

Department of Physics

Departmental Profile

(2017-2022)

1. Scope and Importance of department.

Physics is the branch of science which deals with the study of natural phenomena in terms of basic laws. The scope of physics is divided into two major parts, Macroscopic and microscopic. The macroscopic part deals with phenomena at Laboratory, realistic, terrestrial and astronomical scale, whereas the Microscopic part deals with molecule, atomic and nuclear phenomena. Physics is closely connected to technology and society. Most of the modern technologies are contribution from the realm of physics and work on one or the other scientific principle, these contributions come from all over the world, through observation. Experimentation or analysis of Natural phenomena and the rules or laws that govern such phenomena.

2. Introduction of Department

The department of physics was established in 1956 with B.Sc. Degree. At present 19 students are enrolled for their B.Sc. Physics degree. The department has started M.Sc. Course in Physics since 1988. We have started this course so as to develop it as an advanced center of general Physics. This year 236 students registered for B.Sc. Part I, 45 students enrolled their names for B.Sc. Part II, 19 students enrolled their B.Sc. degree, 19 students registered for M.Sc. Part I and 20 students enrolled for M.Sc. Part II. At present in all 07 teachers (Faculty including Permanent and C.H.B) are working in the Department. The faculty has published around 03 research papers in the International journals and in the proceedings of International/ National/ State and regional level conferences, workshops, Seminars, Symposia etc..

3. Year of establishment : UG 1956 PG 1988

4. Details of Programmes / Courses offered (UG/PG/PhD/Certificate Course/Diploma course) (Academic Year 2022-23)

Name of Programme	Duration	Entry Qualification	Medium of Instruction
B.Sc.(Physics)	Three Years	Plus Two	English
M.Sc.(Physics)	Two Years	B.Sc.(Physics)	English

5. Program pattern (Semester / annual/ CBCS): B.Sc.-CBCS M.Sc.-CBCS

6. Number of teaching and non-teaching staff: Teaching: 06 Non-Teaching: 05

7.Number of Teaching in the department:

Designation	Sanctioned	Filled
Professor	01	00
Associate Professor	05	05
Assistant Professor	02	01

8.Faculty profile with name, qualification, designation, specialization, (Ph.D. / M. Phil. etc.,)

Sr. No.	Name of faculty	Qualification	Year of appointment	Designation	Specialization	Number of years of teaching experience (Year and months)
1.	Mr.R.B.Meshram	M.Sc.NET	2014	Assistant Professor	Electronics	08 Years 10 Months
2.	Prof.Mrs.S.S.Desale	M.Sc.	1990	Associate Professor	Electronics	33Years 6 Months

9. List of senior visiting faculty: Nil

10.Ongoing /completed research projects by faculty funded by governmental and non-governmental agencies (Last five years)

Sr. No	Name of the principal investigator	Duration of the project	Name of the research project	Amount of fund received	Name of funding agency	Year of sanction	Dept. of recipient
			Nil				

11. Research papers published in journals notified on UGC website (Last five years)

Sr. No.	Name of Journal	Title of Research Paper	ISSN/ ISBN No.	Whether peer reviewed. Impact Factor, if any
1	AJANTA	Doped Tin Oxide Thin Film: A LPG Gas Sensor.	2277-5730	-
2	AJANTA	Characterization Techniques: A Brief Study.	2277-5730	-

12. Research papers published in National/International Conference-proceedings

Sr. No.	Name of the Conference Seminar	Title of Research Paper	ISSN/ ISBN	Place & Date
	Nil			

13. Number of books and chapter in edited volumes/Books published

Sr.No.	Title of the book/chapter published	National/ International	Year of publication	ISBN/ISSN No.	Name of the publisher
	Nil				

14. Name of Research Guides:

Sr. No.	Name of research guide	Ph. D/ M. Phil
1.	Dr.S.B.Patil	Ph.D.

15. Number of Ph. D/ M. Phil awarded by faculty:

Sr.No.	Name of Ph. D/M. Phil scholar	Name of the Guide/s	Title of the thesis	Year of registration of scholar	Year of awards of Ph. D/ M. Phil.
1	Nil				

**16. Faculty as chairman/members in National committees/International Committees/
Editorial Boards/BOS/University committees etc.**

Sr. No.	Name of faculty	Name of the body in which full time teacher participated	Member of editorial board	Reviewer
1.	Nil		Nil	Nil

17. Awards / Recognitions received by faculty:

Year of awards	Name of full time teachers receiving awards from state level, National level, International level	PAN	Designation	Name of the award, fellowship, received from government or recognized bodies
Nil				

**18. Numbers of awards / Medals for outstanding performance in sports/cultural
activities in National/ International/ State level etc. received by students**

Year	Name of the award/Medal	National/International/State etc.	Sports/Cultural	Aadhar/Student ID No.	Name of the Student
	Nil				

19. Students Qualifying in State/National/International level examination (NET, SET, GATE, GMAT, GRE, TOEFL/UPSC/MPSC/State government examination, etc.)

Year	Registration No./Roll for the examination	Number of students selected									
		SET	NET	GATE	GMAT	CAT	RGE	TOFEL	Civil services	State Examinations/Others	Govt.
2019-2020	MR1316200538	02	02								
	535066										
	177107										
	800798										
2021-2022	596639	01									

20. Student progression to higher studies. UG to PG, PG to M. Phil., PG to Ph. D, M. Phil to Ph. D, Ph. D to post-Doctoral, etc. (Last Batch, 2016-17)

1. UG to PG

Year	Sr. No.	Program Graduated From	Department Graduated from	Student Name	Name of the Institute Joined	Name of the Program admitted
2021-2022	1	B.Sc Physics	S.S.V.P.S Science College, Dhule	Nikhil Sunil Amrutkar	S.S.V.P.S Science College, Dhule	M.Sc. Physics
	2	B.Sc Physics	S.S.V.P.S Science College, Dhule	Harshal Shankar Chaudhari	S.S.V.P.S Science College, Dhule	M.Sc. Physics
	3	B.Sc Physics	S.S.V.P.S Science College, Dhule	PoojaRajendraChaure	S.S.V.P.S Science College, Dhule	M.Sc. Physics
	4	B.Sc Physics	S.S.V.P.S Science College, Dhule	Nikita VinodPatil	S.S.V.P.S Science College, Dhule	M.Sc. Physics
	5	B.Sc Physics	S.S.V.P.S Science College, Dhule	AafiyaNaazAsadullah Khan Pathan	S.S.V.P.S Science College, Dhule	M.Sc. Physics
	6	B.Sc Physics	S.S.V.P.S Science College, Dhule	HemantRavindraPatil	S.S.V.P.S Science College, Dhule	M.Sc. Physics
	7	B.Sc Physics	KBC North Maharashtra University, Jalgaon	BhushanKashinathMahale	KBC North Maharashtra University, Jalgaon	M.Sc. Physics
	8	B.Sc Physics	KBC North Maharashtra University, Jalgaon	Vidhika Sanjay Warude	KBC North Maharashtra University, Jalgaon	M.Sc. Physics

	9	B.Sc Physics	KBC North Maharashtra University, Jalgaon	VasudhaSharad Sonar	KBC North Maharashtra University, Jalgaon	M.Sc. Physics
	10	B.Sc Physics	JSPM Narhe Technical Campus, Pune	PappuDayaramChavan	JSPM Narhe Technical Campus, Pune	M.C.A
	11	B.Sc Physics	Sinhagad Institute of Management Narhe, Pune	Rahul BhagwatPatil	Sinhagad Institute of Management Narhe, Pune	M.C.A
	12	B.Sc Physics	S.N.D.T Mumbai	Ankita Anil Wagh	S.N.D.T Mumbai	M.C.A
2020-2021	1	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Ansari SariyaNausheenAejaz Ahmad	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	2	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Mali AnkitaLaxman	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	3	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Mali Madhuri Prakash	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	4	B.Sc. Physics	S.S.V.P.S Science College, Dhule	PatilMayuriNandalal	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	5	B.Sc. Physics	S.S.V.P.S Science College, Dhule	PatilRajveerJitendra	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	6	B.Sc. Physics	S.S.V.P.S Science College, Dhule	PatilSaniLotan	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	7	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Patil Vicky Vaman	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	8	B.Sc. Physics	S.S.V.P.S Science College, Dhule	RanmaleMohinee Sanjay	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	9	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Shaikh LabeenaParveen Shaikh Maheboob	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	10	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Shaikh MisbahBano Shaikh Naeem	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	11	B.Sc. Physics	S.S.V.P.S Science College, Dhule	SisodeAsmitaAvinash	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	12	B.Sc. Physics	S.S.V.P.S Science College, Dhule	ThoratRenukaVikram	S.S.V.P.S Science Collage Dhule	M.Sc. Physics
	13	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Chakor Swati Subhash	Swoddharakvidyarthisansthas	M.Sc. Physics
	14	B.Sc. Physics	S.S.V.P.S Science College, Dhule	NewadkarJayesh Vijay	Swoddharakvidyarthisansthas	M.Sc. Physics
	15	B.Sc. Physics	S.S.V.P.S Science College, Dhule	JadhavJitendraChhotu	NandurbarTalukaVidhaya ksamitis G.	M.Sc. Physics
	16	B.Sc. Physics	S.S.V.P.S Science College, Dhule	PatilKalpeshDevidas	NandurbarTalukaVidhaya ksamitis G.	M.Sc. Physics
	17	B.Sc. Physics	S.S.V.P.S Science College, Dhule	KhalaneDhanashri Dinesh	S. S. V. P. Sansthas Late Karmaveer	M.Sc. Physics
	18	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Mali Jitendra Aba	Kohinoor Arts, Commerce & Science	M.Sc. Physics

					College Khultabada'bad	
19	B.Sc. Physics	S.S.V.P.S Science College, Dhule	ShimpiBhatu Narayan	Kohinoor Arts,Commerce& Science College Khultabada'bad	M.Sc. Physics	
20	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Mali PrashantManohar	School Of Physical Science,KbcNmuJalgaon	M.Sc. Physics	
21	B.Sc. Physics	S.S.V.P.S Science College, Dhule	MasuleNileshRamprasad	J.D.M.V.P's Arts, Commerce, Science,	M.Sc. Physics	
22	B.Sc. Physics	S.S.V.P.S Science College, Dhule	PatilTejasRajendra	Mgtsm, Arts, Commerce & Science	M.Sc. Physics	
23	B.Sc. Physics	S.S.V.P.S Science College, Dhule	SuryawanshiPriyankaDevidas	Ges H.P.T. Arts And R.Y.K. Science College,Nashik	M.Sc. Physics	
24	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Hake LahuNamdeo	R. C. Patel Educational Trust's R. C.	M.Sc. Physics	
25	B.Sc. Physics	S.S.V.P.S Science College, Dhule	Nandrelokeshrajendra	University Of Palermo, Italy	M.S.Electronics Engineering	
2019-2020	1	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilRuchikaIshwar	School of Physical Sciences, KBCNMU, Jalgaon	M.Sc Physics
	2	B.Sc Physics	S.S.V.P.S Science College, Dhule	KarneBhagyashriPramod	S.S.V.P.S Science College, Dhule	M.Sc Physics
	3	B.Sc Physics	S.S.V.P.S Science College, Dhule	ThakareZenduPramod	S.S.V.P.S Science College, Dhule	M.Sc Physics
	4	B.Sc Physics	S.S.V.P.S Science College, Dhule	MarkandeyNachiketManohar	S.S.V.P.S Science College, Dhule	M.Sc Physics
	5	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilMadhaviRajendra	S.S.V.P.S Science College, Dhule	M.Sc Physics
	6	B.Sc Physics	S.S.V.P.S Science College, Dhule	Thakur SakshiDattatraya	S.S.V.P.S Science College, Dhule	M.Sc Physics
	7	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilPallaviRajendra	S.S.V.P.S Science College, Dhule	M.Sc Physics
	8	B.Sc Physics	S.S.V.P.S Science College, Dhule	SolunkheHarshada Sanjay	S.S.V.P.S Science College, Dhule	M.Sc Physics
	9	B.Sc Physics	S.S.V.P.S Science College, Dhule	More MansiManohar	S.S.V.P.S Science College, Dhule	M.Sc Physics
	10	B.Sc Physics	S.S.V.P.S Science College, Dhule	More AishwaryaDilip	SwoddharakVidarthiSansthasDadasahebRawal College, Dondaicha	M.Sc Physics
	11	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilKalyani Sunil	SwoddharakVidarthiSansthasDadasahebRawal College, Dondaicha	M.Sc Physics
	12	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilArchanaDilip	SwoddharakVidarthiSansthasDadasahebRawal College, Dondaicha	M.Sc Physics
	13	B.Sc Physics	S.S.V.P.S Science College, Dhule	SuryawanshiSnehal Sanjay	SwoddharakVidarthiSansthasDadasahebRawalColle	M.Sc Physics

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	14	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilBhagyashri Sanjay	G.T.Patil College, Nandurbar	M.Sc Physics
	15	B.Sc Physics	S.S.V.P.S Science College, Dhule	Rajput KaveriKiransing	G.T.Rajput College, Nandurbar	M.Sc Physics
	16	B.Sc Physics	S.S.V.P.S Science College, Dhule	ValviRavindar Sunil	PSGVPM College, Shahada	M.Sc Physics
	17	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilPratikshaJagdish	R C Patel College, Shirpur	M.Sc Physics
2018-2019	1	B.Sc Physics	S.S.V.P.S Science College, Dhule	KhairnarDiksha Sanjay	S.S.V.P.S Science College, Dhule	M.Sc Physics
	2	B.Sc Physics	S.S.V.P.S Science College, Dhule	PatilHarshadaNamdeo	S.S.V.P.S Science College, Dhule	M.Sc Physics
	3	B.Sc Physics	S.S.V.P.S Science College, Dhule	BhadaneKritika Sanjay	S.S.V.P.S Science College, Dhule	M.Sc Physics
	4	B.Sc Physics	S.S.V.P.S Science College, Dhule	Shaikh Samiyalliyas	S.S.V.P.S Science College, Dhule	M.Sc Physics
	5	B.Sc Physics	S.S.V.P.S Science College, Dhule	Ansari SeemaBanoSarosh	S.S.V.P.S Science College, Dhule	M.Sc Physics
	6	B.Sc Physics	S.S.V.P.S Science College, Dhule	Patil Prasad Jayraj	S.S.V.P.S Science College, Dhule	M.Sc Physics
	7	B.Sc Physics	KBC North Maharashtra University, Jalgaon	Yadav Rajesh Lallu	S.S.V.P.S Science College, Dhule	M.Sc Physics
	8	B.Sc Physics	KBC North Maharashtra University, Jalgaon	Sonar SagarPravesh	S.S.V.P.S Science College, Dhule	M.Sc Physics
2017-2018	1	B.Sc Physics	S.S.V.P.S Science College, Dhule	BhadaneChetanPundlik	S.S.V.P.S Science College, Dhule	M.Sc.Physics
	2	B.Sc Physics	S.S.V.P.S Science College, Dhule	BhamarePrafullaDilip	S.S.V.P.S Science College, Dhule	M.Sc.Physics
	3	B.Sc Physics	S.S.V.P.S Science College, Dhule	JireMadhuriGulab	S.S.V.P.S Science College, Dhule	M.Sc.Physics
	4	B.Sc Physics	S.S.V.P.S Science College, Dhule	ShewaleVedankiniPopat	S.S.V.P.S Science College, Dhule	M.Sc Physics
	5	B.Sc Physics	S.S.V.P.S Science College, Dhule	SK.ShaziyaFirdausRafique	S.S.V.P.S Science College, Dhule	M.Sc.Physics
	6	B.Sc Physics	S.S.V.P.S Science College, Dhule	Borase Bharat Prabhakar	S.S.V.P.S Science College, Dhule	M.Sc.Physics
	7	B.Sc Physics	KBC North Maharashtra University, Jalgaon	Faiz Ahmad MD. Yaseen	S.S.V.P.S Science College, Dhule	M.Sc.Physics

2. PG to Ph. D or M. Phil to Ph. D.

Sr. No.	Program Graduated From	Department Graduated from	Student Name	Name of the Institute Joined	Name of the Program admitted
1.			Nil		

22. Placement of outgoing students (Last five years, 2017-2022)

Year	Contact detail	Number of students placed	Name of the employer with contact details	Package received	Program graduated from
2020-2021	Not Available	02	BhadaneKrittika Sanjay VidyawardhiniS Sabha's Arts, Commerce and Science College, Dhule	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule
	Not Available		KairnarDiksha Sanjay VidyawardhiniS Sabha's Arts, Commerce and Science College, Dhule	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule
2018-2019	Not Available	05	KakadeRajdeepNitini Jai-Hind Highschool and Junior College Dhule	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule
	Not Available		Mali RakeshRajendra ONGC Ltd ,Mumbai	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule
	Not Available		ChaudhariSagar Shankar High Court, Nagpur	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule
	Not Available		PuranikUtkarshaSatish District Court and Session Court Jalgaon	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule
	Not Available		DolasSushil Suresh Janta Vidyalaya, Zodge	Not Available	S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule

23. List of alumni/contribution

Sr. No.	Name of Alumni	Year of Graduation/Post Graduation	Position held	Contact detail (Email, Mobile No.)	Quantum of Contribution
	Nil				

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized & the source of funding

Sr. No.	Level National/ International/ State	Name of the workshop/Seminar conference	Funding agency	Amount sanctioned	Durations (From-To)	Number of participants
1	<i>National</i>	<i>Material Science: Advancement and Innovation</i>	-	-	<i>20 February 2019</i>	<i>89</i>

26. Student profile programme/course wise:

Year	Name of the Course/programme (refer question no. 4)	Applications received	Enrolled		Total number of Students
			*M	*F	
2021-2022	B.Sc.	25	10	13	23
	M.Sc.	20	06	12	18
2020-2021	B.Sc.	36	16	19	35
	M.Sc.	20	03	12	18
2019-2020	B.Sc.	24	06	15	21
	M.Sc.	20	03	15	18
2018-2019	B.Sc.	35	09	25	34
	M.Sc.	30	16	12	28
2017-2018	B.Sc.	30	11	16	27
	M.Sc.	24	06	15	21

27. Number of linkages for faculty exchange/student exchange/training/internship/field trips/job on training/research etc.

Sr. No.	Title of the linkage	Name of the partnering institution/ industry /research lab with	Year of commencement	Duration (From-To)	Nature of linkage
1	Nil				

28. Number of functional MoU's with corporate houses/ industries/other institutes/Universities, etc.

Organisation with which MoU is signed	Name of the institution/ industry/ corporate house	Year of signing MoU	Duration	List the actual activities under each MoU year wise	Number of students/teachers participated under MoUs
JET Z. B. Patil Sr College, Dhule		2016	5 years	Nil	Nil
School of Physical Science KBCNMU Jalgaon		2013	10 years	Nil	Nil
Arts , commerce and Science College , Navapur		2012	10 years	Nil	Nil

24. Details of Infrastructural facilities

1. Internet facilities for Staff & Students-Yes

2. Class rooms with ICT facility- **Yes**

3. Laboratories-LAB -4

25. List of Equipment's/Instruments

1. Constant Deviation Spectrometer (OSWA)
2. FabryParot Interferometer (OSWA)
3. L. G. Plate with spectrometer (OSWA)
4. Electromagnet 10 KG. With power supply
5. Platinum Resistance Thermometer with C. F. Bridge
6. Sympson Analog Multimeter
7. Travelling Microscope L.C. 0.001cm
8. Audio Amplifier (for Sound Expts.) Ahuja make
9. Sound Pressure Level Meter
10. Characteristic of Photocell Complete setup Omega ES-399
11. Planck's constant with photocell Omega ES-317
12. Solar Cell Characteristics Omega ES- 290
13. Electronic charge using a rectifier complete set Omega ETB-162
14. Stroboscope Complete set up
15. C.R.O.(Oscilloscopes) 6 Nos
16. Rotating Cylinder Viscometer
17. G. M. Counter Complete setup with radiation sources & Lead Shield. (ECIL)

18. Four – probe Resistivity Apparatus
19. Electromagnetic Pendulum
20. Dual Power Supply –15-0-+15 4 Nos
21. Signal Generators (APLAB)..... 4 Nos
22. e/m by bar Magnetron (Thomson Method) Omega EM-30
23. Abbe Refractometer
24. Digital Frequency counter.....2 Nos
25. He-Ne Laser Source
26. AC power Supplies 6 Nos
27. D.C. variable power supply 6 Nos.
28. L.C.R. Bridge (Radart)
29. Rotary Vacuum Pump
30. High Temperature Muffle furnace
31. Digital temperature Controller & Indicator
32. Digital Multimeter
33. Flint and Crown glass prism
34. 50 MHz Digital Storage Oscilloscope
35. He-Ne LASE 2mW

25. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

26.

Sr. No.	Enrichment programmes	Experts
	Nil	

26. Teaching methods adopted to improve student learning

1. Interactive learning
2. Inquiry-Based Instructions
3. Introduce technology

27. Participation in Institutional Social Responsibility (ISR) and Extension activities:

28. Future plans:

1. To obtain different (Major\Manor) research projects for the academic & infrastructural development of the Department.
2. Linkage with Research Centre
3. To Organize State and National level conferences and workshops.
4. Collaboration with Industry.
5. Formation of Placement Cell in Department

1. Retired Faculty profile with name, qualification, designation, specialization, (Ph.D. / M. Phil. etc.,)

Sr. No.	Name of faculty	Qualification	Year of appointment	Designation	Specialization	Number of years of teaching experience (Year and months)
1.	Dr.S.B.Patil	M.Sc.Ph.D	1991	Associate Professor	Material Science	28 Years 10 Months
2.	Prof.V.V.Patil	M.Sc.M.Phil	1988	Associate Professor	Electronics	33 Years 20days