route.	Journal: Journal of Materials Science: Materials in	1573 - 482X	Scopus	2.8

	K. V. Khot, S. S. Mali, N. B. Pawar, R. M. Mane, V. V. Kondalkar, V. B. Ghanwat, P. S. Patil, C. K. Hong, J. H. Kim, J. Y. Heo and P. N. Bhosale	Electronics Vol.: 25 Year: 2014 Page: 3762- 3770			
3	Microwave assisted synthesis, characterization and thermoelectric properties of nanocrystalline copper antimony selenide thin films. V. B. Ghanwat, S. S. Mali, S. D. Kharade, N. B. Pawar, S. V. Patil, R. M. Mane, P. S. Patil, C. K. Hong and P. N. Bhosale	Journal: RSC Advances Vol.: 4 Year: 2014 Page: 51632-51639	2046 - 2069	Scopus	3.9
4	A facile and low cost strategy to synthesize Cd _{1-x} Zn _x Se thin films for photoelectrochemical performance: Effect of zinc content. C. S. Bagade, S. S. Mali, V. B. Ghanwat, K. V. Khot, P. B. Patil, S. D. Kharade, R. M. Mane, N. D. Desai, C. K. Hong, P. S. Patil and P. N. Bhosale	Journal: RSC Advances Vol.: 5 Year: 2015 Page: 55658-55668	2046 - 2069	Scopus	3.9
5	Thermoelectric properties of nanocrystalline Cu ₃ SbSe ₄ thin films deposited by a self-organized arrested precipitation technique. V. B. Ghanwat, S. S. Mali, R. M. Mane, P. S. Patil, C. K. Hong and P. N. Bhosale	Journal: New Journal of Chemistry Vol.: 39 Year: 2015 Page: 5661-5668	1369 - 9261	Scopus	3.3
6	Photoelectrochemical Performance of MoBiInSe ₅ Mixed Metal Chalcogenide Thin Films. R. M. Mane, S. S. Mali, V. B. Ghanwat, V. V. Kondalkar, K. V. Khot, S. R. Mane, D. B. Shinde, P. S. Patil and P. N. Bhosale	Journal: Materials Today: Proceedings Vol.: 2 Year: 2015 Page: 1458-1463	2214 - 7853	Scopus	--
7	Effect of Substrate on the nanostructured Bi ₂ Se ₃ thin films for solar cell applications. N. D. Desai, V. B. Ghanwat, K. V. Khot, S. S. Mali, C. K. Hong and P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.: 27 Year: 2016 Page: 2385-2393	1573 - 482X	Scopus	2.8
8	Efficient improvement of photoelectrochemical performance of CdSe thin film deposited via arrested precipitation technique. C. S. Bagade, V. B. Ghanwat, K. V. Khot and P. N. Bhosale	Journal: Materials Letters Vol.: 164 Year: 2016 Page: 52-55	1873 - 4979	Scopus	3.0
9	Synthesis of Bismuth Telluride Thin Film for Thermoelectric Application via Electrodeposition Technique.	Journal: Macromolecular Symposia Vol.: 361	1521 - 3900	Scopus	0.2

	P. B. Patil, S. S. Mali, K. V. Khot, V. V. Kondalkar, V. B. Ghanwat, R. M. Mane, R. R. Kharade and P. N. Bhosale	Year: 2016 Page: 152-155			
10	Photocurrent enhancement in Cu ₂ Cd(SSe) ₂ photoanode synthesized via arrested precipitation route. K. V. Khot, S. S. Mali, V. B. Ghanwat, S. D. Kharade, R. M. Mane, C. K. Hong and P. N. Bhosale	Journal: New Journal of Chemistry Vol.: 40 Year: 2016 Page: 3277-3288	1369 - 9261	Scopus	3.3
11	Synthesis of SnS ₂ thin film via non vacuum arrested precipitation technique for solar cell application. K. V. Khot, V. B. Ghanwat, C. S. Bagade, S. S. Mali, R. R. Bhosale, A. S. Bagali, T. D. Dongale and P. N. Bhosale	Journal: Materials Letters Vol.: 180 Year: 2016 Page: 23-26	1873 - 4979	Scopus	3.0
12	Thermoelectric Properties of Indium(III)-Doped Copper Antimony Selenide Thin Films Deposited Using a Microwave-Assisted Technique. V. B. Ghanwat, S. S. Mali, R. M. Mane, C. K. Hong and P. N. Bhosale	Journal: Energy technology Vol.: 4 Year: 2016 Page: 835-842	2194 - 4296	Scopus	4.1
13	Controlled Electrochemical Polymerization Strategies for Electroactive Polyaniline Thin Films. R. R. Kharade, P. B. Patil, K. V. Khot, V. B. Ghanwat, V. V. Kondalkar, C. S. Bagade, N. D. Desai, R. M. Mane and P. N. Bhosale	Journal: Macromolecular Symposia Vol.: 362 Year: 2016 Page: 7-10	1521 - 3900	Scopus	0.24
14	Rapid Formation of Ternary CdZnSe ₂ Chalcogenide Thin Film by Microwave Assisted Chemical Bath Deposition. C. S. Bagade, V. B. Ghanwat, S. D. Kharade, K. V. Khot, R. R. Kharade, N. D. Desai and P. N. Bhosale	Journal: Macromolecular Symposia Vol.: 362 Year: 2016 Page: 60-64	1521 - 3900	Scopus	0.24
15	Synthesis of (CdZn)Se thin films by a facile aqueous phase route and their photoelectrochemical performance for solar cell application. C. S. Bagade, V. B. Ghanwat, S. S. Mali, K. V. Khot, R. M. Mane, C. K. Hong, P. S. Patil and P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.: 27 Year: 2016 Page: 5867-5877	1573 - 482X	Scopus	2.8
16	Influence of deposition temperature on the optical, structural, morphological, compositional and photoelectrochemical properties of TiO ₂ thin films N. D. Desai, S. S. Mali, R. M. Mane, V. B.	Journal: Journal of Materials Science: Materials in Electronics Vol.: 27 Year: 2016 Page: 11739-11750	1573 - 482X	Scopus	2.8

	Ghanwat, C. K. Hong and P. N. Bhosale				
17	Microwave Assisted Novel MoBi ₂ S ₅ Nanoflowers: Synthesis, Characterization, Photoelectrochemical Performance N. B. Pawar, S. S. Mali, S. D. Kharade, V. V. Kondalkar, V. B. Ghanwat, K. V. Khot, P. S. Patil and P. N. Bhosale	Journal: Solid State Sciences Vol.: 61 Year: 2016 Page: 89-93	1873 - 3085	Scopus	3.5
18	Novel synthetic route for the synthesis of ternary Cd(SSe) photoelectrode and their photoelectrochemical application S. K. Jagadale, K. V. Khot, C. S. Bagade, R. M. Mane, V. B. Ghanwat, R. K. Mane, S. S. Mali, C. K. Hong and P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.: 28 Year: 2016 Page: 2984-2995	1573 - 482X	Scopus	2.8
19	Surfactant-Mediated Growth of Nanostructured MoBiInS ₅ Thin Films via Arrested Precipitation Technique N. B. Pawar, V. V. Kondalkar, V. B. Ghanwat, P. B. Patil and P. N. Bhosale	Journal: Advanced Science Letters Vol.: 22 Year: 2016 Page: 915-920	1936 - 6612	Scopus	
20	Low temperature simple aqueous phase chemical synthesis and characterization of ZnO thin films. D. B. Shinde, V. B. Ghanwat, K. V. Khot, V. V. Kondalkar, R. M. Mane, C. S. Bagade, S. K. Jagdale, R. K. Mane and P. N. Bhosale	Journal: Materials Today: Proceedings Vol.: 4 Year: 2017 Page: 119-125	2214 - 7853	Scopus	
21	Development of CdZn(SSe) ₂ thin films by using simple aqueous chemical route: Air annealing S. K. Jagadale, D. B. Shinde, R. M. Mane, V. B. Ghanwat, K.V. Khot, R. K. Mane and P. N. Bhosale	Journal: Materials Today: Proceedings Vol.: 4 Year: 2017 Page: 363-368	2214 - 7853	Scopus	
22	Surfactant mediated synthesis of bismuth selenide thin films for photoelectrochemical solar cell applications N. D. Desai, K. V. Khot, V. B. Ghanwat, S. D. Kharade and P. N. Bhosale	Journal: Journal of Colloid and Interface Science Vol.: 514 Year: 2018 Page: 250-261	1095 - 7103	Scopus	9.9
23	Novel Catalytic Application of Ni@ZnO Nanoparticles and ZnO nanoflakes in aqueous solution of NaPTS hydrotrope at Room Temperature via a green Synthesis of 3, 4-Dihydropyrimidi- 2(1H) ones B. S. Shinde, S. B. Kamble, P. M. Gaikwad, V. B. Ghanwat, S. V. Tanpure, P. Pagare, B. Karale and A.	Journal: Research on Chemical Intermediates Vol.: 44 Year: 2018 Page: 1568-5675	3097 - 3113	Scopus	3.3

	S. Burungale				
24	Enhancement of thermoelectric performance in Cu ₃ SbSe ₄ thin films by In(III) doping; synthesized by arrested precipitation technique. V. B. Ghanwat, S. S. Mali, K. V. Khot, C. S. Bagade, N. D. Desai, C. K. Hong and P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.: 29 Year: 2018 Page: 8793-8800	1573 - 482X	Scopus	2.8
25	A robust and self assembled route to synthesis Cd _{0.4} Zn _{0.6} (Se _{1-x} Te _x) thin films for its solar cell application. C. S. Bagade, V. B. Ghanwat, S. S. Mali, K. V. Khot, C. K. Hong and P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.: 29 Year: 2018 Page: 11763-11773	1573 - 482X	Scopus	2.8
26	Synthesis, characterization and application of nanocrystalline CdZn(SeTe) ₂ thin films for energy application C. S. Bagade, V. B. Ghanwat, S. B. Kamble and P. N. Bhosale	Journal: AIP Conference Proceedings Vol.:1989 Year: 2018 Page: 030003-1-030003-7	1551 - 7616	Scopus	
27	Synthesis of tin sulphide thin film by simple arrested precipitation technique for solar cell application M. P. Joshi, K. V. Khot, V. B. Ghanwat, S. D. Kharade, C. S. Bagade, N. D. Desai, S. S. Patil, and P. N. Bhosale	Journal: AIP Conference Proceedings Vol.:1989 Year: 2018 Page: 020015-1-020015-5	1551 - 7616	Scopus	
28	Photoelectrochemical Performance of MoBiGaSe ₅ Thin Films Deposited by Vacuum Deposition Technique S. V. Patil, V. B. Ghanwat, V. V. Kondalkar, R. S. Mandhare, P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.:30 Year: 2019 Page: 17612-17622	1573 - 482X	Scopus	2.8
29	Photoelectrochemical (PEC) Investigation of Ga Doped MoBi ₂ Se ₅ Thin Films Deposited by Arrested Precipitation Technique S. V. Patil, V. B. Ghanwat, N. B. Pawar and P. N. Bhosale	Journal: Macromolecular Symposia Vol.:393 (1) Year: 2021 Page: 1900210	1521 - 3900	Scopus	0.24
30	Synthesis, characterization and photoelectrochemical performance of nanocrystalline ternary Mo _x Bi _(2-x) Se ₃ metal chalcogenide thin films. S. V. Patil, V. B. Ghanwat, S. S. Mali, R. M. Mane, C. K. Hong and P. N. Bhosale	Journal: Journal of Materials Science: Materials in Electronics Vol.: 31 Year: 2021 Page: 18135-18150	1573 - 482X	Scopus	2.8
31	The Eggshell Waste Transformed Green and Efficient Synthesis of K-	Journal: Polycyclic Aromatic	1563 -	Scopus	2.8

	Ca(OH) ₂ Catalyst for Room Temperature Synthesis of Chalcones S. V. Tanpure, V. B. Ghanwat, B. S. Shinde, K. S. Tanpure, S. P. Lawande	Compounds Year: 2021 Page: 1322-1340	5333		
32	A novel recyclable Nano-catalyst Bi-Mg-O promoted rapid and efficient synthesis of spirooxindole and 4H-pyran derivatives A. Mulik, V. B. Ghanwat, P. Hegade, M. Mali, D. Kim, D. S. Lee, A. Shahzad, S. Shinde	Journal: Polycyclic Aromatic Compounds Year: 2022 Page: 1-14	1563 - 5333	Scopus	2.8
33	Synthesis of Bi doped Titanium oxide by Chemical Bath Deposition for Dye Synthesized Solar Cell Application. A. A. Kamble, A. L. Jadhav, V. B. Ghanwat, S. L. Jadhav, D. G. Gaikwad, A. V. Kadam, V. M. Bhuse	Journal: Inorganic Chemistry Communications Vol.: 152 Year: 2023 Page: 110681-110688	1879 - 0259	Scopus	3.8
34	Synthesis of Bi doped Titanium oxide by Chemical Bath Deposition for Dye Synthesized Solar Cell Application. S. R. Attar, A. C. Sapkal, C. S. Bagade, V. B. Ghanwat, S. B. Kamble	Journal: Research on Chemical Intermediates Year: 2023	1568 - 5675	Scopus	3.3

E) Paper Presentation in Conference /Seminar/ Symposia:

Sr. No	Title of paper	Name of the Conference /Seminar/ Symposia Details	Level (Intl/Natl/State /Uni etc.)	Organizing institute
1	Removal of Malachite green dye from the aqueous solution by using fruit shell waste. V. B. Ghanwat, S. R. Honmore, A. S. Sartape, M. A. Anuse and S. S. Kolekar	UGC-SAP and DST-FIST Sponsored National Symposium on Advances in Synthetic Methodologies and New Materials (ASMNM) On 21 st and 22 nd Jan. 2011	National	Department of Chemistry, Shivaji University, Kolhapur
2	Synthesis of MoBi ₂ S ₅ Colloidal nanoparticles Using Tri-n-octyl phosphine oxide surfactanat. N. B. Pawar, M. M. Salunkhe, R. R. Kharade, V. B. Ghanwat and P. N. Bhosale	UGC-SAP National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials (RASCN) on 21 st and 22 nd Jan. 2012	National	Department of Chemistry, Shivaji University, Kolhapur
3	Synthesis and	Annual International	National	Gokaraju

	Characterization of MoBi ₂ S ₅ thin films by simple colloidal route. N. B. Pawar, S. M. Patil, M. M. Salunkhe, S. D. Kharade, R. M. Mane, V. B. Ghanwat and P. N. Bhosale	Conference on Materials processing and Characterization (ICMPC) on 8-10 th March 2012		Rangaraju Institute of Engineering & Technology, Hyderabad
4	Simple Chemical Method for Porous Network of MoBiCuSe ₄ Nanoflakes and its Photoresponse Property. S. D. Kharade, M. M. Salunkhe, R. R. Kharade, V. B. Ghanwat, S. S. Mohite and P. N. Bhosale	DAE-BRNS 4 th Interdisciplinary Symposium on Materials Chemistry (ISMC-2012), , during 11 th -15 th Dec. 2012	National	Bhabha Atomic Research Center, Mumbai
5	Room Temperature Growth of Bi ₂ Se ₃ Nanospheres and Nanopetels by Arrested Precipitation Technique. S. D. Kharade, N. B. Pawar, V. B. Ghanwat, V. V. Kondalkar, S. P. Patil and P. N. Bhosale	National Conference on Recent Trends in Nanotechnology, 14 th and 15 th Dec. 2012	National	Vivekanand College, Kolhapur, India
6	Synthesis and characterization of novel MoBiGaSe ₅ thin films by vacuum deposition technique. S. V. Patil, S. S. Mali, R. M. Mane, R. R. Kharade, V. B. Ghanwat, V. V. Kondalkar and P. N. Bhoasale	IUPAC- Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-12) 21 st -25 th Nov. 2012	International	Le-Meridian Hotel, Coimbtore, Tamilnadu
7	Morphology Tuning in Mixed Metal Chalcogenide Nanostructures Deposited by Physical Route. S. S. Mohite, R. R. Kharade, S. S. Mali, S. D. Kharade, V. B. Ghanwat and P. N. Bhosale	National Conference on Chemistry of Chalcogens (NC3-2013) on 14 th and 15 th Jan. 2013	National	organized by Department of Applied Chemistry, at Defence Institute of Advanced Technology (DIAT) Pune
8	Facile Single Phase, Crystalline Cu ₃ Se ₂ Thin Films and Effect of Indium Doping: Chemosynthesis	National conference on current Research in chemical science (CRCS-2013),. Held on	National	Department of Chemistry, Shivaji University,

	and Characterization. V. B. Ghanwat, S. D. Kharade, S. B. Pawar, M. M. Salunkhe, P. B. Patil, S. S. Mohite, S. M. Patil and P. N. Bhosale	January 22 nd & 23 rd , 2013		Kolhapur
9	Facile Chemosynthesis of p-type MoBiCuSe ₄ Thin Film for Heterojunction Solar Cell S. D. Kharade, N. B. Pawar, V. B. Ghanwat, S. P. Patil, S. S. Mohite and P. N. Bhosale	10 th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, held on 28 th - 30 th Jan. 2013	International	Hotel Green Park, Chennai
10	Electrochromic Properties and Surfactant Assisted Synthesis of Nanocrystalline WO ₃ Thin Films R. R. Kharade, M. M. Salunkhe, S. D. Kharade, N. B. Pawar, V. V. Kondalkar, V. B. Ghanwat and P. N. Bhosale	24 th Annual General Meeting (AGM) Materials Research Society of India (MRSI),. 11 th – 13 th Feb. 2013	National	Indira Gandhi Centre for Atomic Research, Kalpakkam
11	Microwave assisted synthesis of nanocrystalline Cu ₃ SbSe ₄ Thin films and their characterization. V. B. Ghanwat, S. D. Kharade, S. S. Mali, K. V. Khot, R. M. Mane, P. B. Patil, C. K. Hong, P. S. Patil and P. N. Bhosale	2 nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014). 13 th – 15 th Jan. 2014	International	Department of Physics, Shivaji University, Kolhapur
11	Comparative Study of Nanostructured of Bi ₂ Se ₃ Thin Films Grown Using Different Chelating Agents. S. D. Kharade, V. V. Kondalkar, V. B. Ghanwat, R. M. Mane, R. R. Kharade, S. M. Patil and P. N. Bhosale	2 nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) 13 th – 15 th Jan. 2014	International	Dept. of Physics, Shivaji University, Kolhapur.
12	Microwave assisted synthesis, characterization and thermoelectric properties	National Symposium on Current Trends in Chemical and Nanosciences,	National	Department of Chemistry, Shivaji University,

	of nanocrystalline CuSbSe ₂ thin films. V. B. Ghanwat, S. D. Kharade, N. B. Pawar, S. S. Mali, R. M. Mane, K. V. Khot, C. K. Hong, P. S. Patil and P. N. Bhosale	(CTCNS-2014) 17 th – 18 th Jan. 2014		Kolhapur
13	Thermoelectric properties of nanocrystalline Cu ₃ SbSe ₄ thin films deposited by Arrested Precipitation Technique. V. B. Ghanwat, P. B. Patil, N. D. Desai and P. N. Bhosale	Frontiers in Chemical Sciences (FCS-2014), 30 th June 2014	National	Solapur University
14	Synthesis and Characterization of ternary CdZnSe ₂ chalcogenide thin film by Arrested Precipitation Technique. C. S. Bagade, V. B. Ghanwat, S. D. Kharade and P. N. Bhosale	UGC (WRO) Sponcered National Seminar on Recent trends in Analytical Chemistry (RTAC-2014), 30 th - 31 st Aug. 2014	National	Art, Commerce and Science college, Sateral
15	Surfactant-mediated Growth of Nanostructured MoBiInSes Thin Films via Arrested Precipitation Technique. N. B. Pawar, V. V. Kondalkar, V. B. Ghanwat, P. B. Patil and P. N. Bhosale	3 rd International Conference NANOCON-14., 14 th - 15 th Oct. 2014	International	Bharti Vidyapeeth Deemed University Pune
16	Controlled Electrochemical Polymerization Strategies for Electroactive Polyaniline Thin Films R. R. Kharade, S. S. Mali, P. B. Patil, K. V. Khot, V. B. Ghanwat, V. V. Kondalkar and P. N. Bhosale	Third International Conference on Polymer Processing and Characterization (ICPPC 2014), 11 th - 13 th Oct. 2014	International	Mahatma Gandhi University, Kottayam, Kerala
17	Single step hydrothermal synthesis of hierarchical TiO ₂ microflowers with radially assembled	National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), (16 th -	National	Department of Chemistry, Shivaji University,

	nanorods for enhanced photovoltaic performance. P. B. Patil, V. V. Kondalkar, K. V. Khot, V. B. Ghanwat, R. M. Mane and P. N. Bhosale	17 th Jan., 2015)		Kolhapur
18	Synthesis and characterizations and thermoelectric properties of Cu ₃ SbSe ₄ thin films prepared by arrested precipitation technique. V. B. Ghanwat, S. S. Mali, C. S. Bagade, K. V. Khot, S. D. Kharade, R. R. Kharade, R. M. Mane, P. S. Patil and P. N. Bhosale	International Conference on Green Chemistry Catalysis, Energy and Environment, (ICGC-2015), (22 th - 24 th Jan. 2015)	International	Department of Chemistry, Goa University, Goa
19	Photoelectrochemical performance of MoBiInSe ₅ mixed metal chalcogenide thin films. R. M. Mane, S. S. Mali, V. B. Ghanwat, V. V. Kondalkar, K. V. Khot, S. R. Mane, D. B. Shinde, P. S. Patil and P. N. Bhosale	4 th International Conference on Materials Processing and Characterization (ICMPC-2015), 14 th - 15 th March 2015	International	GRIET, Hyderabad, India
20	Single step fabrication of quaternary Cu ₂ Cd(SSe) ₂ thin films via arrested precipitation technique and their solar cell performance. K. V. Khot, S. S. Mali, V. B. Ghanwat, P. B. Patil, C. S. Bagade, N. D. Desai, S. D. Kharade, S. K. Jagadale, D. B. Shinde, R. M. Mane and P. N. Bhosale	National Seminar on, "Application of Chemical and Material Science for Sustainable Development, (20 th Feb., 2016)	National	Department of Chemistry, Shivaji University, Kolhapur,
21	Low temperature simple aqueous phase chemical synthesis and characterization of ZnO thin films. D. B. Shinde, V. B. Ghanwat, K. V. Khot, V. V. Kondalkar, R. M. Mane, C. S. Bagade, S. K. Jagdale, R.	5 th International Conference on Materials Processing and Characterization, , 12 th & 13 th March, 2016	International	GRIET, Hyderabad, India

	K. Mane and P. N. Bhosale			
22	Thermoelectric properties of In(III) doped copper antimony selenide thin films deposited by microwave assisted technique. V. B. Ghanwat, C. S. Bagade, N. D. Desai, K. V. Khot, S. M. Patil, M .P. Joshi, S. S. Patil and P. N. Bhosale	National Conference On Frontier Areas In Chemical Sciences (FACS-2017), , 27 th and 28 th Jan. 2017	National	Department of Chemistry, Yashavantrao Chavan Institute of Science, Satara
23	Efficient synthesis of octadihydroquinoxaline catalysed Via Fe@NiO nanoballs B. S. Shinde, K. G. Kanade, S. B. Kamble, V. B. Ghanwat, Arvind Burungale	National Conference on Multidisciplinary Nature of Life Sciences and Sustainable Development (NCMAL-2018), , 5 th and 6 th Jan. 2018	National	Department of Botany, Yashavantrao Chavan Institute of Science, Satara
24	Deposition of copper sulphide thin film by simple chemical bath deposition technique for optoelectronic applications P. D. Dhone, A. M. Kurlekar, S. S. Pujari and V. B. Ghanwat*	International conference on "Recent Advances in Renewable Energy and Hygiene Devices (ICRAREHD-2018)", 5 th and 6 th March 2018	International	Yashavantrao Chavan Institute of Science, Satara
25	Thermoelectric Performance of In(III) Doped Cu ₃ SbSe ₄ Thin Films: Synthesized by Arrested Precipitation Technique V. B. Ghanwat, S. S. Mali, C. S. Bagade, K. V. Khot, N. D. Desai, C. K. Hong and P. N. Bhosale	International conference on "Recent Advances in Renewable Energy and Hygiene Devices (ICRAREHD-2018)" 5 th and 6 th March 2018	International	Yashavantrao Chavan Institute of Science, Satara
26	Chemosynthesis of cadmium sulphide (CdS) thin film for optoelectronic applications S. M. Shedage, P. A. Chavan, S. S. Shedage, S. S. Sayyad and V. B. Ghanwat*	International conference on "Chemistry, Environment and Energy" ICCEE-2019, on 16-18 th February 2019	International	Yashavantrao Chavan Institute of Science, Satara

27	Facile deposition of Cu ₃ Se ₂ thin films by APT and effect of Indium doping for optoelectronic application V. B. Ghanwat*, K. V. Khot, C. S. Bagade, N. D. Desai, M. P. Joshi, S. S. Patil, S. S. Mali and P. N. Bhosale	International conference on "Chemistry, Environment and Energy" ICCEE-2019, on 16-18 th February 2019	International	Yashavantrao Chavan Institute of Science, Satara
28	Synthesis of ZnO Thin Films using Efficient SILAR Technique for Optoelectronic Applications O. R. Jadhav, K. P. Kadam, M. V. Bhosarkar, T. S. Bankar, V. B. Ghanwat*	International Conference on "Multifunctional and Hybrid Materials for Energy and Environment" (MHMEE 2020), on 29 th to 31 st January 2020	International	Yashavantrao Chavan Institute of Science, Satara

F) Citation Index

	Google Scholar	Scopus	Web of Science
Citations	613	538	538
h-index	15	15	14
i10-index	19	18	17

❖ Participation in Conference/Seminar/Symposia/Workshop/Any other programs:

Sr. No.	Name of the event	Organizing institute	Level	Year
1	UGC-SAP and DST-FIST Sponsored National Symposium on "Advances in Synthetic Methodologies and New Materials" (ASMNM-2011),	Department of Chemistry, Shivaji University, Kolhapur	National	2011
2	Chemistry in our lives" International Year of Chemistry (IYC-2011)	Department of Chemistry, Shivaji University Kolhapur	National	2011
3	National Seminar on "Recent Advances in Synthetic Chemistry and Nanomaterials" (RASCN-2012)	Department of Chemistry, Shivaji University Kolhapur	National	2012
4	One Day Seminar on "Research Methodology and Recent Techniques" (RMRT-2012)	University of Mumbai, Sub-Centre Ratnagiri	National	2012
5	"Annual International Conference	Gokaraju Rangaraju	International	2012

	on Materials processing and Characterization” (ICMPC-2012)	Institute of Engineering & Technology, Hyderabad		
6	Recent Trends in Nanotechnology	Vivekanand College, Kolhapur, India	National	2012
7	IUPAC- Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-12)	Le-Meridian Hotel, Coimbtore, Tamilnadu	International	2012
8	“Two Day Workshop on Research Writings, Ethics, Plagiarism and Publishability”	Shivaji University Kolhapur, Internal Quality Assurance Cell (IQAC)	National	2012
9	UGC Sponsored National Conference on “Recent Trends in Nanotechnology” (RTN-2012)	Shri Swami Vivekanand Shikshan Sanstha’s, Vivekanand College, Kolhapur	National	2012
10	National Conference on Chemistry of Chalcogens (NC ³ -2013)	Department of Applied Chemistry, at Defense Institute of Advanced Technology (DIAT) Pune	National	2013
11	National conference on current Research in chemical science (CRCS-2013)	Department of Chemistry, Shivaji University, Kolhapur	National	2013
12	2 nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014)	Dept. of Physics, Shivaji University, Kolhapur	International	2014
13	National Symposium on Current Trends in Chemical and Nanosciences, (CTCNS-2014)	Dept. of Chemistry, Shivaji University, Kolhapur	National	2014
14	National Conference on “Frontier in Chemical and Material Science” (FCMS-2015)	Department of Chemistry, Shivaji University, Kolhapur	National	2014
15	International Conference on Green Chemistry Catalysis, Energy and Environment, (ICGC-2015)	Department of Chemistry, Goa University, Goa	International	2015
16	National Seminar on Application of Chemical and Material Science Sustainable Development	Department of Chemistry, Shivaji University, Kolhapur	National	2016
17	National Conference on Frontier Areas in Chemical Sciences (FACS-	Department of Chemistry, Yashavantrao	National	2017

	2017)	Chavan Institute of Science, Satara		
18	International conference on Recent Advances in Renewable Energy and Hygiene Devices (ICRAREHD-2018)	Yashavantrao Chavan Institute of Science, Satara	International	2018
19	International conference on "Chemistry, Environment and Energy" (ICCEE-2019)	Yashavantrao Chavan Institute of Science, Satara	International	2019
20	International conference on "Multifunctional and Hybrid Materials for Energy and Environment" (MHMEE 2020)	Yashavantrao Chavan Institute of Science, Satara	International	2020
21	International conference on "Multidisciplinary Approach and Innovations in Chemical Sciences-2022" (MAICS 2022)	Yashavantrao Chavan Institute of Science, Satara	International	2022

Signature of Faculty