

Curriculum Vitae

Name : Dr. Babasaheb Nivrutti Dole

I. Personal Memorandum

Designation : Professor and Head

Mailing Address: Department of Physics
Dr. Babasaheb Ambedkar
Marathwada University,
Aurangabad-431 004 (MS) India

Phone Numbers : Office : +91-240-2403385/385
Fax : +91-240-2403337
Cell : +91-9423343923/8237006572

E-mail : drbndole.phy@gmail.com

Date of Birth : October 1, 1971

II. Academic Preparation:

Exam.	Subject	College	Year of Passing	Board/ University	% of Marks	Class
S. S. C	Science, Mathematics, Social Science	Chh.Sambhaji High School, Wakulni, Jalna	1988	A'bad Division	60.00	1 st
B. Sc.	Physics, Chemistry, Mathematics	Govt. College of Arts & Science, Aurangabad	1993	<i>Marathwada</i>	63.38	1 st
M. Sc.	Physics(Solid State Physics)	Dept. of Physics, Dr.BAMU., Aurangabad	1995	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	68.50	1 st
Ph. D.	Physics(SolidState Physics) Topic: Study of Cuprate Superconductors Substituted with Pr, Tb etc.		24 th Dec., 2002	Guide: Dr. S.S.Shah (Rtd.) Professor of Physics, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad		



III Awards/Fellowships/Honours received:

1. **First Prize** in Science Exhibition, April 6, 1993, Govt. College of Arts and Science, Aurangabad.
2. **Fourth Prize** in Debating Competition, August 11, 1995, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
3. Yuva Shikshak Pratibha Award, 5th September 2010.
4. **Top25, Hottest Article Across the World, Ranked 22, CAP2011, April-June 2011 Issue.**
5. Rashtriya Gaurav Award, 4th May 2012, New Delhi
6. Excellent Teacher Award, April 21, 2013
7. **Indian Physics Association** - Life Member
8. **Indian Cryogenics Council** - Life Fellow
9. **Physics Society of India**- Life Member
10. **Indian Association of Physics Teachers** – Life Membership No. 8229 L4809
11. **MarathwadaJantaVikasparished**-Life Membership
12. **Materials Research Society of India**- Life Member (LMB-1877) -07 July 2011
13. **Ideal Teacher Award**, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, September 5, 2015.

IV. Research, Teaching and Administrative Experience:

Research Experience:

- Collaborator** :
1. C-MET, Cherlapally, Hyderabad
 2. Tata Institute of Fundamental Research, Colaba, Mumbai
 3. Inter University Accelerator Centre, New Delhi
 4. UGC-DAE-CSR, Ahilya Devi University Campus, Indore- 452 001
 5. UGC-DAE-CSR, BARC, Mumbai-400 085

Teaching Experience:

1. Professor : Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-431 004, (MS), INDIA
January 18, 2015 --- till date.
2. Associate Professor : Materials Research Laboratory

Department of Physics, Dr. Babasaheb Ambedkar Marathwada University,

Aurangabad-431 004 (MS) INDIA
January 18, 2012 to January 17, 2015.

3. Reader : Materials Research Laboratory
Department of Physics, Dr. Babasaheb
Ambedkar Marathwada University,
Aurangabad-431 004 (MS) INDIA
January 18, 2009 to January 18, 2012
4. Assistant Professor : Materials Research Laboratory
Department of Physics, Dr. Babasaheb
Ambedkar Marathwada University,
Aurangabad-431 004 (MS) INDIA
May 26, 2006 to January 17, 2009
5. Assistant Professor : Post Graduate Dept. of Physics (Electronics)
Department of Physics, J. E. S. College, Jalna
September 15, 2003 to May 25, 2006
6. Assistant Professor : Dept. Physics, P.E.S. College of Engineering,
Aurangabad-431004(MS) INDIA
January 18, 2000 to September 14, 2003
7. Research Assistant : IUC-DAEF Project, Indore (MP) INDIA
February 21, 1997 to January 17, 2000

Administrative Experience:

1. Head : Department of Physics,
Dr. Babasaheb Ambedkar Marathwada University,
Aurangabad-431 004
February 1, 2022 Onwards
2. In-charge : **Condensed Matter Physics Laboratory,**
Department of Physics, Dr. Babasaheb Ambedkar
Ambedkar Marathwada University, Aurangabad
3. In-charge : **Library,** Department of Physics
Dr. Babasaheb Ambedkar Ambedkar Marathwada
University, Aurangabad
October 31, 2010 to July 15, 2015.
4. Warden : **Siddharth Research Boys' Hostel**
Dr. Babasaheb Ambedkar Marathwada
University, Aurangabad-431 004 (MS) INDIA
July 06, 2006 to September 01, 2009
5. Warden : Siddharth Students' Rest House, Dr. Babasaheb
Ambedkar Marathwada University,
Aurangabad-431 004(MS) INDIA
July 06, 2006 to September 01, 2009
6. Programme Officer : N S S, PG Unit, Dr. Babasaheb Ambedkar
Marathwada University, Aurangabad-
431004(MS) INDIA
October 07, 2006 to September 01, 2009

7. **Warden** : Taxila Hostel, P. E. S. College of Engineering, Aurangabad-431 004
November 14, 2000 to September 14, 2003
8. **Chairperson:** Board of Studies in Physics, Dr. BAMU, Since April 25, 2023
9. **In-Charge Head** : **Department of Electronics,**
Dr. Babasaheb Ambedkar Marathwada University,
Aurangabad-431 004 (MS), INDIA
March 11, 2023 to November 30, 2023
10. **In-Charge Head** : Department of RUSA-CAST,
Dr. Babasaheb Ambedkar Marathwada University,
Aurangabad-431 004 (MS), INDIA
March 11, 2023 to November 30, 2023

V. **Number of Ph. D. Students Awarded:** 06

03 (Working for Ph.D. Degree)

Sr. No.	Name of the Student	Category	Ph. D. Awarded date
1.	Mr. Vishnu Ramrao Huse	NT-D	00/3/2012
2.	Mr. Vishwanath Dattu Mote	Open	00/04/2012
3.	Mr. Milind Ramchandra Bodke	SC	29/12/2016
4.	Mr. Haribhau Aatmaram Khawal	Open	29/12/2016
5.	Mr. Umesh Prakash Gawai	SC	03/02/2017
6.	Mr. Dnyaneshwar Vitthal Dake	OBC	07/01/2023

VI. **Funding: Research Projects:**

Total Outlay: Rs. 41,93,168/- (In Rupees. Forty One Lac Ninety Three Thousand One Hundred Six Eight)

Sr. No.	Title of the Project	Project No. & Agency	Dated	Duration	INR	Status
1.	Exploring the Swift Heavy Ion Irradiation effect on the Properties of GO Based Ni doped Co Nanocomposites for Supercapacitor Applications	IUAC, New Delhi IUAC/ XIII.3A/UFR No. 67305	13 March 2020	3 Years	630000	Ongoing
2.	Neutron Scattering Studies to probe the role of Cr substitution on the structural and physical properties of ZnS nanowires	UGCDAE-CSR, Mumbai UDCSR/MUM/AO/CRS-M- 256/2017/1162	16.03.2017	2 Year	90,000	Completed
3.	Synthesis and Diverse Property studies on Mn doped ZnO Nanoparticles	Diary No. SERB/F/365/2015-16 DST, New Delhi	25.05.2015	3Years	19,87,968/-	Completed
4.	Development and different property studies of Co doped ZnS Nanowires	UGC-DAE-CSR, Indore CSR-1/CSR-66/2012- 13/270	7/6/2012	3 Years	10,40,200/-	Completed 30.09.2017
5.	Effect of SHI irradiation on different property of Mn doped ZnO	IUAC, New Delhi IUAC/	20/7/2012	3 Years	6,03,000/-	Completed 31.03.2016

- CPE Committee Member, Dr. BAMU. – 2/2/2015.
- **Departmental committee member: July 12, 2018 to July 2020**
- **Inquiry Committee Member, Dr. BAMU, 2022 to Till Date**
- **Affiliation Committee Member, Dr. BAMU, 2022 to Till Date**
- **RUSA-CAST Department, Departmental committee member: November 7, 2023 to till Date**
- **Member of Organizing Committee- Avishkar 2017**
(held 23-25 Dec., 2017, Dr. BAMU.)
- **Electronics Department, Departmental committee member: November 7, 2023 to- till date**
- **Write off committee member(university level)- 2024**
- **PET Observer: PET 2024**
- **Purchase Committee Member : 2024**
- **Co-ordinator Avishkar 2024 (District Level): (08/10/2024)**

2. REVIEWER

- Materials Science and Engineering B –From April 2012.
- Crystal Research and Technology – From February 2012.
- Solid State Physics Symposium, IIT, Mumbai 2012.
- Indian Journal of Materials Science and Engineering- From January 2013.
- Solid State Physics Symposium, since 2011

3. Chair Person

- **Chaired the Session-** International Conference on Nanoscience and Nanotechnology (ICNN 2011),
July

6-8, 2011, Coimbatore Institute of Technology (CIT), Coimbatore, Tamilnadu.
- **Chaired the Session-** National Conference on Recent Initiatives on Green Electronics (NCRIGE-
2013),

February 8-9, 2013, P.G. Department of Electronics Science, Brijlal Biyani
College, Amravati, Maharashtra.

4. CONVENER

- District level NSS camp held during 14 – 18 December 2007 at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
- State Level NSS Camp held during 16-22 February 2008 at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
- Maharashtra state Gadge Baba Swetchata Abhiyan camp at Jategaon held during 23 September to 2 October, 2008
- State Level Disaster Management National Service Scheme Camp held during 2-8 March 2009 at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

5. CO-ORDINATOR

- **City coordinator**, N.S.S., Aurangabad city – 23/07/2008 to 01/09/2009.
- **Coordinator-83rd** Orientation course held at Academic Staff College (ASC), Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, from July 02 to 29, 2010.

6. Board of Examiner

- **Paper Setter**, Department of Physics – 2006 – till date
- **Examiner**, Department of Physics – 2006 – till date
- **Paper Setter**, DOEACC, Aurangabad - 2009 – till date
- **Examiner**, DOEACC, Aurangabad - 2009 – till date
- **Examiner**, SRTM University, Nanded- 2008 – till date
- **Examiner**, Sant Gadge Baba Amaravati University, Amravati-Date 27/12/2012- till date.
- **Paper Setter**, Swami Ramanand Teerth Marathwada University, Nanded, 6/3/2013- till date.
- **Examiner**, Department of Physics, Gulbarga University, Kalabugai, 2014-till date

7. Appreciation of work: International level

- **High Beam Research – Physics Week News (28/06/2011)**
- **News of science – Vertical News (03/07/2011)**

National level

- **Lokmat Times – (02/11/2011)**
- **Dainik Bhaskar – (02/11/2011)**
- **Tarun Bharat – (07/11/2011)**
- **Times of India–(05/11/2011)**
- **Danik Lokmat – (02/11/2011)**
- **Divya Marathi – (02/11/2011)**
- **Dainik Sakal – (02/11/2011)**

X. Brief account of research interests with special focus on nanomaterials:

This research group is headed by Dr. B. N. Dole who has experience in synthesis of nanomaterials namely Mn, Co, Cr, Ni, Al substituted ZnS and ZnO nanoparticles. These synthesized nanomaterials were characterized by XRD, FTIR, SEM, VSM. We have obtained data from these techniques which gives new scientific facets. I have planned to synthesize Mn doped ZnO nanowires and irradiation of ion beam. Using this we wish to study the various facets of the materials. These materials may be useful for the applications of LED and Battery cells.

Facilities Available:

1. HMCO high vacuum temperature furnace (Temperature Range 0 - 1450°C)
2. Ultrasonicator
3. Spin Coating Unit
4. Hydraulic Press Machine
5. UV-Vis Spectrometer
6. Fluorescence
7. X-ray diffractometer
8. Antibacterial Activity

Methods:

1. Solid State Reaction Route
2. Co-precipitation Route
3. Microwave assisted hydrothermal route
4. Sol-gel Route
5. Hydrothermal Route

XI. List of Publications:

Journals/ Seminars / Conferences	Journal	Seminars	Conferences	Symposia	Total
Peer –Reviewed International	59	-	20	4	83
National	08	04	22+4	2	40
Total					123

LIST OF PUBLICATIONS

■ Research Papers in Peer-reviewed International Journals (70)

1.	MB Salunke, BN Dole , NK Sahuji, SS Shah and P Venu Gopal Reddy “Elastic Properties of Ag Added BSCCO (2212) System”, INIS (1999)
2.	B. N. Dole , R. R. Kothawale, N. K. Sahuji, M.B. Salunke and S. S. Shah “Structural Studies of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ High Temperature Superconducting Compounds”, Solid State Ionic Devices: Journal of Science & Technology, (2000) 86-95.
3.	B. N. Dole , R. R. Kothawale and S. S. Shah “Praseodymium Substitution Effect on Superconductivity in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ High Temperature Superconducting Compounds”, Indian Journal of Engineering and Materials Science, 7 (2000) 328-330.
4.	R. R. Kothawale, B. N. Dole and S. S. Shah “Effect of Substitution of Ce on Superconducting Properties of $\text{Bi}_{1.7}\text{Pb}_{0.3}\text{Sr}_2\text{Ca}_{2-x}\text{Ce}_x\text{Cu}_3\text{O}_{10+\delta}$ System”, Pramana-Journal of Physics, 58 (2001) 871-875.
5.	B. N. Dole , R. R. Kothawale, and S. S. Shah “The Role of Praseodymium in YBCO High Temperature Superconducting Compounds”, Indian Journal of Physics, 75A (2001) 343-345.
6.	R. R. Kothawale, B. N. Dole and SS Shah “ Effect of substitution of Ce on superconducting properties of $\text{Bi}_{1.7}\text{Pb}_{0.3}\text{Sr}_2\text{Ca}_{2-x}\text{Ce}_x\text{Cu}_3\text{O}_{10+\delta}$ system”, PRAMANA – Journal of Physics, Indian Academy of Sciences Vol. 58, Nos 5 & 6, May & June (2002) 871–875
7.	B. N. Dole and S. S. Shah “Some properties of BSCCO-Ag added high temperature superconductors”, Indian Journal of Physics, 79A (1) (2005) 81.
8.	B. N. Dole , and S. S. Shah “Study of $\text{Pr}_x\text{Y}_{1-x}\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ high T_c superconductors”, Indian Journal of Pure and Applied Physics, 43 (2005) 279.
9.	B. N. Dole , Y. Purushotham, P.V. Reddy and S. S. Shah “Elastic behavior of Pr substituted Y-123 superconducting materials”, Mod. Phys. Lett. B., 20 (2006) 843-847, IF = 0.569.
10.	V. D. Mote, V. R. Huse, K. M. Jadhav, B. N. Dole and S. S. Shah “Synthesis and Structural properties of Mn doped ZnO nanoparticles by ceramic route”, International Journal of Bionano frontiers, (2010) 145-150.
11.	V. R. Huse, V. D. Mote, K. M. Jadhav, B. N. Dole , and S. S. Shah “The structural study of Pr substituted Eu-123 High T_c cuprate superconductors”, World Research journal of Applied Physics, 2(1) (2011) 32-35, ISSN 0976-7673, I. F. = 4.67
12.	B. N. Dole , V. D. Mote, V. R. Huse, Y. Purushotham, M. K. Lande, K. M. Jadhav and S. S. Shah “Structural studies of Mn doped ZnO nanoparticles”, Journal of Current Applied Physics, 11 (2011) 762-766, Impact factor = 2.11.
13.	V. D. Mote, Y. Purushotham, B. N. Dole “Structural and morphological studies on Manganese substituted ZnO nanometer-sized Crystals”, Cryst. Res. Technol., 46(7) (2011) 705–710, DOI:

	10.1002/crat.201100107, Impact factor-0.946.
14.	V. D. Mote, V. R. Huse, Y. Purushotham, K. M. Jadhav, B. N. Dole and S. S. Shah, "Effect of temperature on the structural properties of Mn substituted ZnO nanoparticles", American Institute of Physics, 1349 (2011) 323-324, H:20.
15.	V. R. Huse, V. D. Mote, B. N. Dole and S. S. Shah "The crystallographic study of Pr substituted Eu-123 High T _c cuprate superconductors", American Institute of Physics, 1349 (2011) 897-898, H:20.
16.	V. R. Huse, V. D. Mote, S. S. Shah and B. N. Dole "The Role of Pr Substituted Eu-123 High T _c Cuprate Superconductors", Asian Journal of Chemistry, 23 (2011) , 5592-5594, Impact factor-0.247.
17.	V. D. Mote, V. R. Huse, Y. Purushotham, S. S. Shah and B. N. Dole "Synthesis and structural study on Co substituted ZnO nanoscale crystals", Asian Journal of Chemistry, 23 (2011) 5595-559, Impact factor = 0.247.
18.	V. D. Mote, V. R. Huse, Y. Purushotham, S. S. Shah and B. N. Dole , "Synthesis & characterization of Mn doped ZnS nanometer – sized particles, American Institute of Physics", 1447 (2012) 217-218, DOI: 10.1063/1.4709957, H:20.
19.	V.D.Mote, Y. Purushotham and B. N. Dole , "Williamson- Hall Analysis in Estimation of Lattice Strain in Nanometer-sized ZnO Particles", Journal of Theoretical and Applied Physics, 6:6 (2012) 1-8, Highly accessed ISSN: 2251-7235.
20.	V. R. Huse, V. D. Mote, Y. Purushotham and B. N. Dole , "Synthesis and Characterization of Pr Substituted Gd-123 High T _c Superconductors", Ceramica, 58 (2012) 381-387, ISSN-0366-6913, Impact factor = 0.1152.
21.	V.D. Mote, V. Huse, Y. Purushotham and B.N.Dole , "Synthesis and Characterization of Cr doped ZnO Nanocrystals", World Journal of Condensed Matter Physics, 2 (2012) 208-211 doi:10.4236/wjcmp.2012.24035, Published, Online November 2012, (http://www.SciRP.org/journal/wjcmp), Impact factor = 0.16. ISSN 2160-6927
22.	V.D. Mote, V. R. Huse, Y. Purushotham and B. N. Dole , "Synthesis and estimation of physical parameters of Cobalt doped ZnO Nanocrystals by Williamson-Hall analysis, International Journal of Chemistry, 1 (2012) , ISSN:2249-2119, IF = 1.38.
23.	V. D. Mote, Y. Purushotham and B. N. Dole , Crystallographic, "FTIR and Optical Property Studies on Co doped ZnS Nanometer- sized Crystals", American Institute of Physics, 1512 (2013) 188 -189 ,DOI: 10.1063/1.4790974, H:20.
24.	V. R. Huse, V. D. Mote, Y. Purushotham and B. N. Dole , "Role of Pr in Eu-123 High T _c Nanometre-sized superconductors", Ceramics International, 39 (2013) 7317-7321, DOI: org/10.1016/j.ceramint.2013.02.070, Impact factor-3.4. ISSN 0272-8842
25.	V. D. Mote, S. S. Shah, Y. Purushotham and B. N. Dole , "Synthesis and Characterization of Mn Substituted ZnO Nanoparticles", International Journal of Nanoscience, 12(1) (2013) 1350004-1350011 DOI: 10.1142/S0219581X1350004X, Impact factor- 2.73.

26.	V. R. Huse, V. D. Mote, Y. Purushotham, S. K. Dhar, S.S. Shah and B. N. Dole , “The Crystallographic and Optical Studies on Cobalt Doped CdS nanoparticles”, World Journal of Condensed Matter Physics, (2013) , 3 , 46-49 doi:10.4236/wjcmp.2013.31008 Published Online February 2013 (http://www.scirp.org/journal/wjcmp), Impact factor = 0.16.
27.	V. D. Mote, and B. N. Dole , “Synthesis and crystallographic study of Co doped ZnO nanosized powders by co-precipitation method Synthesis and magnetic properties of Mn doped ZnO nanoparticles”, <i>Advanced Materials Research</i> , 678 (2013) 113-117 © (2013) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMR.678.113, I. F
28.	V. R. Huse, V. D. Mote, Y. Purushotham and B. N. Dole , “Crystallographic & Electrical Properties of Pr Substituted Gd-123 Nanometre Sized High Temperature Superconductors”, <i>Advanced Materials Research</i> , 678 (2013) 172-176 © (2013) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.678.172, I. F.
29.	V. D. Mote, Y. Purushotham and B. N. Dole , “Effect of PEG on structural and magnetic properties of Mn doped ZnO Nanocrystals”, <i>Advanced Materials Research</i> , 678 (2013) 234-238 © (2013) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.678.234, I. F. =
30.	V. D. Mote, J.S. Dargad and B. N. Dole , “Effect of Mn Doping Concentration on Structural, Morphological and Optical Studies of ZnO Nano-particles”, <i>Nanoscience and Nanoengineering</i> , 1(2): 116-122, (2013) http://www.hrpub.org DOI: 10.13189/nn.2013.010204.
31.	V. D. Mote and B. N. Dole , “Doping effect of Cobalt on the structural and optical properties of ZnS nanocrystals”, <i>Int. J. Chem.</i> , 2 (2) (2013) 245 – 249, ISSN 2249 – 2119, IF = 1.38.
32.	V. D. Mote, Y. Purushotham and B. N. Dole , “Structural, morphological and optical properties of Mn doped ZnS nanocrystals”, <i>Ceramica</i> 59 (351) (2013) 395-400, ISSN 0366-6913.
33.	V. D. Mote, B. N. Dole , Synthesis, “Crystallographic and Magnetic Properties of Mn Doped ZnO Nanocrystals Via Solid State Reaction Technique”, <i>Universal Journal of Physics and Application</i> 2(1) 10-13, (2014) http://www.hrpub.org DOI: 10.13189/ujpa.2014.020103.
34.	H. A. Khawal and B. N. Dole , “Structural and surface morphological study of Ni doped ZnS nanoparticles”, Citation: AIP Conference Proceedings 1591 (2014) 381; doi:10.1063/1.4872610, View online: http://dx.doi.org/10.1063/1.4872610 , H: 20.
35.	M. R. Bodke, Y. Purushotham, B. N. Dole , “Studies on Cr doped ZnS nanocrystals studies on Cr doped ZnS nanocrystals”, <i>Cerâmica</i> 60 (2014) 425-428, ISSN:0366-6913, IF:0.1829 .
36.	S. Baviskar, R. Manza, B. N. Dole , “Simulating an IDC-BioSensor to Detect Diabetics”, <i>International Journal of Science and Research (IJSR)</i> , 3 (12) (2014) , ISSN:2319-7064, IF: 4.438 .
37.	M. R. Bodke, B. N. Dole , Crystallographic, Optical and Morphological study of Cr doped ZnO Nanocrystals”, <i>The Journal of Materials Science-Photon</i> , 121 (2015) 185-191, ISJN: 6259-3864 I.Index: 5.35 .
38.	V. D. Mote, B. N. Dole , “Crystallographic, morphological and W-H models investigations on Mn substituted ZnO Nanocrystals”, <i>Iranian Journal of Materials Science and Engineering</i> 12(1) (2015) 75-88, ISSN:17350808, H:3, SJR:0.29 .
39.	M. R. Bodke, H. A. Khawal, UP Gawai, B. N. Dole , “Synthesis and characterization of chromium doped Zinc Sulfide Nanoparticles”, <i>Open Access Library Journal</i> 2 (2015) 1-8, Doi: http://dx.doi.org/10.4236/oalib.1101549 . ISSN:2333-9721.
40.	H. A. Khawal, U. P. Gawai, B. N. Dole , “Substitutional effect of Ni on different properties of ZnO Nanocrystals”, <i>American Institute of Physics</i> 1665 (2015) 050140, Doi: 10.1063/1.4917781 H:20 .

41.	M. R. Bodke, Y. Purushotham, B. N. Dole , "Structural and optical studies of Cr doped ZnO nanocrystals", Int. J. Chem. Vol 4 (3) (2015) 251 – 258, ISSN 2249–2119, IF = 1.38.
42.	VD Mote, JS Dargad, Y Purushotham, BN Dole, "Effect of doping on structural, physical, morphological and optical properties of Zn _{1-x} Mn _x O nanoparticles", <i>Ceramics International</i> 41(2015)15153–15161, Available online 24 August (2015), IF = 2.6, Available online at www.sciencedirect.com
43.	MR Bodke, Y Purushotham and BN Dole , "Structural and Optical properties of Cr doped ZnS nanorods", Journal of Ceramic Processing Research., 16, No. 5 (2015) 1–4, IF = 0.338. ISSN 1229-9162
44.	MR Bodke, UP Gawai, HK Khawal and BN Dole , "Structural, Photoluminescence and Raman spectroscopy studies on Cr substituted ZnS nanocrystals", BIONANO FRONTIER , 8 (3) December (2015).
45.	HA Khawal, UP Gawai ¹ , MR Bodke, K Asokan and BN Dole , "Structural, Electrical And Surface Morphological Studies On Mn Substituted ZnO Thin Films", BIONANO FRONTIER Vol. 8 (3) December (2015)
46.	UP Gawai, HA Khawal, MR Bodke and BN Dole , "Synthesis and Doping Effect of Gd on ZnS Nanocrystals", BIONANO FRONTIER Vol. 8 (3) December (2015)
47.	V. D. Mote, Y. Purushotham, R. S. Shinde, S. D. Salunke, BN Dole , "Structural, optical and antibacterial properties of yttrium doped ZnO nanoparticles", <i>Cerâmica</i> 61 (2015) 457–461, DOI: org/10.1590/0366-69132015613601932 . ISSN 03666913
48.	UP Gawai, HA Khawal, T Shripathi and BN Dole , "A study on the synthesis, pair distribution function and diverse properties of cobalt doped ZnS nanowires", CrystEngComm, 18 (2016), 1439–1445, DOI: 10.1039/c5ce02253c, IF = 4.038. ISSN 1466-8033
49.	VD Mote, Y Purushotham, BN Dole , "Structural, morphological, physical and dielectric properties of Mn doped ZnO nanocrystals synthesized by sol–gel method", Materials and Design, 96 (2016) 99–105, DOI: org/10.1016/j.matdes.2016.02.016 , IF = 5.770.
50.	HA Khawal, UP Gawai, K Asokan and BN Dole , "Modified structural, surface morphological and optical studies of Li ³⁺ swift heavy ion irradiation on zinc oxide nanoparticles", RSC Advances, 6 (2016) 49068–49075, DOI: 10.1039/c6ra04803j, IF = 3.78.
51.	UP Gawai, HA Khawal, MR Bodke, KK Pandey, UP Deshpande, NP Lalla and BN Dole , "A study of nanostructured ZnS polymorphs by synchrotron X-ray diffraction and atomic pair distribution function", RSC Advances, 6 (2016) 50479–50486, DOI: 10.1039/c6ra05653a, IF = 3.78
52.	U. P. Gawai, H. A. Khawal, M. R. Bodke, and BN Dole , "Effect of silver doping on ZnO nanocrystals", AIP, 1728 (2016) 020607-020611; doi: 10.1063/1.4946658.
53.	HA Khawal, ND Raskar, UP Gawai, and BN Dole , "Synthesis and different property of yttrium doped ZnS nanoparticles", AIP, 1728 (2016) 020431-020435; doi: 10.1063/1.4946482.
54.	UP Gawai, UP Deshpande and BN Dole , "A study on the synthesis, longitudinal optical phonon–plasmon coupling and electronic structure of Al doped ZnS nanorods", RSC Advances, 7 (2017) 12382–12390, DOI: 10.1039/c6ra28180j, IF = 3.78.
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1. Structural Studies of Y_{1-x}Pr_xBa₂Cu₃O_{7-δ} High Temperature Superconducting Compounds, First Asian Conference on Solid State Ionic Devices : Science and Technology, March 22 – 24, 2000, Chennai, (Tamilnadu).
2. The Major Role of Ionicity in Y/Pr-123 High Temperature Superconductors International Conference on Ionic Devices, November 28-30, 2003, Chennai, (Tamilnadu).
3. The Characterization Study of Y-123 High Purity Superconducting Materials, International Symposium on Ultra Pure Materials, November 22-23, 2004, Hyderabad, (Andhra Pradesh).
4. Some Properties of BSCCO – Ga Substituted High Temperature Superconductors, ICAMA, Nov 15 – 17, 2007, Kolhapur, (Maharashtra).
5. Neutron diffraction study of Pr substituted Y – 123 superconductors, ISNS, January 15 – 18, 2008, Mumbai, (Maharashtra).
6. Structural study of Mn substituted ZnO nanoparticles by sol-gel route, International Conference on MEMS and Optoelectronics Technologies (ICMOT-2010) 22-23, January, 2010, Narsapur, (Andhra Pradesh.).
7. Synthesis & structural study of Mn doped ZnO nanoparticles by sol-gel Technique International Conference on Recent Trend in Nano and Bio-Sciences, (ICORTNBS) February 24-26, 2010, Department of Physics P.G. College of Science Osmania University Saifabad, Hyderabad, (Andhra Pradesh).

8. Synthesis and magnetic properties of Mn doped ZnO nano-particles , Indraprastha international Conclave on Nano Science and Technology, November 16-17, 2010 Guru Gobind Singh Indraprastha University, New Delhi.
9. Structural properties of Cobalt doped ZnO nanocrystals via Co-precipitation route, Indraprastha international Conclave on Nano Science and Technology, November 16-17, 2010 Guru Gobind Singh Indraprastha University, New Delhi.
10. Effect of temperature on the structural properties of Mn substituted ZnO nanoparticles. 55th DAE Solid State Physics Symposium, December 26-30, 2010 Manipal University Manipal (Karnataka).
11. The crystallographic study of Pr substituted Eu-123 High T_c cuprate superconductors. 55th DAE Solid State Physics Symposium, December 26-30, 2010 Manipal University Manipal (Karnataka).
12. Synthesis and crystallographic study of Co doped ZnO nano-sized powders by co-precipitation method, International Conference on Nanoscience and Nanotechnology (ICNN 2011), July 6-8, 2011, Coimbatore Institute of Technology, Coimbatore (Tamilnadu).
13. Crystallographic & Electrical Properties of Pr Substituted Gd-123 Nanometre Sized High Temperature Superconductors, International Conference on Nanoscience and Nanotechnology (ICNN 2011), July 6-8, 2011, Coimbatore Institute of Technology, Coimbatore (Tamilnadu).
14. Effect of PEG on structural and magnetic properties of Mn doped ZnO nanocrystals, International Conference on Nanoscience and Nanotechnology (ICNN 2011), July 6-8, 2011, Coimbatore Institute of Technology, Coimbatore (Tamilnadu).
15. Characterization Study of Gd_{1-x}Pr_xBa₂Cu₃O_{7-δ} Nanometer Sized Superconductors, International Conference on Advanced Materials and Nanotechnology (ICANN – 2011), December 8-10, 2011, Indian Institute of Technology, Guwahati, (Assam)
16. Pivotal Role of Pr in Eu-123 Nanosized Superconductors, International Conference on Nanomaterials and Nanotechnology (ICNANO-2011), December 18 - 21, 2011, Conference centre at University of Delhi, Delhi.
17. Doping effect of Cobalt on the structural and optical properties of ZnS Nanocrystals, International Conference on Nanomaterials and Nanotechnology (ICNANO-2011), December 18 - 21, 2011, Conference centre at University of Delhi, Delhi.
18. Crystallographic and Optical studies on Cr Doped ZnO Nanocrystals, International Conference on Nanomaterials and Nanotechnology (ICNANO-2011), Dec. 18 - 21, 2011, Conference centre at University of Delhi, Delhi.
19. Synthesis and Characterization of Mn doped ZnS nanometer – sized particles, 56th DAE Solid State Physics Symposium, December 19-23, 2011 SRM University, Kattankulathur(Tamilnadu).
20. Crystallographic, FTIR and Optical Property Studies on Co doped ZnS Nanometer-sized Crystals, 57th DAE Solid State Physics Symposium, December 3-7, 2012, IIT, Mumbai

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1. The study of Magnetic Propulsion Phenomenon in Superconductors- 11th National Convention of IAPT, December 12-14, 1996, Aurangabad, Maharashtra.
2. Elastic Behavior of Silver Added BSCCO System- RTEM, February 18-20, 1999, Kolhapur, Maharashtra.
3. Structural Studies of Praseodymium Substituted YBa₂Cu₃O_{7-δ} High T_c Superconducting Compounds, ISC, Physics Section, January 3-7, 2000, Pune, Maharashtra.
4. The Role of Praseodymium Substitution in YBCO High Temperature Superconducting Compounds, MRSI-2000, Baroda, Gujrat.
5. The effect of Europium Substitution in Bismuth (2223) High Temperature Superconductors, (NNSC-2002) 24-26, March 2003, Kolkata, West Bengal.
6. Superconducting Properties of Praseodymium Substituted YBCO Compounds, NSCCFA, March 25-27, 2004, Bengal Engineering College, (A Deemed University) Hawrah, West Bengal
7. The Crystallographic Study of Y_{1-x}Pr_xBa₂Cu₃O_{7-δ} High T_c Superconductors, National Conference on Advanced Materials and Technology, September 24-26, 2004, Amritsar, Punjab.
8. The Neutron Diffraction Study of Y-123 High T_c Superconducting Compounds, CNS, 2-4, 2004, Mumbai, Maharashtra.

9. 14th National Symposium on Environment, June 5-7, 2005, Hyderabad, Andhra Pradesh.
10. Study of Y – 123 high temperature superconductors, NCMRAT, Jan 29 – 31, 2007, Aurangabad, Maharashtra.
11. Elastic Behavior of BSCCO – Ag Added High Temperature Superconductors, (NCRTMS – 2009), Feb.10-11, 2009, DAV College, Amritsar, Punjab.
12. Structural and Magnetic study of Ce substituted BSCCO Ceramic Materials, (MR – 09), 8-9 May 2009, Indian Institute of Technology Bombay, Powai, Mumbai, Maharashtra.
13. Synthesis and Structural properties of Mn doped ZnO nanoparticles by ceramic route, National Conference on Advancements in Nanoscience for Different Technologies February 10-11, 2010, ShrikrishnaMahavidyalaya, Gunjoti, Maharashtra.
14. The Structural study of Pr substituted Eu-123 High T_c cuprate Superconductors, March 10-11, 2010 at Murum, Dist- Osmanbad, Maharashtra.
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16. Synthesis and structural study on Co substituted Zn Onanoscale crystals, National Conference on Recent Advance in Condensed Matter Physics, March 14-15, 2011, Department of Physics, Aligarh Muslim University, Aligarh, U. P.
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20. Structural and Morphological Investigations on $Zn_{1-x}Ni_xO$ Nanocrystals, NCRIGE, Feb., 8-9, 2013, P.G. Department of Electronics Science, Brijlal Biyani College, Amravati,
21. Diverse Properties on Ce Doped ZnO Nanoparticles, NCNMN, December 1, 2018, Deogiri College, Aurangabad
22. Effect of band gap on photocatalytic activity of GO based Cr doped NiO nanocomposite, IJSRST, March 15 2023, Arts, commerce, science college Kille Dharur.

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1. Physics in 20th Century and Emerging Trends for the New Millenium, IPA, November 10-12, 1999, TIFR and BARC, Mumbai,
2. Effect of Praseodymium Substitution in YBCO High T_c Superconducting Compounds, Material Science: Trends & Future, February 22-24, 2000, Sangrur, Punjab
3. High Temperature Superconducting Materials- Some Challenging Problems, RMTD, December 28-29, 2005, Barshi, Solapur, Maharashtra.
4. Studies of SEM, Porosity and Bulk density of Eu substituted Bi-2223 high T_c Superconducting Compounds, RMTD, December 28-29, 2005, Barshi, Solapur, Maharashtra.
5. UGC-SAP National Seminar on Material Science, x-ray and Gamma ray Spectroscopy, March, 29-30.2017, Organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
6. Outcome Based Education Workshop 2017, Mahatma Phule Hall, IQAC, Dr. BAMU, Aurangabad, 09/12/2017.

■ PUBLISHED ARTICLES IN MARATHI LANGUAGE

1. SanvedanaatmakAtishighawahakta, DainikLokmat, 8/4/1999.
2. Atishighrawahakatechya Tara, DainikLokmat, 28/9/1999.
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5. RashtriyaSeva Yojanetun Sarvangin Vikas, Yuvasanskar (2008) 112.
6. NSS Through Development, Yuvasanskar, 2008, 12
7. Marathwadyat Anakhi Ek Krishi Vidyapeeth Sthapan Karave, Tarun Bharat, 31/05/2009.
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15. Naitikmulye Adhishtit Shikshanatun Rastravikas, Tarun Bharat, 5/9/2010.

TALKS

1.	Water Pollution Environmental Pollution, February 11-13, 1992, Govt. College of Arts and Science, Aurangabad, B. N. Dole
2.	Sixth State Level Debate Competition, September 5, 1995, Lokmat Times
3.	Participation in debate, 4/4/1996, Foster Development College of Education, Aurangabad
4.	Water Harvesting- A Major Need of Country, July 25, 2004, Ellora, Aurangabad, Indian Water- CultureAnd Council
5.	As a Chief Guest, Lecture on Yuvak Din (Swami Vivekanand's Birth Anniversary) J E S College, Jalna, 12/01/2005
6.	As a Chief Guest, Lecture on Nam Vistar Din, Dr. Babasaheb Ambedkar Marathwada University, P E S College of Engineering, Aurangabad, 14/01/2005
7.	Lecture on Mahatma Gandhi's Birth Anniversary as Chief Guest at Hivara, Jalna- 2/10/2005
8.	Talk on Panchtatva at Hast Pokhari---21/11/2005
9.	Personality Development, ShriSantSawata Mali Gramin College, Fulambri,
10.	Superconductivity, ZulaBhilajiraoPatil College Dhule, 5/10/2007.
11.	Talk on Participation of N.S.S. Volunteers in National Development at GavandariTanda on 24/01/2009, organized by Government College of Arts and Science, Aurangabad
12.	Talk on Role of N.S.S. in National Development at Tisgaon on 2/02/2009, organized by Dr. Babasaheb Ambedkar Art's and Science Commerce College, Aurangabad.
13.	Disaster Management at Dr. Babasaheb Ambedkar Art's and Science Commerce College, Aurangabad, 21/03/2010.
14.	Development through Education at Chh. Shivaji Hostel,Dr. Babasaheb Ambedkar Art's and Science Commerce College, Aurangabad, 2/4/2010
15.	Role of Volunteers for Village Development, Paithan, Aurangabad, 22/03/2010.
16.	Student and Education MGM College Aurangabad, 4/1/2010.
17.	Education, Chetna College, Aurangabad, 8/1/2010
18.	Swami Vivekanand and Youth, Lasur station, Govt. B.Ed. College, 16/1/2010.
19.	Education and Society, Govt. Institute, Aurangabad, 29/1/2010
20.	Superstitions and its EradiationAgri College, Aurangabad, 2/2/2010.
21.	Mahatma Gandhi and India,84th orientation course, ASC, Dr. BAMU, Aurangabad, 26/08/2010.
22.	PadamvibhushanGovindbhaiShroff Book written by Dr. V L Dharukar, 21/11/2010.
23.	Swami Vivekananda Birth Anniversary, Agri College, Aurangabad, 12/01/2011.
24.	Namvistar Din, Multipurpose High School, 14/01/2011.
25.	Education and its Importance, Sow. BhairomalTanwani Junior College of Science and Commerce, Aurangabad, 16/07/2011.
26.	Secrets of Good Teaching in Higher Education, ASC, Dr. Dr. BAMU, Aurangabad, 11/11/2011.
27.	ApuliyaHita, Hast Pokhari, Jalna (Talk No. 215) 2/12/2012
28.	Talk on SantGadge Baba SwetchaAbhiyanat Rohilagarh, Jalna (Talk No. 216)20/12/2012
29.	Talk on Superconductivity, ASC Dr. BAMU, Aurangabad (Talk No. 217)
30.	Talk on Swami Vivekananda's Youth Policy, Govt. Science Institute, Aurangabad (Talk No. 218), 16/02/2013.
31.	Talk on Swami Vivekananda's message for Youth, Chh. Sambhaji High School, Wakulani, Jalna (Talk No.219), 26/02/2013.
32.	Talk on Nanomaterials, ASC, Dr. BAMU, 13/12/2014

33.	Talk on Nanomaterials, ASC, Dr. BAMU, 13/12/2014
34.	Talk on Nanoscience and Nanotechnology, ASC, Dr. BAMU, 26/2/2015
35.	Talk on HTSC, Nanomaterials, ASC, Dr. BAMU, 6/6/2015
36.	Talk on Water conservation and Youth –Government Institute of Science, A'bad 5/3/2015.
37.	Talk on Water conservation and Youth –Government Institute of Science, A'bad 5/3/2017.
38.	Talk on Nanomaterials, ASC, Dr. BAMU, 13/09/2017.
39.	Speech on “Inaugural Function of Science Society” Indrajeet Arts, Commerce and Science College, Sillod, Aurangabad, 25/09/2017.
40.	Talk on “Inaugural Function of Science Club” at Shri Shivaji College, Kannad, Aurangabad, 14/10/2017.
41.	Lecture on Global Science for Global Wellbeing, Vinayakrao Patil College, Vaijapur, Aurangabad, 28/02/2023

■ **Achievements:**

1. Research Grants from National Funding Agencies Received: Rs. 5300,000=00
2. **Science Direct Top25, Hottest Article Across the World, Ranked 22, CAP2011, April-June 2011 Issue.**
3. Rashtriya Gaurav Award, 4th May 2012, New Delhi
4. Excellent Teacher Award, April 21, 2013.
5. **Ideal Teacher Award**, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, September 5, 2015.
6. Chairman- Board of Studies in Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, April 25, 2023.
7. Single Research Paper Citation More than 1916 (Google Scholar).

Dr. B. N. Dole
Professor and Head
Department of Physics
Dr. Babasaheb Ambedkar
Marathwada University
Chhatrapati Sambhaji Nagar-431 004
MAHARASHTRA

14. Development through Education at Chh. Shivaji Hostel, Dr. Babasaheb Ambedkar Art's and Science Commerce College, Aurangabad, 2/4/2010
15. Role of Volunteers for Village Development, Paithan, Aurangabad, 22/03/2010.
16. Student and Education MGM College Aurangabad, 4/1/2010.
17. Education, Chetna College, Aurangabad, 8/1/2010
18. Swami Vivekanand and Youth, Lasur station, Govt. B.Ed. College, 16/1/2010.
19. Education and Society, Govt. Institute, Aurangabad, 29/1/2010
20. Superstitions and its Eradication Agri College, Aurangabad, 2/2/2010.
21. Mahatma Gandhi and India, 84th orientation course, ASC, Dr. BAMU, Aurangabad, 26/08/2010.
22. Padamvibhushan Govindbhai Shroff Book written by Dr. V L Dharukar, 21/11/2010.
23. Swami Vivekananda Birth Anniversary, Agri College, Aurangabad, 12/01/2011.
24. Namvistar Din, Multipurpose High School, 14/01/2011.
25. Education and its Importance, Sow. Bhairoma Tanwani Junior College of Science and Commerce, Aurangabad, 16/07/2011.
26. Secrets of Good Teaching in Higher Education, ASC, Dr. Dr. BAMU, Aurangabad, 11/11/2011.
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40. Talk on "Inaugural Function of Science Club" at Shri Shivaji College, Kannad, Aurangabad, 14/10/2017.
41. Talk on Science Day, Govt. Science Institute, Aurangabad, 28/2/2019

ACHIEVEMENT:

Delivered 450 talks on various topics:

- Under my Guidance: 5 students completed their Ph. D. and at present 3 students are working.
- Research Publications:
I have been published 62 research manuscripts in SCI Journals
- Grants Received:
He has been completed three research projects namely of funding agencies (UGC, DAE, IUAC) of Rs. 17,00,000=00
And at present 2 projects funded by (SERB-DST, DAE) are running of Rs. 20,00,000=00

Achievements:

1. Top25, Hottest Article Across the World, Ranked 22, CAP2011, April-June 2011 Issue.
2. Rashtriya Gaurav Award, 4th May 2012, New Delhi
3. Excellent Teacher Award, April 21, 2013.
4. Ideal Teacher Award, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, September 5, 2015.

Dr. B. N. Dole

Professor

Department of Physics

Dr. Babasaheb Ambedkar

Marathwada University

Aurangabad-431 004, INDIA

Dr. B. N. Dole

Professor

Department of Physics

Dr. Babasaheb Ambedkar Marathwada

University, Aurangabad-431004

Maharashtra, INDIA

Bio-Data

(In short)

NAME: Prof. B. N. Dole has been working in Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad since 2006. He has been completed Ph. D. in 2002. He has 24 Years teaching Experience at M. Sc. Physics at PG level. Under His Guidance 6 students had completed their Ph. D. and at present 4 students are working. He has been working on various committees namely Scrutiny, Regular University Selection, PET-2012, etc. of the University.

- Research Publications:

He has been working as a member -Board of Examiner. He has been published 57 research manuscripts in peer reviewed Journals, 5 in national peer reviewed Journals. He has been presented research papers in 21 International Conferences and 20 in national conferences.

- Talks:

He has been delivered 450 talks on various topics

- Grants Received:

He has been completed 5 research projects namely of funding agencies (UGC, DAE, IUA) of
Rs. 37,00,000=00

And at present 1 research project funded by DAE) is ongoing Rs. 600,000=00

Achievements:

1. **Top25, Hottest Article Across the World, Ranked 22, CAP2011, April-June 2011 Issue.**
2. Rashtriya Gaurav Award, 4th May 2012, New Delhi
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4. **Ideal Teacher Award**, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, September 5, 2015.
5. Chairman