

RESUME

Full Name		DR. DESHMUKH SUSHANT BAPURAO		
Name of Institute:		Jalna Education Society's R.G. Bagdia Arts, S.B. Lakhota Commerce and R. Benzonji Science College, Jalna, Maharashtra		
Designation		Professor and Head		
Subject		Physics		
Specialisation		Electronics		
UG/ PG Teacher		Both		
Category		Open		
Address & Contact Details		Mobile No: 9420416654 Email: sushant.d59@gmail.com F11, Jabinda Residency, Behind Shahnoormia Dargh, Deva Nagri, Ch. Sambhajinagar		
Gender	Male			
Mother tongue	Marathi	Languages Known:	English, Hindi	

a) Educational Qualification:

Name of Exam	Board/University	Passing Mon-Year	Stream/Subject	Obtained/Total Marks		% or Grade Point
Ph.D.	Dr. Babasaheb Ambedkar Marathwada University, Ch. Sambhajinagar	1997	Physics	---	---	---
M.Sc.	Pune University	1992	Physics	1533	2000	76%
B.Sc.	Pune University	1990	Physics	1341	1900	71%
H.S.C	Pune Board	1987	PCMB	360	600	60%
S.S.C.	Pune Board	1985	Eng, Hindi, Marathi, Science, Maths, Soc. Science	491	700	71%

b) Work Experience:

Name of Employer	Type of Service	Designation	Nature of Post	From-To	Pay scale	Approval date
Jalna Education Society's R.G. Bagdia Arts, S.B. Lakhota Commerce and R. Benzonji Science College, Jalna, Maharashtra	Permanent Grant in aid	Professor & Head	Full Time	25 Aug 2006 to till date	225000	Sept 2006

A.S.C. College, Badnapur, Dist. Jalna	Permanent Grant in aid	Lecturer	full Time	June 1998 to 24 Aug. 2006	16500	Oct 1998
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c) Research Papers/ Conference Proceedings:

Sr No	Type of Journal	Title with Page No.	Journal Details	Published year	Sole/ Co-Author
1	International	Multi-Frequency Microwave Dielectric Characterization of Agricultural Soils for Precision Agriculture Applications	International Journal of Aquatic Research and Environmental Studies, Volume 5, Issue S4 (November), 2025 , pp 203-217	2025/11/15	Co-Author
2	International	Frequency-Dependent Dielectric Properties of Agricultural Soils from Buldhana District, Maharashtra	International Journal of Aquatic Research and Environmental Studies, Volume 5, Issue S4 (November), 2025 , pp-243-253	2025/11/15	Co-Author
3	International	Physico-Chemical Characterization and X-Band Dielectric Behaviour of Agricultural Soils from Mantha Taluka, Jalna District, India	International Journal of Aquatic Research and Environmental Studies, Volume 5, Issue S4 (November), 2025 , pp 218-233	2025/11/15	Co-Author
4	International	Dielectric Characterization of Vertisol and Inceptisol Soils at Multiple Microwave Frequencies	International Journal of Aquatic Research and Environmental Studies, Volume 5, Issue S4 (November), 2025 , pp 1-18	2025/11/15	Co-Author
1	International	Investigating The Influence Of Texture And Color On Dielectric Properties Of Soil At Microwave Frequency	International Journal of Environmental Sciences (Elsevier), Vol 11, Issue 20, PP-1426-1434	04-08-2025	Corresponding Author
2	International	Evaluation of diurnal variation of physical, chemical and dielectric properties of the soil	JES Bulletin, 3(1):40-44, Volume 3, Number 1, ISSN-2584-2072	January – 2025	Co-Author
3	International	Soil Dielectric Properties in the Context of Heavy Metal Contamination and Agricultural Productivity: A Review	JES Bulletin, 3(1):99-103, Volume 3, Number 1, ISSN-2584-2072	January – 2025	Co-Author
4	International	Dielectric Properties of South-western Vidarbha Soil: Implications for Agriculture, Environmental Monitoring, and Soil Health Across Microwave Frequency Bands X, C, and J	JES Bulletin, 3(1):104-109, Volume 3, Number 1, ISSN-2584-2072	January – 2025	Co-Author
5	International	The Study Of Dielectric And Emissivity Measurement Of Alkaline	International Journal of Environmental Sciences	04-08-2025	Corresponding

Sr No	Type of Journal	Title with Page No.	Journal Details	Published year	Sole/ Co-Author
	nal	Soil At Microwave Frequency	(Elsevier), Vol 10, Issue 6, PP-178-189		g Author
6	Inter national	A Review on Physico-chemical and Dielectric properties of soil	ALOHANA JOURNAL (ISSN NO:2231-6329) VOLUME 13 ISSUE 6 2024	2024	Corresponding Author
6	Inter national	Dielectric characterization of soil samples of Nashik region by microwave measurement	Journal of Emerging Technologies and Innovative research (JETR), Volume 7, Issue 2, PP.197-202, ISSN 2349-5162	Feb-2020	Guide
7	Inter national	Acoustic and Thermodynamic properties of Binary Liquid Mixtures using DMSO at different temperatures	Journal of Current pharma research, Volume 10, Issue 2, pp 3716-3723	Jan-2020	Guide
8	Inter national	Excess Thermodynamic Properties of Binary Liquid Mixtures of DMSO with Methanol at Different Temperatures	<i>International Journal of Universal Science and Technology</i> , Volume: 04 Issue: 04, PP: 196-201	2018	Guide
9	Inter national	Relationship of Electrical conductivity & Dielectric Constant with Status of Micronutrients in the Soil of Northern Maharashtra Region	International Journal of Chemical & Physical Sciences	March 2018	Guide
10	Inter national	Synthesis, Characterization and Gas sensing properties of Cu surface modified BaTiO ₃ thick films	Int. Res. J. of Science & Engineering, 2018; Special Issue A2 :	2018	Guide
11	Inter national	Influence Of Bulk Density On Dielectric Properties Of Soil Samples Of Khandesh And Northern Maharashtra	International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org, Volume 6, Issue 1 Pg 1515-1522	Jan 2018	Guide
12	Inter national	Relation Between Dielectric Constant and Water Content of Soil from Western Ghat of MS, India	International Research Journal of Science and Engineering, Special Issue A2, Pg 76-82	2018	Guide
13	Inter national	Measurement of Dielectric Constant of Soil from Northern Maharashtra at X Band Microwave Frequency	Current Global Reviewer, Issue 1, Pg 49-54	January-2018	Guide
14	Inter national	Dependence of Dielectric Constant on Physiochemical Properties of soil samples of Northern Maharashtra	Journal of Emerging Technologies and Innovative Research (JETIR) , Volume 5, Issue 3, Pages-127-134	March-2018	Guide
15	Inter national	Dielectric Study of Soil at X Band Microwave Frequency and Physiochemical Properties	International Journal of Engineering and Techniques Volume 4 Issue 1, Jan – Feb 2018	Feb 2018	Guide
16	Inter	Synthesis, Characterization and Gas	International Journal for	Dec-	Guide

Sr No	Type of Journal	Title with Page No.	Journal Details	Published year	Sole/ Co-Author
	national	sensing properties of Cr surface modified BaTiO ₃ thick films	Research in Applied Science & Engineering Tech. (IJRASET) Volume 5 Issue XII	2017	
17	International	Behaviour of Dielectric Properties of Soil of Northeast Region of Nashik with Variation of Moisture Content	International Journal for Research in Applied Science and Engineering, Issue XII, Vol.5, 2544-2550	Dec-2017	Guide
18	International	Variation of Physical Parameters of Soil from Nashik Region with Dielectric Constant at X Band Frequency	International Journal of Scientific and Engineering Research, Issue 11, Vol.8, Pg 86-90	Nov 2017	Guide
19	International	Effect of Organic Matter on the Electrical Parameters of Soil Samples from Western Ghat Zone of Maharashtra	International Journal of Scientific Development and Reserach, Issue 11 Vol.2, 117-122	2017	Guide
20	International	Pollution Effects and Control Soil Pollution	Pollution Effects and Control Soil Pollution, Special 17, pp 163-169	2017 August	Co Author
21	International	Correlations Between Physico chemical Characteristics with Dielectric Constant of Soil from Nashik Region	International Journal of Science and Research Issue 3, Vol.6, 2325-2328	March-2017	Guide
22	International	Complex Dielectric Behaviour of Soil from Nashik Region at X Band Microwave Frequency	International Journal of Scientific Research and Publication, Issue 12 Vol.6, Pg 77-89	Dec-2016	Guide
23	International	"H ₂ S Gas Sensing Properties of Sr Modified BaTiO ₃ Thick Films by Dipping and Doping Process"	<u>Sensor Letters</u> , Volume 14, Number 12, pp. 1203-1209(7) Publisher: American Scientific Publisher	2016	Guide
24	National	Variation of Dielectric Constant of soil from Nasik region with physical parameters at x band frequency	Proceeding Book: National Conference on Nonmaterial Imperatives in the New Millennium (NINM-2016) ISBN :978-93-83993-95-6 45, pp.45-49	Oct 2016	Guide
25	International	Comparative Evaluation of Ultrasonic Velocity in Binary Liquid Mixtures Over Wide Range of Temperatures	<i>International Journal Of Scientific Research</i> , Volume 5, Issue 10, PP:340-345	October 2016	Guide
26	International	Viscometric and thermodynamic study of binary liquid mixtures at 295 K, 300 K, 305 K, 310 K and 315 K	<i>International Journal of Advancement in Engineering Technology, Management and applied Science</i> , Volume 03, Issue 09, PP: 99-106	Sept 2016	Guide

Sr No	Type of Journal	Title with Page No.	Journal Details	Published year	Sole/ Co-Author
27	International	Sensitive and rapid Hydrogen sulphide sensors based on Ni surface modified BaTiO ₃ thick films	Journal of Advanced Physics, Vol 5, Issue 2, , pp-110-117, ISSN-2168-1996	June-2016	Co-Author
28	International	Acoustic and Thermodynamic study of binary liquid mixtures at different temperatures from 295 K to 315 K	<i>International Refereed Research Journal</i> , (Special Issue on International Conference proceedings), Vol. 7 (4), 2016, 119-124	2016	Guide
29	International	Finite element analysis of corner deformed plasma filled waveguide	Bionano Frontier, vol. 8, issue 3, ,pp.275-278, ISSN-2320-9593	December 2015	Main-Author
30	International	Gas sensing properties of Cu surface modified BaTiO ₃ thick film	Bionano Frontier, vol. 8, issue 3, pp-31-33	December--2015	Guide
31	International	Seasonal Study of Physico-Chemical Characteristics of Ground Water of Rahata Area	Seasonal Study of Physico-Chemical Characteristics of Ground Water of Rahata Area, vol 2, issue 7 , pp 663-669	July - 2015	Co Author
32	International	Finite Element Analysis of lossy Waveguide With Inclination of Side Wall	Journal of Deccan Current Science, vol 13, ISSN-0975-3044	January 2015	Main Author
33	International	Physico-chemical and dielectric properties of soil samples at X-band microwave frequency of Nasik region	Bionano Frontier, vol. 8, issue 3, ,pp.279-282, ISSN-2320-9593	December 2015	Co-Author
34	International	Formulation, characterization and LPG-sensing properties of CuO-doped ZnO thick film resistor	Advancement in Sensing Technology, Springer Publication, pp 283-298	2013	Co-Author
35	International	Thermo-acoustical studies of binary mixture n-octane, n-decane, n-dodecane and n-tetradecane with octan-2-ol and application of theories of sound speed	Journal of Molecular Liquids, Elsevier publication, vol 175, pp 44-50	Nov, 2012	Co-Author
36	international	Speed of ultrasound and thermodynamic properties of n-tetradecane in binary liquid mixtures at 298.15 K	International Journal of Research in Physical Chemistry , ISSN-2320-3919, Volume 2, Issue 3, pp 11-19	July-2012	Co-Author
37	national	Review of distance evaluation	Journal of research analysis and evaluation, volume 3, issue 29, pp.87-88, ISSN 0975-3486	February 2012	Guide
38	International	Computer Assisted testing and evaluation system: distance evaluation using mobile agent technology	International journal of advanced research in computer engineering & technology, volume 1, , pp.395-401, Issue 4, ISSN-	June 2012.	Guide

Sr No	Type of Journal	Title with Page No.	Journal Details	Published year	Sole/ Co-Author
			2278-1323		
39	national	Current trends and analysis of mobile agent application	world journal of science and technology, 2(4), pp 1-6, ISSN-2231-2587	April, 2012	Guide
40	national	Analysis of mobile agent	Journal of global research in computer science, volume 2, Issue 11 , pp.6-10 ISSN-2229-371X	Dec. 2011	Guide
41	national	Finite element analysis of trapezoidal cross section plasma filled waveguide	Bulletin of the Marathwada Mathematical Society, volume 12, Issue 1, pp.23-36	June 2011	Main Author
42	national	Mobile Agent: Emerging Technology	International Journal of electronics communications and computer Engineering,, volume 2, Issue 2, pp1-7, ISSN-2249-071x	June 2011.	Co-Author
43	international	Ultrasonic studies of some bio-active molecules in aq. 0.02M LiClO ₄ -3H ₂ O sol", at 298.15K	Deccan Current Science, Vol-1, ISSN-0975-3044	July-Aug 2009	Co-Author
44	International	4d transition metal Monoxides, Monocarbides, Monoborides, Mononitrides, Monofluorides: a Quantum Chemical study (pp.1103-1115)	International J. of Quantum Chemistry, (Wiley Inter science) ISSN-1097-461X	August, 2009	Co-Author
45	national	Ultrasonic studies of some amino acids in aq. 0.02M LiClO ₄ -3H ₂ O solution at 308.15K	Bulletin of pure and applied Science, pp.1-7, ISSN-2229-6107	Dec-2007	Co-Author
46	national	Acoustical studies of some bio-active molecule in aq. 1, 4-dioxane at 298.15 K	Journal of material science, vol 4 (2) , pp.475-480, ISSN-2394-0565	Dec-2007	Co-Author
47	national	Volumetric studies of some amino acids in aqueous 1,4-dioxane at 308.15 K,pp	Journal material science, vol. 4(2), pp. 447- 452, ISSN-2394-0565	June 2007	Co-Author
48	national	Ultrasonic studies of some amino acids in aq. 0.02M LiClO ₄ -3H ₂ O sol at 298.15K	Journal of material science , voi.4, issue-2, pp 373-378, ISSN-2394-0565	Dec-2007	Co-Author
49	national	Volumetric, viscometric and ultrasonic studies of some amino acids in aqueous 0.02M LiClO ₄ -3H ₂ O solution at 298.15 K	Journal of material science, vol.4, issue-2, 345-352, ISSN-2394-0565	Dec-2007	Co-Author
50	national	Dielectric properties of water- laden soils from Parbhani dist. of Maharashtra	Research Journal of S.R.T.M. University, pp 5-9, ISSN-2277-8594	June 2007.	Co-Author
51	national	Volumetric, Viscometric studies of some amino acids in aq. 0.02M LiClO ₄ -3H ₂ O solution at 298.15 K	Bulletin of pure and applied science. pp.1-7, ISSN-2229-6107	June-2007	Co-Author

Sr No	Type of Journal	Title with Page No.	Journal Details	Published year	Sole/ Co-Author
52	international	Finite element analysis of trapezoidal cross section lossy waveguide	Indian Journal of Physics, Volume 72B, Issue 3, pp 257-261	March-1998	Main Author

d) Paper Presented in Conference/Workshop/Symposium:

Sr No	Title of Paper	Type of Conference/ Workshop/ Symposium	Details of Conference/ Workshop/ Symposium	Organiser Details	Proceedings Published	Sole/ Co-author
1	Structural, optical and gas sensing properties of barium titanate surface modified by nano silver	International	Smart materials at 3 rd International conference on recent trends in image processing and pattern recognition (RTIP2R,2020), 3-4 Jan 2020	Dr.Babasaheb ambedkar Marathwada University, Aurangabad	yes	Guide
2	Physico-chemical and Electrical properties of soil samples at X-band microwave frequency of Nasik region	National	National conference in recent advances in science, 13/02/2020	Shivaji college, Kannad, Dist. Aurangabad	No	Guide
3	Moisture dependent dielectric properties of different soil texture at X-band microwave frequency, pp.891-996	International	International Conference on Microwaves and Optics -2007, Aurangabad , December 2007, Sponsor: DST,UGC, ISRO, IEEE	Organized by Department of Physics, Dr.Babasaheb Ambedkar Marathwada University, Aurangabad	Yes	Co-author
4	Seasonal study of Physico-chemical study of characteristics of ground water of Rahata area, M.S.	International	4 th International conference on Recent trends in Engineering and Technology (ICRTET-2015), 2-4 July 2015	Kantabai Bhavarlalji College of Engineering, Chandwad, Dist. Nasik, M.S	Yes	Co-author
5	Gas sensing properties of Cu surface modified BaTiO ₃ thick film ,pp.31-33	International	International Conference on Functional Materials and Microwaves-(ICFMM-2015) 28-30, December-- 2015	Organized by Department of Physics, Dr.Babasaheb Ambedkar Marathwada University, Aurangabad	Yes	Guide

Sr No	Title of Paper	Type of Conference/ Workshop/ Symposium	Details of Conference/ Workshop/ Symposium	Organiser Details	Proceedings Published	Sole/ Co-author
6	Physico-chemical and dielectric properties of soil samples at X-band microwave frequency of Nasik region, pp.279-282	International	International Conference on Functional Materials and Microwaves-(ICFMM-2015) 28-30, December--2015	Organized by Department of Physics, Dr.Babasaheb Ambedkar Marathwada University, Aurangabad	Yes	Guide
7	Finite element analysis of corner deformed plasma filled waveguide, pp.275-278	International	International Conference on Functional Materials and Microwaves-(ICFMM-2015) 28-30, December--2015	Organized by Department of Physics, Dr.Babasaheb Ambedkar Marathwada University, Aurangabad	Yes	Guide
8	Gas sensing properties of pure BaTiO ₃ thick films, 56-63	National	National conference on Novel Materials for Advanced Technology, held on 13-14 Sept. 2013	Bhopal (NMAT-2013) Sponsor: IETE, CSIR MPCST	No	Guide
9	Finite element analysis of Plasma filled waveguide with inclination of side walls, (157-164)	National	National Conference of Microwave Techniques and Applications, NCMTA-2013, 29-30 Nov. 2013 Sponsor: IETE, UGC	Maulana Azad College, Aurangabad	Yes	Guide
10	Current trends and analysis of mobile agent applications, 2-6	National	National conference on emerging trends in computer Technology-2012 . April 21, 2012	Held at R.C.Patel Institute of Technology, Shirpur, Dist. Dhule, Maharashtra, India	Yes	Guide
11	Finite element analysis of trapezoidal cross section plasma filled waveguide, 23-36	National	Recent Developments in Mathematics, National Conference, 17-18 Jan 2011	J.E.S. College, Jalna, M.S., India	Yes	Guide
12	Dielectric study of moisture laden soils at X-band microwave frequency, 47-55	National	Contribution of Biological Research to Humankind, National conference, 14-15 Jan 2007, J.E.S. College, Jalna Sponsor: UGC India	J.E.S. College, Jalna, M.S., India	Yes	

Sr No	Title of Paper	Type of Conference/ Workshop/ Symposium	Details of Conference/ Workshop/ Symposium	Organiser Details	Proceedings Published	Sole/ Co-author
13	Emerging Trends in Remote Sensing	International	Training Course (research) 20/04/2015 to 01/05/2015	Indian Space Research Organisation (ISRO), National remote sensing centre, Hyderabad	----	Guide
14	Acoustic and Thermodynamic study of binary liquid mixtures at different temperatures from 295 K to 315 K	International	12-14 Dec 2016	MSG College, Malegaon, Dist. Nasik	Yes	Guide
15	Excess Thermodynamics Properties of Binary liquid mixture of DMSO with Methanol at various Temperature	National	21 January 2018	Sant Ramdas College, Ghansawangi	No	Guide
16	Gas sensing properties of Ni doped BaTiO ₃ thick film	International	Dec-2015	Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur	No	Guide
17	Dielectric measurements of soil located from Deomurti Navha Road, Jalna district (MS) at X-band (Sarita Jassulal Bhurewal, S. B. Bajaj, Ashish B. Itollikar, S. B. Deshmukh)	International	International Conference on Materials Science and Nanotechnology for Sustainable Applications (ICMSNSA-2023) 23 - 24 March 2023	Organized by University Department of Basic and Applied Sciences MGM University, Aurangabad, (MS) India-431003	Yes	Co-Guide

Sr No	Title of Paper	Type of Conference/ Workshop/ Symposium	Details of Conference/ Workshop/ Symposium	Organiser Details	Proceedings Published	Sole/ Co-author
18	Evaluating the accuracy of measurements of soil moisture content at X band microwave frequency (Kunal Takle, S.B. Deshmukh,)	International	International Conference on Materials Science and Nanotechnology for Sustainable Applications (ICMSNSA-2023) 23 - 24 March 2023	Organized by University Department of Basic and Applied Sciences MGM University, Aurangabad, (MS) India-431003	Yes	Guide
19	Frequency-Dependent Dielectric Properties of Soil : A Comparative Study of Physical and Chemical Influences (Kunal Takle, S.B. Deshmukh,)	International	Emerging Trends in Physics and Mathematics-(ETPM-2024)	Anandrao Dhondge Alias Babaji Mahavidyalya , Ashti, Dist Beed	Yes	Guide

e) Publications- Books, Chapters, Articles:

Sr. No	Publication Type	Title of Book	Publisher Details	Book ISSN/ISBN	Published Year	Sole/ Co-author
1	Chapter in Book	Physics for B.Sc. Second year, Photo-electric effect (92-103)	Himalaya Publishing House, Mumbai	978-93-5142-983-8	2014	Co-author
2	Chapter in Book	Physics for B.Sc. Second year, X-rays (104-117)	Himalaya Publishing House, Mumbai	978-93-5142-983-8	2014	Co-author
3	Chapter in Book	Physics for B.Sc. Second year, Thermal Properties of Solids (148-167)	Himalaya Publishing House, Mumbai	978-93-5202-426-1	2015	Co-author
4	Chapter in Book	Physics for B.Sc. Second year, Free electron theory of metals and transport properties (168-186)	Himalaya Publishing House, Mumbai	978-93-5202-426-1	2015	Co-author
5	Chapter in Book	Advance Physics, Thermal properties of Solids (97-113)	Anand Prakashan, Aurangabad	81-922357-4-5	2012	Co-author

Sr. No	Publication Type	Title of Book	Publisher Details	Book ISSN/ISBN	Published Year	Sole/ Co-author
6	Chapter in Book	Advance Physics, Nano Physics (114-129)	Anand Prakashan, Aurangabad	81-922357-4-5	2012	Co-author
7	Chapter in Book	Advance Physics, Transistor Biasing (130-148)	Anand Prakashan, Aurangabad	81-922357-4-5	2012	Co-author
8	Chapter in Book	Advance Physics, Crystal Structure (101-123)	Anand Prakashan, Aurangabad	81-922357-0-7	2013	Co-author
9	Chapter in Book	Advance Physics, Bonding and band theory of solids (124-145)	Anand Prakashan, Aurangabad	81-922357-0-7	2013	Co-author
10	Chapter in Book	Advance Physics, Semiconductor devices (146-178)	Anand Prakashan, Aurangabad	81-922357-0-7	2013	Co-author
11	Chapter in Book	Advance Physics, D.C. Circuits (179-204)	Anand Prakashan, Aurangabad	81-922357-0-7	2013	Co-author
12	Chapter in Book	Concept of Physics, Time varying fields (57-68)	Anand Prakashan, Aurangabad	81-922357-0-7	2012	Co-author
13	Chapter in Book	Concept of Physics, Electromagnetic Waves (69-80)	Anand Prakashan, Aurangabad	81-922357-0-7	2012	Co-author
14	Chapter in Book	Fundamentals of Physics,, Ultrasonic and Acoustics, (81 to 96	Anand Prakashan, Aurangabad	93-82202-09-7	2014	Co-author
15	Chapter in Book	Fundamentals of Physics,, Viscosity and Surface Tension (61-80)	Anand Prakashan, Aurangabad	93-82202-09-7	2014	Co-author
16	Chapter in Book	Fundamentals of Physics,, polarization (88-104)	Anand Prakashan, Aurangabad	93-82202-21-9	2014	Co-author
17	Chapter in Book	Fundamentals of Physics,, diffraction (46-67)	Anand Prakashan, Aurangabad	93-82202-21-9	2014	Co-author
18	Chapter in Book	Physics for B.Sc. third year, Interaction of Electromagnetic waves with matter (117-130)	Kailash Publication, Aurangabad	978-81-942185-2-4	2019	Co-author
19	Chapter in Book	Physics for B.Sc. third year, ELECTROMAGNETIC	Kailash Publication, Aurangabad	978-81-942185-2-4	2019	Co-author

Sr. No	Publication Type	Title of Book	Publisher Details	Book ISSN/ISBN	Published Year	Sole/ Co-author
		WAVES (131-143)				

f) Details of Research Students guided for M.Phil./Ph.D.:

Sr. No	Student Name	Degree	Registration Date	Award of Degree	Branch/Title	Degree Status
1	Mr. Suresh B. Nahire	Ph.D.	20 June 2012	Awarded	Gas sensing Performance of Pure and Modified aTiO ₃ thick film Resistor	Awarded (12/10/18)
2	Mrs. Sunita R. Dandwate	Ph.D.	20 June 2012	Awarded	Ultra sonic Investigation of Molecular interactions in Binary liquid mixtures at different temperatures	Awarded (15/02/19)
3	Mrs. Dhiware Manisha	Ph.D.	5 June 2015	Awarded	Soil Analysis of Nashik Region at very high frequency using different techniques	Awarded (7/6/19)
4	Mr. Kharat Bhagwat	M.Phil	1 June 2006	Awarded	Computational study of 4D metal monoborides, monocarbides, mononitrides, monoxides and monofluorides using DFT method	Awarded (15-12-2007)
5	Mr. Bakale S.P.	Ph.D.	20/06/2012	-----	Study of Ultrasonic velocities and viscosities of binary mixture of higher alcohols with toluene as a solvent at different temperatures	---
6	Mr. Amit Shinde	Ph.D.	01-05-2022	Working	A Study of Physical, Chemical and Electrical Properties of Agricultural Soil in the region of Mantha Taluka at very high Frequency	--
7	Mr. Kunal Ashok Takle	Ph.D.	12-02-2022	Working	Dielectric Study of Soil of South-Western Vidharbh region at Microwave Frequency	--
8	Mrs. Dipali Dilip Arjune	Ph.D.	12-02-2022	-----	To study Agricultural Soil of Jalna District at a very high frequency band	--
9	Mrs. Swati Murlidhar Ugale	Ph.D.	12-02-2022	Working	To Study Physical, Chemical and Electrical properties of Soil of Sangamner Region at very high frequency	---

Sr. No	Student Name	Degree	Registration Date	Award of Degree	Branch/Title	Degree Status
10	Mr. Lahamate Yogesh Khandu	Ph.D.	23-08-2025	Working	Comparative Analysis of various methods for preparation of transition metal doped CuO and CuS, nano-particles for Pharmaceutical and Catalytic Applications	---
11	Mr. Sathak Vithalrao Khedekar	Ph.D.	23-08-2025	Working	Nanomaterial based Electrode Synthesis for the Enhancement of Super-Capacitor Performance	---
12	Mrs. Bundhe Shital Sheshrao	Ph.D.	23-08-2025	Working	Advance Quantum information Theory : Algorithmic Innovation and Applications	---
13	Mr.Suryawanshi Pruthviraj Sushil	Ph.D.	09-10-2025	Working	Preservation of Agricultural Food materials using Nuclear radiation Spectroscopy	---

g) Details of Research Schemes/Projects/ Consultancies undertaken:

Sr. No	Project Name	Funding Agency	Fund Mobilised (Rs.)	Commencement Date	Completion Date	Worked as
1	To study characteristics of Wave guide with different medium and shapes using F.E.M.	UGC, New Delhi	55,000	15/04/2008	15/06/ 2010	Chief-Investigator
2	Dielectric Study of Godavari Soil using Infinite Sample method	UGC, New Delhi	75000	15/04/2008	02-02-2011	Co-Investigator
3	Dielectric Properties of soil with organic and Inorganic matters at Microwave Frequencies	UGC, New Delhi	175000	08/03/2012	07/03/2014	Co-Investigator
4	To build and study microcontroller based thin film gas detector	UGC, New Delhi	164000	13/04/2015	07/03/2018	Chief-Investigator

h) Course Coordinator:

Sr. No	Project Name	Funding Agency	Fund Mobilised	Commencement Date	Completion Date	Worked as
1	UGC Innovative P.G. Course, M.Sc.(Industrial Automation)	UGC, New Delhi	60 Lakhs	01/06/2011	01/06/2016	Coordinator
2	UGC Course, B.Voc (Industrial Automation)	UGC, New Delhi	125 Lakhs	01/06/2018	01/06/2021	Coordinator

I) CO-CURRICULAR, EXTENSION & PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES:

1. Student related co-curricular, extension & field based activities (such as extension work through NSS/NCC & other channels, cultural activities, subject related events, advisement & counseling)	a. Organized educational tours to BARC, IUCAA, and NCL. b. Organized the Physics Alumni Meet. c. Guided students for NET/SET examinations. d. Delivered talks at various NSS camps. e. Worked as Chairman of College cultural gathering
2. Contribution to Corporate life & management of the department & institution through participation in academic & administrative committees & responsibilities	a. Worked as member of various college committees. b. Served as an IQAC member from 2010 to 2015. c. Worked as Chairman, Training and Placement Cell. d. Worked as CS, JCS for the University Examinations
3. Professional Development Activities (such as participation in seminars, conferences, short term, training courses, talks, lectures, membership of associations, dissemination & general articles)	a. Workshops attended: 15 b. Life memberships: 2 c. Member, College Affiliation Committee d. Member, Board of Studies (Physics)
Training Courses, Teaching, Learning Evaluation Technology Programmes, Faculty Development Programmes (Not less than one week duration)	a. Completed a two-week ISRO training course. b. Attended three Refresher Courses. c. Attended an Orientation Course.
Invited lectures or presentations for conferences/symposia	a. Served as a resource person at the ICT-based workshop conducted at Deogiri College, Aurangabad. b. Conducted theory and practical sessions in the Department of Applied Mathematics at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. c. Worked as resource person for Research Methodology course work at Dr. Babasaheb Ambedkar Marathwada University, Ch.Sambhajinagar

Design of new course & curriculum	a. Contributed as a member in designing the curriculum for NEP B.Sc. Physics and M.Sc. Physics. b. Designed the syllabus for the UGC Innovative Course M.Sc. (Industrial Automation) and the UGC Skill-Based Course B.Voc. (Industrial Automation).
Particulars of current research work at personal level	Working in the field of Material Science (Dielectrics). Ph.D. research involved the Finite Element Method (FEM). Currently developing programs for data generation, FEM analysis, eigen-value computation, and field plotting.
Co-curricular & extra curricular activities	Delivered talks at various NSS camps.
Consultancy work carried out	Guided and supported students in securing in-plant training opportunities in various industries across the Jalna region.
Patents & IPR Details:	Registered for IPR
Any other information you wish to specify	a. Worked as Coordinator for the UGC Innovative Course M.Sc. (Industrial Automation) and as Nodal Officer for the skill-based course B.Voc. (Industrial Automation). b. In January 2024, my research student won the top prize at the state-level science exhibition <i>Avishkar</i> in the Basic Sciences category for a working model titled “Universal Automation Kit for Microwave Benches.” c. Served as the Organising Secretary for the international conference titled “Harmony of Wisdom: Integrating Physical Science with the Rich Heritage of the Indian Knowledge System,” held on 10–11 January 2025.

Dr. S.B. Deshmukh