

Dr. Shrikrishna P. Yawale
M.Sc., M.Phil, Ph.D., M.I.I.Ceram.

Professor

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Research Area/Research Interest:

Solid State Physics, Semiconducting Glasses, Gas Sensors, Conducting Polymers, Instrumentation.

Publications year-wise

Sr. No	Title with Page Nos.	Name of Journal	Year	National/ International/ State/ Local	Whether Peer reviewed
1.	<i>Study of CO₂ gas detection by multilayer SnO₂-ZnO-Ppy Sensor.</i>	International Journal of Science and Engineering, special issue	2017	International	Yes
2.	Stability of CO ₂ gas sensor by doping nano ZnO in conducting Polymer Polyaniline	International Journal of Science and Engineering, special issue A1: 149-154	2017	International	Yes
3.	Conducting Polymer Polyaniline as CO ₂ Gas Sensor	International Journal of chemtech Research CODEN(USA):IJCRGG 10 (7) 494-500	2017	International	Yes
4.	Preparation and Characterization of Polymer Composite polythiophene.	Transactions of the Indian Institute of Metals 69 (3),	2016	International	Yes
5.	Spectral Behaviour of Infrared Spectra of Silver Doped Lead Borate Glasses.	International Journal of Engineering Technology Science and Research,3(3),95-98	2016	International	Yes
6.	Fabrication of SnO ₂ -ZnO multilayer-PPy ammonia gas sensor for detection.	Indian Journal of Physics 89 (10),1025-1030	2015	International	Yes
7.	Investigation of Thiophene-Based Polymer Composition Such as LED	International Journal of Electronics, Communication and Soft Computing, Special	2015	International	Yes

		issue,239-241			
8.	Study of physical and electrical properties of CuO-MnO ₂ -B ₂ O ₃ Glasses	Int. Res. J. of Science & Engineering, 3 (3): 77-83	2015	International	Yes
9.	Physical And Transport Properties of CuO-MnO ₂ -B ₂ O ₃ Glasses	International Journal of Scientific Engineering and Applied Science (IJSEAS) -1, (2), 6-12	2015	International	Yes
10.	Hopping Conduction Mechanism in Amorphous CuO-Bi ₂ O ₃ Semiconducting Pellets	International Journal of Innovative Science, Engineering & Technology, . 2 (4, 209-213	2015	International	Yes
11.	Study of Transport and Electrical Properties of PEO: PVP: NaClO ₂ Based Polymer Electrolyte	International Journal of Chemical and Physical Sciences 4, special issue,60-64	2015	International	Yes
12.	Hopping conduction Mechanism in Amorphous CuO-Bi ₂ O ₃ semiconducting pellets,	International Journal of innovative science , engineering & technology (IJSET), 2(4), 209-213	2015	International	Yes
13.	Physical & Transport properties of CuO-MnO ₂ -B ₂ O ₃ glasses,	International Journal of scientific, engineering and applied sciences (IJSEAS), 1(2), 6-12	2015	International	Yes
14.	Synthesis and characterization of CuO-MnO ₂ -B ₂ O ₃ Glasses,	International Journal of scientific, engineering & applied sciences (IJSEAS) , 2(3),16-21	2015	International	Yes
15.	Electrical properties of CuO-MnO ₂ -B ₂ O ₃ Glasses	International Journal of innovative science, engineering & technology (IJSET), 2(6),33-35	2015	International	Yes
16.	Electrical properties of CuO-MnO ₂ -B ₂ O ₃ Glasses	International Journal of scientific, engineering and applied sciences (IJSEAS),	2015	International	Yes

		1(3), 565-568.			
17.	Study of Physical and Electrical properties of CuO-MnO ₂ -B ₂ O ₃ Glasses	International Research Journal of science engineering (IRJSE), 3I(3), 77-83	2015	International	Yes
18.	Conductivity study of PEO – LiClO₄ polymer electrolyte doped with ZnOnanocomposite ceramic filler	Bulletin of Materials Science 37(6):1403-1409 .	2014	International	Yes
19.	Optical Properties of SiO ₂ Nanoparticles Doped PEO – LiClO₄ Polymer Electrolyte Nanocomposite Films	Research & Reviews: Journal of Physics 3 (1),	2014	International	Yes
20.		Int. Journal of Renewable Energy 4 (1),	2014	International	Yes
21.		Int. Res. J. of Science & Engineering, 2 (4),145-149	2014	International	Yes
22.		International Journal of Research in Advent Technology,2, (3), 226-229	2014	International	Yes
23.		Rev. Mex. Fis. 58 ,445–450	2012	International	Yes
24.		J Polymer Engineering 32 , 103–110	2012	International	Yes
25.		International Journal of Basic and Applied Research, Special issue, 54-57	2012	International	Yes
26.		International Journal of Basic and Applied Research . 02 (2), 9-13.	2012	International	Yes
27.	Transport Properties of CuO-B ₂ O ₃ glasses	Vidarbha J. of Science, 7, (1-2) 1-5	2012	National	Yes
28.	Transport Properties of	Vidarbha J. of Science,7,(3-	2012	National	Yes

	Vanadium Phosphate glasses,	4) 21-25			
29.	Effect of ZnO content on ultrasonic velocities and elastic constants of semiconducting borate glasses,	Vidarbha J. of Science, 7, 7, (3-4) , 50-55	2012	National	Yes
30.	Optical properties of CuO-MnO ₂ -B ₂ O ₃ Glasses,	International Journal of Basic and Applied Research ,2(2), 9-13	2012	International	Yes
31.	Electrical and Heat transport Mechanism in CuO-B ₂ O ₃ glasses,	Vidarbha J. of Science, 6, (3-4), 5-12	2011	National	Yes
32.		Journal of Polymer Engineering 31(2):289-292	2011	International	Yes
33.	Hopping conduction Mechanism in Amorphous CuO-Bi ₂ O ₃ semiconducting pellets.	Vidarbha J. of Science, 6(1-2) , 20-24.	2011	National	Yes
34.		International Journal of Modern Physics B. 24, (31), 6107-6113	2010	International	Yes
35.		i-Manager's Journal on Future Engineering and Technology 5 (3),	2010	National	Yes
36.		Optoelectronics and Advanced Materials-Rapid Communications 4 (1),97-101	2010	International	Yes
37.	Optical properties of CuO-B ₂ O ₃ glasses	Vidarbha J. of Science, 5(1-2) , 34-38	2010	National	Yes
38.),2410-2414	2009	International	Yes
39.	Transport properties of CuO-MnO ₂ -B ₂ O ₃ glasses	Vidarbha J. of Science, 4(3-4) , 31-38	2009	National	Yes
40.		Glass Physics and Chemistry 34, 381-388	2008	International	Yes

41.		Sensors and Actuators B: Chemical 366-373	2008	International	Yes
42.		Journal of Non-Crystalline Solids 353 (13),	2007	International	Yes
43.		Sensors and Actuators A: Physical 135 (2), 388-393	2007	International	Yes
44.		International Journal of Modern Physics B 20 (17), 2395-2414	2007	International	Yes
45.		Sensors and Transducers Journal 79 (5), 1180-1185	2007	International	Yes
46.		i-Manager's Journal on Software Engineering 1 (1), 39	2006	National	Yes
47.		Glass Physics and Chemistry 31 (5), 611-620	2006	International	Yes
48.	Preparation and study of thickness dependent electrical characteristics of zinc sulfide thin films,	Bulletin of Materials Science, 28, 43	2005	International	Yes
49.		Glass Physics and Chemistry 31 (5), 611-620	2005	International	Yes
50.		Electronic Journal Technical Acoustics, 37	2005	International	Yes
51.		Bulletin of Materials Science 26 (6), 639-642	2005	International	Yes
52.		Bulletin of Materials Science 26 (2), 267-271	2003	International	Yes
53.		Indian Journal Of Engineering And Materials Sciences 9 (5), 375-382	2003	International	Yes

54.		Bulletin of Materials Science 25 (5), 431-434	2002	International	Yes
55.		Bulletin of Materials Science 25 (1), 75-78	2002	International	Yes
56.		Indian Journal of Physics A 6A(4):399-401	2002	International	Yes
57.		ActaCienciaIndica 28 (4), 185-190	2002	National	Yes
58.		Discharges and Electrical Insulation in Vacuum, 2002. 20th International 214-218	2002	International	Yes
59.		Indian Journal Of Physics And Proceedings Of The Indian Association For The Cultivation of Science	2002	International	Yes
60.		Indian Journal Of Engineering And Materials Sciences 7 (3), 150-153	2001	International	Yes
61.		Indian Journal of Physics A and Proceedings of the Indian Association for the Cultivation of Science.	2000	International	Yes
62.		Journal of Polymer Materials 14 (2), 155-158	1999	International	Yes
63.		Indian Journal Of Engineering And Materials Sciences 4, 33-37	1997	International	Yes
64.		Indian Journal Of Engineering & Materials Sciences 4 (1), 28-32	1997	International	Yes
65.		Indian Journal Of Pure & Applied Physics 35 (4), 281- 289	1997	International	Yes
66.		Journal of Polymer Materials 13 (3), 233-238	1997	International	Yes

67.		Ind.J.Mater.Sci.Engs. 4 (1997) 28-32.	1997	International	Yes
68.		Journal of Pure and Applied Ultrasonics 18, 74-79	1996	National	Yes
69.		Indian Journal of Engineering & Materials sciences 2, 291-296	1995	International	Yes
70.		ActaAcustica United with Acustica 81 (2), 184-186	1995	International	Yes
71.		VIDE-PARIS- 51, 544-550	1995	International	Yes
72.		Indian Journal Of Engineering & Materials Sciences 2 (5), 231-235	1995	International	Yes
73.		Indian Journal Of Pure & Applied Physics 33 (7), 362- 365	1995	International	Yes
74.		Acoustics letters 18 (11), 212-216	1995	International	Yes
75.		Indian Journal Of Pure & Applied Physics 33 (5), 225- 230	1995	International	Yes
76.		Indian Journal Of Pure & Applied Physics 33 (10), 638-642	1995	International	Yes
77.		Indian Journal Of Pure & Applied Physics 33 (11), 683-686	1995	International	Yes
78.		Indian Journal Of Pure & Applied Physics 33 (1), 34- 37	1995	International	Yes
79.		ActaPhysicaPolonica-Series A General Physics 86 (6), 969-978	1995	International	Yes

80.		Indian Journal Of Pure & Applied Physics 32 (3), 270-271	1994	International	Yes
81.		Indian Journal Of Physics And Proceedings Of The Indian Association For The cultivation of Science	1994	International	Yes
82.		Indian Journal of Pure and Applied Physics,32(3),275-276 .	1994	International	Yes
83.		Journal of Materials Science 28 (20), 5451-5455	1993	International	Yes
84.		Acustica 76 (2), 103-105	1993	International	Yes
85.		Indian Journal of Physics, A, 65 A(1) 76-78	1992	International	Yes

2. Invited/Conference Talks:

3. Paper Presentation in National/International Conferences/Symposia
National Conferences

- W.J.Gawande S.P. Yawale, S.S. Yawale. Ultrasonic velocity and Elastic constants measurement in some borate glasses, VI National symposium on Ultrasonics, S. V. University Tirupati (16-17 Sept, 1994)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Environmental Impact assessment on biomass through e.m.f. and resistance, National symposium on Eco-Environmental Impact & Organic Response, V.M.V. Amravati (15-17,Octo. 1994)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Magnetic susceptibility of Zn.Fe.Cr.O₄ & Zn.Mn.Cr.O₄ samples”, DAE solid state physics symposium (BARC Sponsored), Jaipur (27-31, Dec. 1994)
- W.J.Gawande, S.P. Yawale,, S.S. Yawale. Electronic conduction in CuO-Bi₂O₃ Pellets , 82nd Session of Indian Science Congress Jadhavpur University, Calcutta (3-8 Jan.1995)

- W.J.Gawande, S.P. Yawale, S.S. Yawale. Electrical conduction in CuO-B₂O₃ glasses, National conference on Recent Trends in composites, Shivaji Science College, Amravati (28Feb - 2Mar , 2001)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Thermal conductivity of CuO-B₂O₃ glasses , National conference on Recent Trends in Composites, Shivaji Science College, Amravati (28Feb -2Mar , 2001)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Project Method – A innovative method of teaching physics , RTTBAS-2009, Phulsingh Naik. Mahavidyalaya, Pusad Dist. Yavatmal (3 Jan. 2009)
- W.J.Gawande, S.P. Yawale,S.S. Yawale. Development of CO₂ gas sensor instrumentations using soft molecular electronics,NCNST-2011, Shri Shivaji Science College, Nagpur (21-22 Feb. 2011)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Optical and transport properties of Cu doped AS₂S₃ Thin films synthesized by chemical bath deposition method, National Conference on materials : Atom to molecule (MAM-2011), Shri Shivaji Science College, Nagpur (16 Dec. 2011).
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Effect of ZnO content on ultrasonic velocity and elastic constants of semiconducting Borate Glasses, National seminar on Technological Innovations with Enviromental integrity (NSTIEI-2012) H.V.P.M.,s College of Engineering and Technology , Amravati (28 Feb 2012).
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Synthesis and characterization of CuO-B₂O₃ glasses, National Conference on Lasers and advanced materials (NCLAM-2012), Dept. of Physics, S.G.B. Amravati University, Amravati (29-30 May 2012).
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Electrical conduction in CuO-B₂O₃ glasses, National conference on Recent Trends in Physics (NCRTP-2012), Dept. of Physics, Mungsaji Maharaj Mahavidyalaya, Darwha Dist. Yavatmal (26-27Oct.2012)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Transport properties of CuO-MnO₂-B₂O₃ glasses, National conference on Recent Initiatives towards green electronics (NCRIGE-2013), P.G. Dept. of Electronics, Brijlal Biyani science college, Amravati (8-9 Feb2013)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Optical properties of CuO-MnO₂-B₂O₃ glasses, National conference on Materials Science: Trends and future (NCMS-2014), Dept. of Physics, Bhartiya Mahavidyalaya, Amravati(10-11 Jan2014).

- W.J.Gawande, S.P. Yawale, S.S. Yawale. Transport properties of CuO-MnO₂-B₂O₃ glasses, National conference on material characterization and their applications(NCMCA-2014), (6 Feb2014).
- W.J.Gawande S.P. Yawale, S.S. Yawale Transport properties of CuO-MnO₂-B₂O₃ glasses, National conference on advanced materials (NCAM-2014), Dept. of Physics, Nabira Mahavidyalaya, Katol Dist. Nagpur (1 Mar 2014).
- W.J.Gawande S.P. Yawale, S.S. Yawale. Structural study of CuO-B₂O₃ glasses, National conference on Recent development in material science and Technology (RDMST-2014), Dept. of Physics, Arts, commerce and science college, Koradi Dist.Nagpur (11 Octo 2014).

International Conferences:

- S.P. Yawale, S.V. Pakade and C.S. Adgaonkar. Electrical properties of 80V₂O₅-20P₂O₅ semiconducting glass in presence of magnetic field".Proc. Solid State Phys Symp BARC, Bombay, 30C (1987)p. 65.(1987)
- S.P.Yawale, S.V. Pakade, P.K.Agnihotri and C.S. Adgaonkar Elastic constants of 75V₂O₅-25P₂O₅ semiconducting glass" , Proc. Solid State Phys Symp BARC, Bombay, 30C (1987)
- S.P. Yawale, S.V. Pakade, Y.R. Paranjapey and C.S. Adgaonkar Effect of past electric field on dc conductivity and dielectric constant of CuSO₄.5H₂O crystal at room temperature".75th session of Indian Science Congress, Pune (1988)
- P.K.Agnihotri, S.P.Yawale, S.V.Pakade and C.S. Adgaonkar. Empirical formula for the sound velocity in binary liquid mixtures" National Symp. On Ultrasonic Applications to molecular interaction Nagpur Dec.15-17. (1988)
- S.V.Pakade, S.P.Yawale and C.S. Adgaonkar Elastic constants of xAs-15Sb-(85-x)Se glasses," National Symp. On Ultrasonic applications to molecular interaction, Nagpur, Dec.15-17. (1988)
- S.P.Yawale, S.V. Pakade and C.S.Adgaonkar. Analysis of the two phase data in binary liquid system water + phenol below its critical temperature", Proc. Solid State PhysSymp. Bhopal University, Bhopal, Dec 20-23. 1988
- S.V. Pakade, S.P.Yawale and C.S. Adgaonkar. Theoretical and experimental investigation of the activation energies of V₂O₅-P₂O₅ semiconducting glasses", Proc. Solid State PhysSymp, Bhopal University, Bhopal 31C, (1988)

- S.V.Pakade, S.P. Yawale and C.S. Adgaonkar. Ultrasonic velocity and absorption measurement in V_2O_5 - P_2O_5 semiconducting glass", Proc. Solid State Phys. Symp, Bhopal University, Bhopal 31C (1988)
- S.P.Yawale, C.S. Adgaonkar, S.V. Pakade and P.K.Agnihotri Ultrasonic velocity and absorption measurement in binary liquid mixtures", Ultrasonic International 89 (CSIC) Madrid, Spain, July 3-7, (1989).
- P.K.Agnihotri, C.S.Adgaonkar, S.P.Yawale and S.V. Pakade. "Effect of steric factor on molecular interaction in binary liquid mixtures", Ultrasonics International 89 (CSIC) Madrid, Spain July 3-7. (1989)
- S.P. Yawale, S.V. Pakade and C.S. Adgaonkar. The dielectric constant measurement in critical binary liquid system, 10th IUPAC Conf On Physical Organic Chemistry, Haifa, Isreal. (Aug. 5-10, 1990).
- D.K.Burghate, V.S.Deogaonkar S.V.Pakade & S.P.Yawale. Thermal conductivity of lead bismuth glasses", Solid State Physics Symposium (BARC) University of Rajasthan, Jaipur. (Dec.27-31,1994)
- S.V.Pakade, S.P.Yawale & W.J.Gawande. Ultrasonic velocity and elastic constant measurement in some borate glasses" , VI National Symposium on Ultrasonics, Tirupati. (Sept.16-17, 1994)
- W.J.Gawande, S.V.Pakade, S.P.Yawale & K.M.Kulkarni. Environmental impact assessment on biomass through e.m.f. and resistance", National Symposium on Eco-Environmental Impact & Organism Response, Govt. Vidarbha Mahavidyalaya, Amravati. (Oct.15-17,1994)
- W.J.Gawande, S.V.Pakade & S.P.Yawale. Magnetic susceptibility of $ZnFeCrO_4$ & $ZnMnCrO_4$ samples"
- Solid State Physics Symposium (BARC), University of Rajasthan, Jaipur, Dec.27-31,1994.
- W.J.Gawande, S.V.Pakade, S.P. Yawale, S.G.Motke and D.K.Burghate Space charged limited conduction in amorphous Semiconductor-Polysterene-Semiconductor (SPS) sandwich material. 2nd International conference on space charge in solid dielectrics Antibes, Juan-les-Pins (France). (April 2-7,1995)
- W.J.Gawande, S.G.Motke, S.V.Pakade & S.P.Yawale. Electronic conduction in CuO - Bi_2O_3 pellets", 82, Indian Science Congress, Calcutta (Jan. 3-8, 1995)
- D.K.Burghate, V.S.Deogaonkar S.V.Pakade & S.P.Yawale. AC conductivity of lead

- bismuth glasses", 82, Indian Science Congress, Calcutta . (Jan. 3-8, 1995)
- W.J.Gawande, S.P. Yawale, S.S. Yawale. Thermal conductivity of V_2O_5 - P_2O_5 glasses, International conference & Exhibition on Thermal treatment of materials, Heat treat show 195, Bombay.(3-6, February, 1995)
 - W.J.Gawande, S.P. Yawale, S.S. Yawale. Space charged limited conduction in amorphous semiconductor – Polystyrene – semiconductor (SPS) sandwich material, 2nd International conference on space charge in solid dielectrics, Paris (2-7 April, 1995)
 - W.J.Gawande, S.P. Yawale, S.S. Yawale. Dc-Electrical conductivity and thermoelectric power measurements in CuO - B_2O_3 glasses , 4th International symposium on advanced materials, Islamabad, Pakistan. (17-21 Sept.19 95)
 - S.B. Sawarkar, V.S. Deogaonkar, S.V. Pakade, and S.P. Yawale. Thermally stimulated discharge currents in lead borate glasses”, International symposium on Discharge and Electrical Insulation in Vacuum, EIT DE TOURS-FRANCE, (June 30-July 5,200
 - S.A. Waghule, S.M.Yenorkar, G.T.Lamdhade, V.R.Bhonde, S.S.Yawale and S.P.Yawale. Conducting polymer-Polypyrrole as a CO_2 gas sensor”, 46th DAE Solid State Physics Symposium, Organised by BARC,Tromby, Mumbai, at Jiwaji University,Gwalior. (26-30 Dec. 2003)
 - G.T.Lamdhade, S.S.Yawale and S.P.Yawale. Stannic oxide along with α -Alumina and titanium oxide as a H_2S gas sensor”, 46th DAE Solid State Physics Symposium,Organised by BARC,Tromby ,Mumbai, at Jiwaji University, Gwalior. (2003)
 - Y.B.Gandole, S.P. Yawale and S.S.Yawale. Modeling and simulation of Piezo-electric crystal”. National conference on Statistic and Computer applications, Organized by Govt. V.I. S. H, Amravati. (Nov 28-30,2005)
 - Y.B.Gandole, S.P. Yawale and S.S.Yawale. Virtual instrumentation for Pizeo-electric transducers characteristics,National conference on trends in technology (NCTT) .(2005)
 - W.S.Barde , S.P. Yawale and S.S.Yawale. Ionic conductivity of polypyrrole synthesized by chemical oxidation method. National conference on recent advances in materials Science, Organized by Dr. B.R.Ambedkar College, Nagpur. (Jan 21-22,2006)
 - S.U. Patil, S.S. Yawale, S.P. Yawale. Conducting Behavior Of ZnO Doped Nanocomposite Polymer Electrolyte, 3rd international conference on Recent trends in engineering and management, Rajasthan. (2016)

PARTICIPATION IN CONFERENCES: GROUP ACADEMIC ACTIVITIES

- Indian Science Congress at University of Poona, Pune on Jan 7-12,1988.
- International Conference on Disordered Materials Systems (Structure & Properties) at Devi Ahilya University, Indore on Feb 3-6, 1991.
- Recent Trends In Composites at Dept of Physics, Shri Shivaji Science College, Amravati on Feb 28 -Mar 2, 2001.
- Workshop on Modern Differential Geometry at Amravati University, Amravati. On Feb 28-Mar 1, 1993.
- Solid State Physics Symposium at DOE, Govt. Of India, BARC, Trombay, Bombay on Dec 27-31,1997.
- Solid State Physics Symposium, Bhopal University, Bhopal. On Dec 20-23,1988.
- National Symposium on Eco-Environmental Impact and Organism Response at Dept. of Zoology, Govt. Vidarbha Mahavidyalaya,. Amravati on Oct 15-17,1994.
- National Seminar on Solid State Chemistry and allied areas at Dept. of Chemistry, Institute of Science, Nagpur on Jan 28-30,1991.
- National Symposium on Ultrasonic Application to Molecular Interactions at Dept. of Physics, Institute of Science, Nagpur on Sept. 15-17,1988.
- Patent Awareness Workshop at Nagpur University, Nagpur Sponsored by PEC,TIFAC & DST on March 8, 2003.
- First conference of Electronics Teachers Association and Workshop and on up gradation of Curriculum at Brijalal Biyani Science College, Amravati on March 20,2005.
- National conference on Luminescence And its applications (NCLA-2006) at Dept. of Physics, Amravati University, Amravati on Feb 7-9, 2006.
- Workshop on Scope and limitations of B.Sc.III (Physics) Syllabus at Dept. of Physics, Amravati University, Amravati on Jan.30,2007.
- One Day Workshop on post accreditation Policy Planning at Vidya Bharti Mahavidyalaya Amravati on Oct.23, 2004.
- Workshop on Development & Implementation of Question bank at SGB Amravati University, Amravati on March 30-31, 2007.
- National conference on Green Chemistry and its Perspective at Dept. of Chemistry, Amravati University, Amravati on Feb. 11-12, 2008.
- Regional level workshop on Advances in Electronics (Special Emphasis on

Microcontrollers) at Brijalal Biyani Science College, Amravati on Feb. 22, 2008.

- o National conference on Recent Initiatives in Green Electronics at Brijalal Biyani Science College, Amravati, Feb 8-9, 2013.

9. Projects (Completed)

Major research projects completed: 01

Title of the project – Development of Nano-architecture metal oxide doped conducting polymer as gas sensor.

Date of sanction and Letter No. 14 March 2014, F.N. 42-823/2013(SR)

Duration: Three Years

Grants sanctioned: Rs.10.82 Lakhs

Grants received: Rs. 997000/-

Funding Agency: UGC, New Delhi.

Minor research projects completed: 02

i) Title of the project - Calorimetric and electrical conduction study of blend containing polypyrrole.

Date of sanction and Letter No. 22 March 2002, F. No. 47-01/2002/WRO

Duration: Two Years

Grants sanctioned: Rs.40,000/-

Grants received: Rs. 40,000/-

Funding Agency: UGC, New Delhi.

ii) Title of the project – Development of carbon dioxide gas sensor with special reference to tin oxide.

Date of sanction and Letter No. Dated: 6 Jan 2006 F.No.47-085/2005/WRO

Duration: Two Years

Grants sanctioned: Rs.74,000/-

Grants received: Rs. 74,000/-

Funding Agency: UGC, New Delhi.

4. Research Guidance (Ph.D. & Msc by Research)

List of Ph.D. Awards

Sr. No.	Name of Ph.D Research Student (Award)	Registration No. and Date of Registration	Notification No. and Date of Award	Topic
1	Shri. W. J. Gawande	AU/6-Ph.D. /Phy/ 4/95 Dt.21.01.1995	47/99 Dt. 03.03.1999	Study of physical and electrical properties and hopping conduction mechanism in CuO-MnO ₂ -B ₂ O ₃ glasses.
2	Shri. D. S. Dhote	AU/5-Ph.D./Phy/ 1/98 Dt.08.06.1998	49/2002 Dt.07.02.2002	Study of electrical properties of vanadium borate glass Electrets through thermally stimulated current techniques.
3	Shri. S. G. Motke	AU/5-Phd/Phy/7/98 Dt.08.06.1998	58/2002 Dt.22.02.2002	Transport properties of zinc doped lead –borate glasses.
4	Shri. G. T.	AU/554-PhD/PHY/6/2000	141/2003 Dt.	Study of electrical properties of metal oxide thin films in

	Lamdhade	Dt.15.07.2000	31.07.2003	presence of humidity and H ₂ S, CO ₂ gases.
5	Shri. V. T. Kharche	AU/554- PhD/PHY/1/2000 Dt.15.01.2000	42/2007 Dt.03.05.2007	Study of electrical properties of silver and oxygen ion conducting silver borate glasses.
6	Shri. Y. B. Gandole (Electronics).	AU/554/412/2002 Dt.15.01.2002	40/2008 Dt. 14.02.2008	Development of ultrasonic system through virtual Instrumentation
7	Shri. M.A.Giri	<u>PG/Ph.D./@Regin./</u> <u>2003-2004/ 1210-24</u> Dt. 11.09.2003 SRTM Uni. Nanded	PG/PhD/2008- 2009/ 1830-7 Dt. 22.09.2008	Calorimetric Investigation and Electrical properties of Silver Ion Doped Lead Borate glasses
8	Shri. V. R. Bhonde	AU/554/239/2001 Dt. 15.07.2001	45/2008 Dt. 20.02.2008	Electrical conduction in conducting polypyrrole thin films.
9	Shri. S. M. Yenorkar	AU/554-Ph.D./ PHY/02/2003 Dt.15.01.2003	51/2008 Dt. 30.04.2008	The mixed oxide SnO ₂ -CuO as a semiconductor gas sensor for CO ₂ and H ₂ S.
10	Shri. S. A. Waghuley	AU/554/266/2003 Dt.30.07.2003	55/2008 Dt.31.05.2008	Gas sensitive electrical conduction of poypyrrole-Modified SnO ₂ -Al ₂ O ₃ sensors.
11	ShriV.K.Sewane	AU/554/65/2003 Dt.15.02.2003	121/2009 dated.31.12.2009	Transport and Microwave Properties of Fast ion Conducting Lithium Borate Glasses
12	ShriG.K.Reddy (Electronics)	AU/554/266//2003 Dt.30.07.2003	121/2009 dated.31.12.2009	Development of PC Based Gas Controlling and Sensing System
13	ShriC.S.Ulhe	AU/554/239/2001 Dt. 10.10.2001	50/2009 dated.24.02.2009	Calorimetric and Electrical Conduction study of Blend Containing Polypyrrole
14	ShriS.B.Unhale	AU/554-PhD/PHY /001/2004 Dt. 15.01.2004	58/2011 dated. 13.05.2011	Application of Metal Oxides SnO ₂ and ZnO as a CO ₂ Gas sensors

15	ShriD.P.Deshmukh	SGBAU/Ph.D./Physics/8/2010 Dt. 15.01.2010	50/2013 Dated. 11.07.2013	Conduction Mechanism and Structural study of Polythiophene Polyvinyl Acetate Composite Films
16	Shri D.R. Bijwe	SGBAU/Ph.D./PHY-5012/2011 Dt.15.07.2011	65/2014 Dated. 01.08.2014	Study of Nano Metal Oxide Doped Polyaniline Conducting Polymer
17	Miss AnkitaKarule	SGBAU/Ph.D./Physics/10/2010 Dt.15.01.2010	41/2015 Dated 21/02/2015	Synthesis Characterization and Conductivity study of PolypyrrolePolyethelene Oxide Composite Films
18	ShriS.U.Patil	SGBAU/Ph.D./Physics/10/2009 Dt.15.07.2009	109/2017 Dated 12.01.2017	Study of Conducting Nanocomposite Polymer Electrolytes Dispersed with ceramic Fillers
19	Miss P.A. Fartode	SGBAU/Ph.D./Physics/9/2010 Dt. 15.01.2010	124/2017 Dated 27.01.2017	Development of Sodium ion Conducting Polymer Electrolyte System for Solid State Battery application
20	ShriMayur S. Katore (Electronics)	SGBAU/Ph.D./ELE CT/7103/ 2015 Dt.15.07.2015	148/2017 Dated 27.04.2017	Chemically Engineered ITO/Polyaniline-Metal Oxide NanoComposite Architecture for Photovoltaic Application
21	ShriS.M.Palhade	AU/554/432/2006 Dt.07.11.2006		Design and Analysis with Modeling and Simulation of Microstrip Patch Antenna

List of Ph.D. Students registered

Sr.No.	Name of Ph.D. Student .Registered	Registration No and Date of Registration	Topic
1	ShriPritesh. J. Jadhao	SGBAU/Ph.D./PHY-5837/2013 Dt.15.01.2013	Synthesis and Characterization of Nano CdS, CdTePolyaniline Composite
2	Shri M.N. Chavhan	SGBAU/Ph.D./PHY/6621/2014	Study of Chloride Salt Doped Polyaniline

		Dt.15.07.2013	Conducting Polymer
3	Shri K. M. Mude	SGBAU/Ph.D./PHY/7628/2015 Dt.15.01.2015	Development of CO ₂ gas sensor using doped conducting polymer -Polyaniline
4	Shri B.M. Mude	SGBAU/Ph.D./PHY/7627/2015 Dt.15.01.2015	Design of CO ₂ gas sensor using doped conducting polymer Polypyrrole
5	ShriK.R.Banarase	SGBAU/Ph.D./PHY/7616/2015 Dt.15.01.2015	Synthesis and characterization of doped metal oxide PolyanilineNanocomposites for applications in Photovoltaic Cell

5. Activities

a) Details of patents: Patent Filed-

Application No. TEMP/E-1/19652/2018-MUM Dated; 18/05/2018

Title: High performance Photovoltaic Cell with Sodium Superoxide Interlayer in Polyaniline-CuO Matrix.

b) Books /reports/chapters/general articles etc.

S.No.	Title	Author's Name	Publisher	Year of publication
1	Advance Digital Electronics, Microprocessor and 8051 Microcontroller	S.P.Yawale, D.S.Dhote,Y.B.Gandole	GC Publishers, Nagpur	2015

c) Worked on various authorities & bodies of the University mention activities name & year:

Worked as member on (SGBAU, Amravati):

- Co-opted Member BOS in the subject Electronics (1997-2002).
- Member of Examination Committee subject Electronics 32 (5) (1997-2002).
- Member, 'Doctoral Research Committee' (1997-2002).
- Member, 'Research Recognition Committee' (2003-2007, 2010-2017).
- Elected Member of BOS in the subject Electronics (2008-2013, 2010-2017)).
- Member of Subject Examination Committee subject Electronics 32 (5) (2008-2013).
- Member of Science Faculty (2008-2013, 2010-2016).
- Senate member, SantGadge Baba Amravati University (2010-2016).
- Nominated as a member on Instrumentation Cell of SGBAU, Amravati (2017)
- Member of Research and Recognition Committee subject Electronics, SGBAU, Amravati (2018)
- As a VC nominee and Govt. nominee on Placement and Interview Committees of Assistant Professor, Associate Professors, Professor and Principal Appointments.
- Subject Expert on Selection Committees.

d) Referee of Ph.D.Thesis :

Examined Ph.D. Thesis in the Subjects Electronics and Physics of Swami RamanandTirthMarathwada University, Nanded, RSTM Nagpur University, Nagpur, BAMU, Aurangabad. Culcatta University and Jadhavpur University, Kolkata, Odisha and Solapur University.

e) Referee of Journals AND PROCEEDINGS OF CONFERENCES

- Indian Journal of Materials Science & Engineering, Council of Scientific Industrial Research, New Delhi.
- Journal of Non-Crystalline Solids, Elsevier Publications, Netherlands.
- Journal of IEEE (Transactions on Industrial Electronics), USA.
- National conference on recent trends in composites held at ShriShivaji Science College, Amravati during Feb. 28-March 2,2001.
- Sensors and Actuators (Netherland)
- Sensors Letters (Germany)
 - Journal of Physics and Chemistry of Solids (Elsevier Pub.,Netherlands)
 - Indian journal of Pure and applied Physics (CSIR, NISCARE, New Delhi)
 - Indian Journal of Physics, Kolkata

f) ADDITIONAL INFORMATION

- Research Fields: Semiconducting Glasses, Conducting Polymers, Gas and Humidity Sensors, Electronics Instrumentation, Dielectrics, Ultrasonic and Microwaves.
- Ex.Head, ‘Instruments Maintenance Facility (IMF)’
- Established ‘UGC Network Resource Centre’ of UGC in the Institute
- Member of subcommittee for Restructuring of Syllabus of B.Sc. and M.Sc. (Physics) and M.Sc. and M.Phil.(Electronics).
- Valuation and moderation of UG and PG.
- Ex. Member of Local Advisory Committee (Elected as per MUAct), Govt.VISH, Amravati (2010-2016)
- Chaired Session in many Conferences of Physics and Electronics.

6. Topics taught:

Solid State physics and Electronics

7. Professional recognition/Award/Prize/Certificate, fellowship received by the applicant

S.No.	Name of Award	Awarding agency	Year
1	Utkrushata Seva Gaurav Award	Sant Gadge Baba Amravati University, Amravati	2008