

## CURRICULAR VITAE

✚ **Name:** Dr. NITIN BABULAL SONAWANE

✚ **Designation:** Assistant Prof. in Physics

✚ **Institute:** Dept. of Physics,  
Karm. A.M. Patil Arts, Comm., and Kai.  
Annasaheb N.K.Patil



Science Sr. College, Pimpalner, Tal. Sakri, Dist. Dhule (M/S)

✚ **Mob.**9850145509

✚ **Email:** [sonawanenitinb@gmail.com](mailto:sonawanenitinb@gmail.com)

✚ **Date of Birth** : 17/08/1969

✚ **Marital Status** : Married

✚ **Citizenship** : Indian

✚ **Sex** : Male

✚ **Educational Qualifications** :

Education	Board/University	Year	Subjects	Marks (%)
Ph.D.	North Maharashtra University, Jalgaon	2015	Physics	A-Grade
M. Phil.	North Maharashtra University, Jalgaon	2009	Physics	A-Grade
M. Sc.	University of Poona, Pune	1993	Physics	67.2
B. Sc.	University of Poona, Pune	1989	Physics	70
H. S.C.	Pune, Board	1986	P, C, M, B	65.17
S.S.C.	Pune, Board	1984	General	72.28

**College Academic and Administrative Committees:** Worked as member of various committees, like, Career counseling, Study visit, tour, Field work, Students seminar, Quiz, Debate, Avishkar, Cultural, sports, Water, Tree conservation, Blood donation, Alumni meet, NAAC, IQAC, API, Coordinator/member of Avishkar, member of organization committees in conference/ workshop/seminar, Admission, Academic, Examination committees, Examination Reforms, Examiner Internal and Examinations, Syllabus restructuring Workshops etc.

**Research Publication:** More than 17 Research papers Published in Reputed International and National Journals.

**Paper Presented/Participated in Conferences:** More than 26 International/National/State level conferences have been attended/paper presented in various International/National conferences/Workshops, **Books Published:** 3.

**Research Degree:**

<b>Degree</b>	<b>Title</b>	<b>Date of award</b>	<b>University</b>
M.Phil	“Gas Sensing Performance of Pure and Modified WO <sub>3</sub> Thick Film Resistors”	6 <sup>th</sup> April-2009	North Maharashtra University Jalgaon
Ph.D.	“Cadmium Based N-Type Semiconductor As a heterojunction Partner with P-Type Inorganic/Organic Materials Towards LPG Sensing Applications”	31 <sup>st</sup> July 2015	North Maharashtra University Jalgaon

**Post held after appointment at this institution**

<b>Designation</b>	<b>Department</b>	<b>Date of actual Joining</b>		<b>Grade</b>
		<b>From</b>	<b>To</b>	
Assistant Professor	Physics	14/09/1993	01/01/2006	8000-275-13500
Assistant Professor	Physics	01/01/2006	06/04/2014	15600-39100 AGP -6000
Assistant Professor	Physics	06/04/2014	06/04/2019	15600-39100 AGP -7000
Assistant Professor	Physics	06/04/2019	Till now	15600-39100 AGP -8000

**Period of teaching experience:**PG  
classes:

nil

UG classes (in  
years):

28 Years

**Research Experience excluding years spent in M.Phil /Ph. D.: 12 Yrs.****Field of specialization under the subject /Discipline: Physics**  
(Thin Film, Nanotechnology, Crystal Growth)

**Academic Staff college orientation /Refresher course**

<b>Name of Course</b>	<b>Place</b>	<b>Duration</b>	<b>Sponsoring agency</b>
Orientation Course	Dr.Babasaheb Ambedkar Marathwada University, Aurangabad.	01/02/2010 to 27/02/2010 = 28 Days.	UGC, New Delhi
Refresher Course	Dr.Babasaheb Ambedkar Marathwada University, Aurangabad.	05/03/2009 to 25/03/2009 = 21 Days.	UGC, New Delhi
Refresher Course	Academic Staff College, University of Pune, Pune	01/02/2001 to 28/02/2001 = 28 Days.	UGC, New Delhi
Refresher Course	Savitribai Phule University, Pune (Fajipur)	25/09/2018 to 15/10/2018 = 21day's.	UGC, New Delhi
Faculty Development Programme	Visvesvaraya National Institute of Technology Nagpur	9/12/2013 to 13/12/2013	VNIT Nagpur
Faculty Development Programme	Savitribai Phule Pune University (Taloda)	22/12/2017 to 28/12/2017	UGC, New Delhi
Faculty Development Programme	Ramanujan College, University of Delhi	20/04/2020 to 6/05/2020	UGC, New Delhi(HRD Ministry)
Faculty Development Programme	Ramanujan College, University of Delhi	06/09/2021 to 12/09/2021	UGC, New Delhi(HRD Ministry)
Two week Course	JKSA college, Nijampur and K.A.M.P College,Pimpalner	07/06/2021 to 21/06/2021	College affiliated to KBCNMU,Jalgaon

### *List of Publications*

SR. NO.	Paper published in journals
1.	<p>N. B. Sonawane, D. R. Patil, L .A. Patil</p> <p>“CuO-Modified WO<sub>3</sub> Sensor for the Detection of a ppm level H<sub>2</sub>S gas at Room Temperature”</p> <p><b>Sensors and Transducers Journal, Vol-93, Issue-6, June 2008, PP-82-91</b></p>
2.	<p>N. B. Sonawane, R.R.Ahire, K.V. Gurav, J.H. Kim, B.R. Sankapal.</p> <p>“CdS nanowires with PbS nanoparticles surface coating as room temperature liquefied petroleum gas sensor”</p> <p><b>Sensor and Actuators A, 216 (2014) 78-83 – (Impact Factor: 1.94)</b></p>
3.	<p>N. B. Sonawane, R.R.Ahire, K.V. Gurav, J.H. Kim, B.R. Sankapal.</p> <p>“PEDOT: PSS shell on CdS nanowires: Room temperature LPG sensor”.</p> <p><b>Journal of Alloys and Compounds 592 (2014) 1-5. (Impact Factor: 2.72)</b></p>
4.	<p>S. J. Patil, K.S. Thakare, N. B. Sonawane, N.G.Deshpande, R.R.Ahire,</p> <p>“Role of Firing Temperature on Structural and Electrical Characteristics of Titania Thick film for Sensor Applications”</p> <p><b>Journal of Optoelectronics and Advanced Materials Vol-17, No.5-6 May-June 2015</b></p>
5.	<p>N.B.Sonawane, P.K.Baviskar, R.R.Ahire, Vibha H.Ojha, B.R. Sankapal.</p> <p>“Nanonecklace of CdO through Simple Solution Chemistry”</p> <p><b>Material Science in Semiconductor Processing 49 (2016) 81-83 (Impact Factor: 2.1)</b></p>
6.	<p>N. B. Sonawane, P.K.Baviskar, R.R.Ahire, B.R. Sankapal.</p> <p>“CdO neckless like nanobeads decorated with PbS nanoparticles:Room temperature LPG sensor”</p> <p><b>Material Chemistry and Physics 191 (2017) 168-172.</b></p>

7.	S. J. Nandre, <b>N. B. Sonawane</b> , D.V.Sonawane, S.S.Sonawane and R.R.Ahire, “Non-Conventional Energy Sources For Rural Development of India” <b>Pltinum-ISSN-2231-0096,Vol-6, No.4, Dec. 2016, pp-42-46</b>
8.	S. J. Nandre, <b>N. B. Sonawane</b> , S.S.Sonawane and R.R.Ahire, “Pollution in Various Festivals in India and Creating Awareness to People” <b>Ajanta -ISSN-2277-5730, English Part VIII, Jan. 2017, pp-145-152</b>
9.	W.B.Shirsath, <b>N. B. Sonawane</b> , “Human Rights and Child Labour in India-Causes and Remedies” <b>Vichar Manthan-ISSN-2347-9639,Vol-4, No.3, Issue-12, Sept-Dec. 2017, pp-81-85</b>
10.	<b>N. B. Sonawane</b> , S. J. Nandre, S.S.Sonawane , R.R.Ahire, “India Towards Solar Energy Independence” <b>Journal of research and Development-ISSN-2230-9578,Vol-8, No.4, Dec. 2017, pp-102-109</b>
11.	Nandre S. J. , <b>Sonawane N. B.</b> , Sonawane S.S., Ahire R.R “Role of Business for Development of Tribal” <b>Journal of research and Development-ISSN-2230-9578,Vol-8, No.6, Feb. 2018, pp-50-54</b>
12.	<b>Sonawane N. B.</b> , <b>Kadam K.D.</b> “Traditional and Scientific Use of Solar Energy for Peace ” <b>Journal of research and Development-ISSN-2230-9578, Vol-8, No.6, Feb. 2018, pp-55-58.</b>

SR. NO.	Paper published in journals
13.	<b>N. B. Sonawane</b> , D.B.Salunke, S.S.Sonawane, R.R.Ahire, “ Utilization of Solar Energy from Generation to Generation”-A Review <b>Ajanta-ISSN-2277-5730 Vol. VIII-Issue-I ,pp.126-132Jan-Mar.2019</b> <b>(UGC Listed 40776) (Impact Factor:5.5)</b>

14.	<b>N. B. Sonawane</b> , S.J.Nandre, R.R.Ahire Thin Film Characterization Techniques–A Theoretical Background <b>Research Journey, ISSN-2348-7143 Feb.2020 pp-5-8(I.F.-6.625)</b>
15.	S.J.Nandre, <b>N. B. Sonawane</b> , R.R.Ahire “Role in Prevention of Corona Virus Infection” <b>Journal of Research and Development, Volume(10)Special issue(8)May-2020 ISSN No.2230-9578 (Impact Factor: 5.13)</b>
16.	H.S.Pawar, S.J.Nandre, <b>N. B. Sonawane</b> , S.D.Chavhan, R.R.Ahire “Growth and Characterization of Cobalt Oxalate Crystal by Ager-Ager Gel Method” <b>IJCRT ISSN:2320-2882, Volume 9,Issu 4 April 2021, PP-1343-1348</b>
17.	H.S.Pawar, S.J.Nandre, <b>N. B. Sonawane</b> , R.R.Ahire, “ Physical and Optical Study of Cobalt Oxalate Single Crystal by Ager-Ager Gel Method” <b>Journal of Scientific Research, Volume 65, Issue 7, 2021, pp 58-60.</b>

**List of Workshops/Conferences (National/International) attended and presented papers**

Sr. No.	Workshops/ Conferences	Title of paper	Authors
1.	<b>International Conference</b> on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2014), held at Shivaji University, Kolhapur during January 13-15, 2014.	PEDOT: PSS and PbS Shell on CdS Nanowires: Room Temperature LPG Sensor.	<b>N. B. Sonawane</b> , R.R.Ahire, K.V. Gurav, J.H. Kim, B.R. Sankapal.
2.	<b>International Conference</b> on Nanomaterials and Applications-2008 held at Shivaji University, Kolhapur during December 9-11,2008	CuO-Modified WO <sub>3</sub> Sensor for the Detection of a ppm level H <sub>2</sub> S gas at Room Temperature	<b>N. B. Sonawane</b> , D. R. Patil, L .A. Patil

3.	<b>National Conference</b> on Nanomaterials Avenue 21-23 October 2013, K.R.T. Arts, B, H. Comm. And A. M. Science College, Nasik-2 (M.S.)	Attended/Poster presented	
4.	<b>National Conference</b> on Indian Development In recent and Ideal Semiconductors for Novel Applications 6-7 Oct. 2012 D.H .Agrawal, M.G.Agrawal Science, College,, Nawapur (M.S.)	Attended/Poster presented	
5.	<b>National Conference</b> on Materials and Devices for Future Technology 7 Feb. 2011 North Maharashtra University, Jalgaon (M.S.)	Attended/Poster presented	
6.	Short term Training Program on Material Synthesis to Diverse Applications (MSPA-2013) 9-13 December 2013 Visvesvaraya National Institute of Technology, Nagpur (M.S.)	Attended	
7.	<b>National Seminar</b> on Physics and Technology of Sensors 3-5 2008 Department of Electronics Science, University of Pune.	Attended	
8.	<b>National Seminar</b> on Advanced In Nano Structured Materials and their applications 22-23 January-2013, C.H.C.Arts, S.G.P.Comm., B.B.J.P. Science college Taloda, Dist-Nandurbar (M.S)	Attended	
9.	<b>National Seminar</b> on Advanced Materials And Its Applications 1-2 Feb 2013 Arts and Science College, Dondaicha, Dhule (M.S.)	Attended	
10.	<b>National Seminar</b> on Nanostructured Materials for Advanced technology 3-4 Oct. 2011, Karm.Bhaurao Patil Mahavidyalaya, Pandharpur, Dist.Solapur (M.S.)	Attended	

11.	<b>National Workshop</b> on Advanced In Materials Processing 8-Mar.2014 School of Physical Sciences, North Maharashtra University, Jalgaon (M.S)	Attended	
12.	<b>National Workshop</b> on Acquaintance Program of IUAC 30 April 2008 School of Physical Sciences, North Maharashtra University, Jalgaon (M.S)	Attended	
13	UGC Sponsored National Conference on Recent Development in Nanomaterials and Their Applications, Date 5 <sup>th</sup> -6 <sup>th</sup> February 2016, Departments of Electronics G.T.Patil Arts, Commerce and Science College, Nandurbar	Synthesis of CdS/PbS heterojunction film for LPG sensing at Room Temperature	N.B.Sonawane
14	<b>National Conference</b> on Biodiversity and Environmental Impact, 24 December 2016, Smt N.N. Chaudhari Arts, Comm, and Science College, Kusumba	Non-Conventional Energy Sources For Rural Development of India	N.B.Sonawane
15	<b>International Conference</b> on Liberalization, Privatization and Globalization: Impact on Indian System- An Assessment , Bhusaheb N.S. Patil Arts, and M.F.M.A. Commerce College, Dhule	Pollution in Various Festivals in India and Creating Awareness to people	N.B.Sonawane, S.J.Nandre
16	<b>National conference</b> on Non-conventional Energy Sources for Rural Development of India 6-Jan.2018, Organized by Dept. of Physics. Uttamrao Patil Arts, Comm. & Sci. College, Dahivel	India towards Solar energy Independence	N. B. Sonawane, S. J. Nandre, S.S.Sonawane , R.R.Ahire
17	<b>National Conf.</b> On Material Science: Advancement and Innovations, NCMSAI-2019, Dept. of physics, SSVPs, L.K.Dr.P.R.Ghogrey Science College, Dhule	Utilization of Solar Energy from Generation to Generation-A Review	N. B. Sonawane, D.B.Salunke, S.S.Sonawane, R.R.Ahire,



18	<b>International Conference</b> on Impact of COVID-19 Pandemic Related Lockdown: Present and Future(ICPRLPF-20),Karm.A.M.Patil Arts,Comm. And Kai.Annasaheb N.K. Patil Science Sr.College, Pimpalner, May, 16-2020	Member of Organizing committee and Special Issue Editor	N.B.Sonawane
19	<b>National</b> webinar on Nanomaterials :Past, Present and Future Scenarios, organized by Dept.Of.Chemistry,Gokhale Education Society's, Arts,Comm.and Science College, Jawhar, Palghar, on 30/05/2020	Participated	
20	<b>National</b> webinar on New Horizons for E-Learning in Higher Education organized on 14-15/05/2020, S.G.Patil, College, Sakri.	Attended	
21	<b>Inter-National</b> webinar on Role of Advance Materials for Optoelectronics Devices (RAM-OD 2020) organized by S.G.Patil, Arts, Comm. And Science College, Sakri on 12/06/2020.	Attended	
22	<b>National</b> webinar on Research Methodology in Language and Literature in Digital Era,Adarsh College of Arts Nijampur Jaitane, Tal.Sakri, Dist.Dhule, On 7-8/05/2020	Attended	
23	<b>National</b> webinar on Digital Transformation: classroom and LMS, organized by Surupsing Hirya Naik College of Education,Navapur , on 07/06/2020	Attended	

24	<b>Webinar</b> on COVID-19:Teaching Learning Challenges and opportunities in Indian Education System,29/06/2020 organized by Center for Continuing Education, Dr.B.R.Ambedkar,National Institute of Technology, Jalandhar	Attended	
25	<b>State</b> level Webinar on Rural Development Through Community Engagement, organized by S.G.Patil Arts, Science and Comm. College, Sakri, on 30/06/2020	Attended	
26	<b>Workshop on Curriculum Development in Physics</b> at T.Y.BSc. (CBCS Pattern) on the behalf of KBCNMU, Jalgaon, organized by, S.I.Patil Arts,G.B.Patel Science and S.J.K.V.S. Commerce College, Shahada , on 15-16/05/2020	Attended	

**List of Book Publications:**

01	OPTICS and LASERS : T.Y.B.Sc., Physics SEM IV (Text Book as per New Revised Syllabus KBCNMU, Jalgaon),June 2019	NIRALI PRAKASHAN,PUNE	
02	PRACTICAL COURSE IN PHYSICS, S.Y.B.Sc.,Physics SEM IV (Text Book as per Revised Syllabus KBCNMU, Jalgaon),June 2019	NIRALI PRAKASHAN,PUNE	
03	Journal of Research and Development, A Multidisciplinary International Level Journal, "Impact on COVID-19 Pandemic Related lockdown: Present and Future Volume 10, Special Issue (8),May-2020 ISSN-2230-9578	Editor: R.V.Bhole Special Issue Editor: Dr.N.B.Sonawane	

