

## CURRICULUM VITAE

### Dr. Anant Sudhakarrrao Wadatkar

**Dr. Anant Sudhakarrrao Wadatkar**  
Assistant Professor and Head  
Department of Physics,  
Vinayak Vidnyan Mahavidyalaya,  
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#### Present Position

Assistant Professor and Head, Department of Physics,

#### 1) Educational Details:

Degree/ Examination	Discipline	Board / University	Year
Ph.D. (Physics)	(Faculty of Science) <b>Topic:</b> Effect of Dopants on the Electrical Properties of Binary Polyblends of PS, PMMA, and PVC and their Electrets.	SGB Amravati University, Amravati	2011
M. Phil.	Physics	Alagappa University, Karaikudi (T.N.)	2008
M.Sc. (Physics)	(Condense Matter Physics)	Amravati University	1999
B.Sc.	Physics, Mathematics, Chemistry	Amravati University	1996
H.S.C.		Amravati Board	1993
S.S.C.		Amravati Board	1991

#### 2) Experience:

**Teaching Experience : PG :18 Years (Ad-hoc Basis) UG: 12 years (CHB)**

- 18 Years at PG Level on Ad-hoc Basis at Vidya Bharati Mahavidyalaya, Amravati
- 1 years on CHB at PG department of Physics, S.G.B. Amravati University, Amravati
- 12 years on CHB at UG Level at Vidya Bharati Mahavidyalaya, Amravati

**Research Experience: 12 Years as a Research Scholar.**

#### 3) Memberships / Linkages:

Sr. No.	Name of the Organization	Level	Nature of Membership	Year from which the linkage is established
1.	Wildlife and Environment Conservation Society	State	Life Member	2011
2.	Maharashtra Pakshimitra	State	Life Member	2011
3.	Indian Association of Physics Teachers (IAPT)	National	Life Member	2015
4.	Adhar Foundation	State	Life Member	2017

#### 4) Research Project (As Co- Investigator)

##### Minor Research Project:

Sr. No.	Title of the Project	Status	Funding Agency Letter No.	Principal Investigator
1.	Investigation of A.C. and D.C. Electrical Conductivities and Optical Properties of some doped polyblend systems.	Completed	Minor Research Project funded by University Grants Commission, New Delhi, sanction order. File No. 47-610/08(WRO) Dated March 6, 2009 (2009-2011) of Rs. 1,80,000	Dr. N. G. Belsare
2.	Electrical and optical properties of some doped cast polymeric film.	Completed	Minor Research Project funded by University Grants Commission, New Delhi, sanction order. File No. 47-674/08(WRO) Dated March 6, 2009 (2009-2011) of Rs. 1,05,000	Prof. T.S. Wasnik
3.	Study of electrical properties of thermoplastics and their blends.	Completed	Minor Research Project funded by University Grants Commission, New Delhi, sanction order. File No. 47-675/08(WRO) Dated March 6, 2009 (2009-2011) of Rs. 1,00,000/-	Dr. R. V. Joat
4.	Study of DC and AC Electrical Conducting Properties of some doped Polymers.	Completed	Minor Research Project funded by Vidya Bharati Mahavidyalaya, Amravati File No. Dated 07 Sept. 2018 Amount Rs. 10,000/-	Dr. R. V. Waghmare
5.	Fabrication of Transition Metal Nanoferrites as Potential Electrodes for Supercapacitor Applications	Submitted	Rajiv Gandhi Science & Technology Commission (Government of Maharashtra) Amount Rs. 2,00,000/-	Dr. P. B. Kharat

#### 5) Publications:

##### A) Journal Papers

Sr. No.	Title of the Paper	Name of the Journal with Vol. No. & Year	Level
1	Gas Sensitivity of TiO <sub>2</sub> based thick film sensor to NH <sub>3</sub> gas at room temperature	International Journal of Advanced Engineering Technology, II Vol./IV issue.2011	International
2	Polyvinyl Chloride –Polymethyl Methacrylate Micro-composite Polymers: Miscibility	Journal of Electron Devices, Vol. 11, 2011, pp. 583-587	International
3	Application of Metal Oxide Thick Film as a NH <sub>3</sub> Gas Sensor	Journal of Electron Devices, Vol. 11, 2011, pp. 544-550	International
4	Temperature and Electric Field Dependence of DC Electrical Conductivity of 4:1 PVC- PMMA Polyblend thin films doped with Cinnamic Acid	Bio-Nano frontier Special Issue -7 PP 12-14,2011 (ISSN 0974-678 Impact. Factor : 0.2334)	International
5	Effect of IR Radiation on the Dielectric Properties of Salicylic Acid Doped Poly-blend Thin Films of PS and PMMA.	International Journal of Scientific & Engineering Research, Volume 4, Issue 9, September-2013 ISSN 2229-5518	International
6	Study of variation dielectric constant of 4:1 PS PMMA Polyblend thin films doped with Oxalic Acid in different weight proportions	International Journal of Basic and applied research Special vol.04 (196-200)ISSN No. 2249-3352 (2014)	International
7	Investigation of Temperature dependence of Electrical Conductivity of PVAC-PPY-CrCl <sub>3</sub> Composite Polymer Film.	International Journal of Basic and applied research Special vol. 04(338-341)ISSN No. 2249-3352 (2014)	International
8	Effect of UV Radiation on The Dielectric Constant of Salicylic Acid - 2 Doped Polymer Thin Film of PMMA.	Research Journey, International E-Research Journal Impact Factor (SJIF) 6.261(CIF) Special Issue 110 (I)- Physics ISSN :2348-7143 February 2019	International

9	Study on DC Conductivity of PPy- Zn Nano Composites	Science Direct Materials Today: Proceedings 15 (2019) 595-603	International
10	The D.C electrical properties of Lithium ion conducting solid polymer electrolyte based on polyvinyl alcohol	Journal of Physics: Conference Series Volume: 1644, ISSN:1742-6588, E-ISSN:1742-6596 (2020)	International
11	Temperature dependent AC electrical properties of solid polymer PVA based proton electrolyte	Journal of Physics: Conference Series Volume: 1644, ISSN:1742-6588, E-ISSN:1742-6596 (2020)	International
12	Low-cost Fabrication of Cu doped ZnO (Zn <sub>0.95</sub> Cu <sub>0.05</sub> O) Film for Enhanced Gas Sensing Applications	Journal of Physics: Conference Series Volume: 1644, ISSN:1742-6588, E-ISSN:1742-6596 (2020)	International
13	Gas sensing behavior of ZnO thick film sensor towards H <sub>2</sub> S, NH <sub>3</sub> , LPG and CO <sub>2</sub> .	Journal of Physics: Conference Series Volume: 1644, ISSN:1742-6588, E-ISSN:1742-6596 (2020)	International
14	Enhancement of Electrical Conductivity in PVA Film by Doping with Li <sup>+</sup> ion	International Journal of Scientific Research in Science and Technology Volume 9 Issue 13 (2022)	International

## 6) Publications:

### A) Conference Papers

Sr. No.	Title of the Paper	Name of the Conf./Seminar Workshop, Venue and Duration	Level
1.	Comparative study of dc and ac conductivities of 1:1, 1:2 and 1:3 PS/PMMA Polyblend thin films	53 <sup>rd</sup> DAE Solid State Physics Symposium (December 16 -20, 2008); at Bhabha Atomic Research Centre, Mumbai.	National
2.	Study of Effect of Cennamic acid as a Dopant on dc Electrical Conductivity of 2:1 PVC/PMMA Polyblend films.	53 <sup>rd</sup> DAE Solid State Physics Symposium (December 16 -20, 2008); at Bhabha Atomic Research Centre, Mumbai.	National
3.	Electrical Conduction in 1:1, 1:2 and 1:3 PS/PMMA Polyblend thin films doped with Benzoic Acid	53 <sup>rd</sup> DAE Solid State Physics Symposium (December 16 -20, 2008); at Bhabha Atomic Research Centre, Mumbai.	National
4.	Study of DC Electrical Conductivity 1:1 PMPMA Polyblend Doped with Cinnamic Acid	National conference on Material Science: Trends & Future- 2010, organized by Department of Physics, VidyaBharati Mahavidyalaya, Amravati. 6-7 Jan 2010.	National
5.	The Study of DC Electrical Conductivity 1:0.5 PVC-EC Polyblend Thin Film	National conference on Material Science: Trends & Future- 2010, organized by Department of Physics, VidyaBharati Mahavidyalaya, Amravati. 6-7 Jan 2010.	National
6.	DC Conductivity Study of 4:1 PS PMMA Polyblend thin films doped with Oxalic Acid	National conference on Recent Trends in Engineering Sciences, organized by Dr. Bhausahab Nandurkar College of Engineering and Technology, Yavatmal, 11-12 Oct. 2010.	National
7.	“Temperature and Electric Field Dependence of DC Electrical	National conference on Recent Trends in Engineering Sciences, organized by Dr.	National

	Conductivity of 4:1 PVC PMMA Polyblend thin films doped with Cinnamic Acid”	Bhauasaheb Nandurkar College of Engineering and Technology, Yavatmal, 11-12 Oct. 2010.	
8.	“Study of DC electrical conductivity of 1:1 PS+PMMA polyblend thin films doped with Succinic Acid”,	National conference on Recent Trends in Engineering Sciences, organized by Dr. Bhauasaheb Nandurkar College of Engineering and Technology, Yavatmal, 11-12 Oct. 2010.	National

### 7) Participation as a Delegate:

6.	National conference on LASER and their Applications	Department of Physics, Amravati University, Amravati, 28-30 Jan 2004.	National
7.	One day Workshop on Post Accreditation Policy Planning	VidyaBharati Mahavidyalaya, Amravati. 23 <sup>rd</sup> October 2004.	University
8.	International conference on Relativity-2005	Department of Mathematics, Amravati University, Amravati, 11-14 Jan 2005.	International
9.	Workshop on Innovative Experiments in Physics	Vigyan Prasar, Department of Science and technology, Govt. of India. At Nyass Trust, Dombivli, Mumbai, 16-17 Dec., 2006	State
10.	State Level Seminar on Human Right Awareness Education 2007	VidyaBharati Mahavidyalaya, Amravati, 26 <sup>th</sup> Dec 2007.	State
11.	A Workshop on Pure Physics Curricula in Contemporary Universities: Challenges and Innovations	(Convention of AUPTA) Vidya Bharati Mahavidyalaya, Amravati M.S, 26 April 2009	University
12.	International conference on English Language and Literature Today	VidyaBharati Mahavidyalaya, Amravati.. 11-12 Nov 2009	International
13.	National conference on Material Science: Trends & Future- 2010,	Department of Physics, VidyaBharati Mahavidyalaya, Amravati. 6-7 Jan 2010.	National
14.	National conference on Recent Trends in Engineering Sciences,	Dr. Bhauasaheb Nandurkar College of Engineering and Technology, Yavatmal, 11-12 Oct. 2010.	National
15.	One day Workshop “Vivekanandas Scientific Approach through Einstein’s Brain”	PGTD Physics, SGB Amravati University, Amravati. 11 Oct. 2011.	University
16.	मराठी विश्वकोश राजस्पर्धा व ग्रन्थप्रदर्शन	Library and Information Science Department, Vidya Bharati Mahavidyalaya, Amravati 10, 11 Aug. 2012	University
17.	National Children’s Science Congress –Maharashtra Regional Workshop, (NCSTC, DST,GOI)	Sarda Kanya Vidyalaya, Nashik 28 <sup>th</sup> July 2013	State
18.	National Conference on Material Science Trends and Future -2014	Bharatiya Mahavidyalaya, Amravati 10-11 Jan. 2014,	National
19.	Pre State Screening Level of 22 <sup>nd</sup> National Children’s Science Congress	Shikshak Bhavan, Pune 22-23 Nov. 2014	State
20.	International Symposium on Ultrasonic (ISU-2015)	Department of Physics, RTM Nagpur University. Nagpur 22-24 Jan. 2015	International
21.	Peaceful use of Atomic Energy in the field of Medicine, Agriculture, Environment, Geology, Chemistry, etc	VidyaBharati Mahavidyalaya, Amravati. 28 Feb. 2015	University
22.	National Seminar on	J.B. Science college, Wardha 28 Feb.	National

	Nanotechnology: Today and Tomorrow	2016	
23.	One day workshop on Research Methodology and Perspective	Vidya Bharati Mahavidyalaya, Amravati 26, Nov. 2016	State
24.	A Workshop for Orientation of Physics Teachers on Revision and Restructuring of UG Physics Syllabi	Vidya Bharati Mahavidyalaya, Amravati 22 Jan. 2017.	University
25.	One Day Workshop On Patent and It's Global Perspectives	Vidya Bharati Mahavidyalaya, Amravati 18 April, 2017	University
26.	Workshop on "Awala Prakriya Prashikshan."	Vidya Bharati Mahavidyalaya, Amravati 17 Nov, 2017	University
27.	International Conference on 'Recent Trends in Science and Technology	S. S. S. K.R. Innani Mahavidyalaya, Karanja Lad 22-23 March 2018	International
28.	National Conference on Gender Isonomy : A Societal Onus	Vidya Bharati Mahavidyalaya, Amravati 19 April 2018	National
29.	One Day Workshop on Rain Water Harvesting	Vidya Bharati Mahavidyalaya, Amravati 28 July 2018	University
30.	National Conference on Emerging Trends in Science	Vidya Bharati Mahavidyalaya, Amravati 1-2 Feb 2019	National
31.	National Seminar on Revised Accreditation Framework and Institutional Preparation: An Overview	Vidya Bharati Mahavidyalaya, Amravati 9 March 2019	National
32.	One Day Orientation Workshop On The Role Of Board Of Studies In Curriculum Planning	Sant Gadge Baba Amravati Vidyapeeth Shikshan Manch and Vidya Bharati Mahavidyalaya, Amravati 10 March 2019	University
33.	One Day Workshop on Awareness for autonomy of colleges NAAC Revised Accreditation Framework (RAF) and in National institutional ranking Framework (NIRF) of NAAC A, A+, B++, B+ and B grade colleges.	IQAC SGB Amravati University, Amravati. And JD (Higher Education) Amravati 17 Feb. 2020	University
34.	NAAC Awareness Program for Affiliated Colleges	Shri. Shivaji Arts and Commerce College Amravati 22 May 2020	State
35.	UGC sponsored online one week faculty development programme on neck revised accreditation from work	IQAC Vidya Bharati Mahavidyalaya Amravati during 1 Jun. to 7 Jun. 2020	University
36.	Orientation programme for "Faculty in Universities / Colleges / Institutes of Higher Education"	Teaching Learning Centre, Ramanujan College University of Delhi. 11 Jan to 09 Feb 2021	National
37.	One week online Faculty Development Programme (FDP) on "Innovative Pedagogy for Effective Teaching & E-Learning During Covid Era "	Institution's Innovation Council (Ministry of Education initiative) IIMT College of Management, Greater Noida U.P. 2 June to 8 June 2021	National
38.	Two Days National Webinar on Teaching Methodology	Organized by IQAC Cluster India in collaboration with VVM Nandgaon RSSC Chandur, JMV Achalpur On 29,30 Oct. 20	National
39.	State level online Workshop for Faculty Members on Use of Virtual Laboratory in Teaching and Learning	Jointly organized by VVM Nandgaon RSSC Chandur, JMV Achalpur On 15 Sept. 2021	University
40.	MS-DEED level 1 online workshop on introduction to Innovative pedagogies for UG Teachers	Indian Institute of Science Education and Research, Pune, on 21 Feb. to 23 Feb. 2022	National

➤ **Total No. of PG (M.Sc.) Project Guided : 35**

➤ **List of PG (M.Sc.) Project Guided:**

Sr. No.	Name of Student	Title of Project	Academic Year
1.	Mr. Pankaj Bahaley	Study of Variation of Dielectric constant of liquid with temperature	2004-05
2.	Mr. Pankaj Deshmukh	To Measure the various optical parameters by using Laser.	2004-05
3.	Ms. Priti Jokhotiya	Study of Variation of Dielectric constant of Solid with temperature	2004-05
4.	Ms. Swati G. Akotkar	Measurement of velocity of ultrasonic wave in different liquids and determination of effect of temperature on it.	2004-05
5.	Mr. Vinit H. Khatri	To Study the various optical parameters by using He-Ne Laser.	2004-05
6.	Ms. Shital G. Kadu	Determination of Velocity of Ultrasonic wave through different materials & its temperature dependence.	2005-06
7.	Ms. Sonali S. Sakhare	Determination of Modulus of Rigidity of some materials & its temperature dependence.	2005-06
8.	Mr. P. Sanjay Kanth	Variation of Dielectric constant of PMMA doped with Anthracene with temperature	2006-07
9.	Mr. Satish Reddy	Variation of Dielectric constant of PS doped with Anthracene with temperature	2006-07
10.	Ms. R. S. Daware	Study of DC Electrical Conductivity of Pthalic acid doped 2:1 PS+ PMMA Polyblends thin films	2007-08
11.	Ms. T. V. Chandak	Study of dc Electrical Conductivity of Cinnamic acid doped 1:1 PS+ PMMA Polyblends thin films	2007-08
12.	Ms. Vishakha N. More	Study of D. C. electrical Conductivity of 4:1 PS/ PMMA Polyblends System doped with Oxalic Acid	2007-08
13.	Mr. Iliyas Ahmed Khan	Variation of DC Electrical Conductivity of 1:1, 1:2 PVC+PVA Polyblends with Respective to their original PVC and PVA sample.	2010-11
14.	Mr. Pavan J. Dhobale	Comparative Study Of 4:1 PVC+PMMA Polyblend thin films prepared using pool of mercury and spin coating method.	2010-11
15.	Mr. Abdul Tauheed	Study of D. C. electrical Conductivity of 3:1 PMMA+PS Polyblends (doped and undoped) systems.	2011-12
16.	Mr. Ashish R. Thakare	Effect of Temperature and Electric field on the DC and AC Electrical Conductivity of Cinnamic Acid doped 1:2 PMMA+PS Polyblends.	2011-12
17.	Mr. Yogesh B. Pachpawar	Study of D. C. electrical Conductivity of 1:1.5 PMMA+PS Polyblends (doped and undoped) systems.	2011-12
18.	Ms. Bharati Mahale	Study Of AC Electrical Conductivity of Malonic Acid Doped 2:1 PMMA: PS Polymer blend	2012-13
19.	Ms. Sarika R. Tapadiya	Study of D. C. electrical Conductivity of 1:2 PS+PMMA Polyblends Doped with Malonic Acid .	2012-13
20.	Ms. Rashmi B. Maind	The comparative study of polymer blends by using a pool of mercury and spin coating method	2013-14
21.	Ms. Puja M. Sable	Study the AC electrical conductivity of PANI PVA composite.	2013-14
22.	Ms. Piyusha Bhele	Study the DC electrical conductivity of PANI PVA composite.	2014-15
23.	Mr. Amit Dakhore	Effect of temperature and frequency on AC conductivity and dielectric constant of PANI PVA composite.	2014-15
24.	Ms Ankita Ganorkar	Study the DC electrical conductivity of PANI PMMA composite.	2014-15
25.	Ms. Pooja D. Sisangiya	To Study the AC conductivity of PVC, PVAc and their blends	2015-16
26.	Mr. Rahul T. Thakur	To study DC electrical conductivity of PVC (Polyvinyl Chloride) and PVAc (Polyvinyl acetate)	2015-16
27.	Mr. Amol B.	Study AC and DC electrical conductivity of of a Al <sub>2</sub> O <sub>3</sub> dope	2016-17

	More	polyaniline	
28.	Ku. Pranjali G. Gondchar	To study AC and DC electrical conductivity of ZnO doped polyaniline	2016-17
29.	Mr. Sanket G Patil	To study DC electrical conductivity of PVC (Polyvinyl chloride) PS (polystyrene) and their blends	2016-17
30.	Mr. Swapnil R.Sawant	To study AC and DC electrical conductivity of Tio <sub>2</sub> doped polyaniline	2016-17
31.	Ms. Shraddha Thakare	To study AC conductivity of polyaniline	2017-18
32.	Mr.Tausheeque Khan Iqbal Khan	To study DC electrical conductivity of polyaniline	2017-18
33.	Ms.Amrutasingh Rajput	Synthesis and characterization of ZnO nanoparticles using precipitation method	2018-19
34.	Ms. Bhagyashri M. Vinchurkar	Synthesis and Characterization of MgO Nanoparticles using soi-gel method	2018-19
35.	Ms. Aishwarya M. Deshmukh	Study of synthesis and characterization of Tio <sub>2</sub> Nanoparticles by Ultrasonicator method.	2018-19

### EXTRA CURRICULAR ACTIVITIES:

- Worked as a District Coordinator of **National Children's Science Congress (NCSC)** From year 2012 to 2017.
- Invited as a **Resource Person** and Worked as Local Organizer at Orientation Workshop on **"Understanding Whether and Climate"** on 19<sup>th</sup> July 2014.
- Worked as a **Guide Teacher and Evaluator** for Pre State Screening Level of 22<sup>nd</sup> National Children's Science Congress 2014 on 22-23 Nov., 2014 at Shikshak Bhavan, Pune.
- Worked as a Dy. Superintendent, of UGC NET/JRF Examination at Shri Shivaji Science College, Amravati on 28<sup>th</sup> Dec., 2014.
- Worked as a **Judge** for Science Exhibition at Harshwardhan Kala Academy, Amravati on 3<sup>rd</sup> Jan., 2015.
- Worked as a **Judge** for Science Project and Model Exhibition at Suryakanta Devi Pote Public School, Amravati on 12<sup>th</sup> Jan., 2015.
- Active participation in Blood Donation.
- Worked as a Organizing Secretary of **'International Web Conference on Advanced Material and Nanotechnology'** ( NANOMAT-2020) Organized by Department of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, Dist. Amravati (MS), **Date 20- 21 June 2020.**
- Worked as a Organizing Secretary, **'Sir C. V. Raman Lecture Series'** Organized by Department of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, Dist. Amravati (MS), **Date 22 Feb. 2021 to 12 March 2021.**
- Worked as a Organizing Secretary of **'Second International Web Conference on Advanced Material and Nanotechnology'** ( NANOMAT-2021) Organized by Department of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, Dist. Amravati (MS), **Date 20- 21 June 2020.**

### Personal Details: Dr. Anant S. Wadtkar

- Date Of Birth : 27 October, 1975
- Gender : Male
- Nationality : Indian
- Mother Tongue : Marathi
- Languages Known : English, Hindi, Marathi



**Signature**

