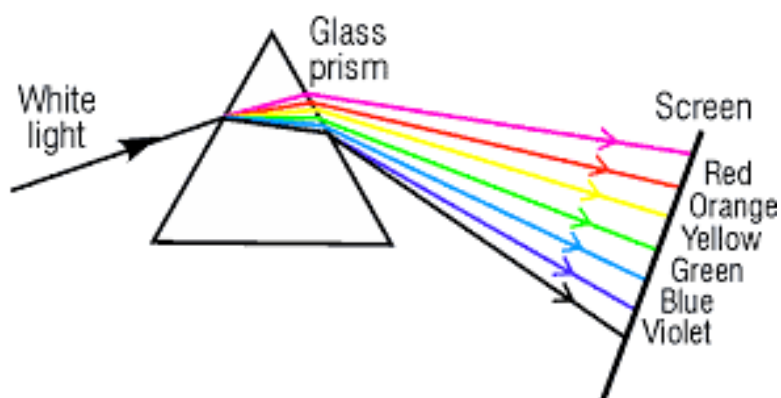


P.T.C. EDUCATION SOCIETY'S
S.S.M.M. ARTS, SCIENCE & COMMERCE COLLEGE,
PACHORA DIST. JALGAON [M.S.]
(AFFILATED TO NORTH MAHARASHTRA UNIVERSITY, JALGAON)



DEPARTMENTAL PROFILE



DEPARTMENT OF PHYSICS

2012 TO 2018

S.S.M.M. Arts, Science and Commerce College, Pachora

(Affiliated to North Maharashtra University, Jalgaon)

(Profile of the Department of Physics)

1. Name of the Department:- **PHYSICS**
2. Year of Establishment:- **June 1971 (Gen)**
: **June 1986 (Special)**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
U.G. COURSES:
 - 1) **F.Y.B.Sc**
 - 2) **S.Y.B.Sc**
 - 3) **T.Y.B.Sc**
4. Names of Interdisciplinary courses and the departments/units involved :
 - a. Environmental Studies
 - b. General Knowledge.
5. Annual/ semester/choice based credit system (programme wise):-
 - 1) **F.Y.B.Sc :- Semester (60 +40) CGPA**
 - 2) **S.Y.B.Sc:- Semester (60 +40) CGPA**
 - 3) **T.Y.B.Sc:- Semester (60 +40) CGPA**
6. (A) **Number of Teaching posts Sanctioned = 04**

Post	Sanctioned	Filled
Professor	00	00
Associate Professor	02	02
Asstt. Professor	02	01

6. (B) **Number of Non-Teaching Posts Sanctioned = 04**

Post	Sanctioned	Filled
Lab Asstt,	01	00
Lab Attendant	03	03

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

Name	Qualification	Designation	Specialization	Total Teaching Experience
Dr.R.B.Pathak *	M.Sc M.Phil Ph.D	Associate Professor	Physics (Electronics)	31
Dr. S.M.Patil	M.Sc M.Phil Ph.D	Associate Professor	Physics (Electronics)	35
S.T.Suryawanshi	M.Sc M.Phil	Asst. Professor	Physics (Electronics)	20

* Retired from 1st August 2017

8. List of senior visiting faculty :---Nil

9. A) Total Workload

Sr. No.	Academic Year	Number of Teachers	Total Workload (Periods)
01	2012-13	03+*01	102
02	2013-14	03+*01	118
03	2014-15	03+*01	102
04	2015-16	03+*01	102
05	2016-17	02+*02	114
06	2017-18	02+*02	114
07	2018-19	02+01	114

* CHB

9. B) Percentage of lectures delivered and practical classes (weekly) handled
(Programme wise) by temporary faculty:-----

Sr. No	Programme	Lectures	Practical's
1	F.Y.B.Sc	03	04
2	S.Y.B.Sc	02	04
3	T.Y.B.Sc	02	-----

10. Student -Teacher Ratio (Programme wise):--

*** Strengths of Students :**

Sr · N o	Programme	No. of Students in the Academic Year							
		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	F.Y.B.Sc	134	156	180	150	140	133	142	152
2	S.Y.B.Sc	27	22	52	36	58	51	31	46
3	T.Y.B.Sc	06	11	12	08	12	20	20	17

11. * Student-Teacher Ratio:

Academic Year	Programme	Student-Teacher Ratio
2011-12	F.Y.B.Sc	33:01
	S.Y.B.Sc	09:01
	T.Y.B.Sc	02:01
2012-13	F.Y.B.Sc	39:01
	S.Y.B.Sc	07:01
	T.Y.B.Sc	04:01
2013-14	F.Y.B.Sc	45:01
	S.Y.B.Sc	17:01
	T.Y.B.Sc	04:01
2014-15	F.Y.B.Sc	38:01
	S.Y.B.Sc	12:01
	T.Y.B.Sc	03:01
2015-16	F.Y.B.Sc	35:01
	S.Y.B.Sc	!9:03
	T.Y.B.Sc	04:01
2016-17	F.Y.B.Sc	33:01
	S.Y.B.Sc	17:01
	T.Y.B.Sc	07:01
2017-18	F.Y.B.Sc	47:1
	S.Y.B.Sc	10:1
	T.Y.B.Sc	7:1
2018-19	F.Y.B.Sc	51:1
	S.Y.B.Sc	15:1
	T.Y.B.Sc	6:1

12. Result Analysis:

A) Success rate of students (Passing %) of T.Y.B.Sc

Year	Total admitted Students	Total Appeared Students	Ist Class with CGPA	IInd Class with CGPA	Pass class with CGPA	ATKT	Fail	Total Successful Students	% of Passing
2011-12	05	05	05					05	100
2012-13	11	11	08	.....	01	.....	02	09	81.8
2013-14	12	12	10	01	01	.....	.....	12	100
2014-15	09	09	09	.....	.....	.....	.....	09	100
2015-16	12	12	11	...	....	....	01	11	91.66
2016-17	20	20	18	.....	.....	.....	02	18	90

[illegible]

13. Number of academic support staff (technical) and administrative staff; sanctioned and filled: sanctioned -----04 *Filled-----03

14. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.
Ph.D-----02
M.Phil-----03

15. Publications:

a) Publication per faculty :---

➤ **Dr.S.M.Patil :**

Number of papers published in peer reviewed journals (national /international) by faculty and students: ---07

➤ **Publications(Paper/Books/Articles/Monographs):-**

1.S.M.Patil, D.S.Patil, G.D.Deshmukh, P.H.Pawar,

“Photosensing properties of cadmium sulfide (CdS) thin films by Chemical bath deposition techniques”, Vol.5 (12) January-April (2012) page: 59-63, Asian Journal of Chemical and Environmental research ISSN 0974-3049

2. S.M.Patil, P.H.Pawar,

“Photoconducting properties of cadmium zinc sulfide (CdZnS) thin films by Chemical bath deposition techniques” Vol. 5 (34) July-October (2012) page: 63-68 Asian Journal of Chemical and Environmental research ISSN 0974-3049

3. S.M.Patil , P.H.Pawar,

“Nanocrystalline hexagonal shaped CdS thin films for photo conducting application” Vol.17(2) (2014) page: 153-167, International Letters of Chemistry, Physics and Astronomy ISSN 2299-3843

4. S.M.Patil, P.H.Pawar,

“Influence of deposition temperature on nanocrystalline CdS thin films Application in Solar Cells as Antireflection Coatings”, Vol. 17(1) (2014) page: 21-36, International Letters of Chemistry, Physics and Astronomy ISSN 2299-3843

5. S.M.Patil, P.H.Pawar,

“pH dependent structural, optical and electrical properties of chemically deposited CdS thin films”, Vol. 5 (3),2014,page 40-48, Scholars Research Library Archives of Physics Research, ISSN 0976-0970.

6. S.M.Patil, P.H.Pawar,

“Photoconducting properties of hierarchical rod like structure nanostructured Cd_{1-x}Zn_xS thin films prepared by chemical bath deposition technique” Volume 5, Nov 2014, Issue 11, Page 1475-1495, International Journal of Scientific and Engineering Research, ISSN 2229-5518

7. G. D. Deshmukh, , S. M. Patil, , S. S. Patil, and P. H. Pawar.

Effect of Film Thickness on Structural and Optical Properties of Bi₂Te₃ Thin Films Journal of Chemical, Biological and Physical Sciences[JCBPS] Section C; May 2015 – July 2015, Vol. 5, No. 3; 2769-2779. E- ISSN: 2249 –1929

8. S. M. Patil¹, D.S. Patil¹ and P. H. Pawar

Gas Sensing Properties of Nanocrystalline Fiber like Structure of CdS thin films for H₂S gas detection ‘ ‘International Journal of Chemical Concepts”
vol.02,No.02,pp-096-105, ISBN; 2395-4256

15 (B) Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, etc.): **Nil**

- * Monographs: Nil
- * Chapter in Books: **Nil**
- * Books Edited: **Nil**

15. (c) Books with ISBN/ISSN numbers with details of publishers:
a) 01 Book (By S.T. Suryawanshi Published by Lulu Book USA (ISBN No 978-1-329-92057-6 in 2016)
b) 23 Books (By Dr. R.B. Pathak)---separate sheet attached

List of the books

ACADEMIC YEAR 2012-2013

Class	Title	Name of University
F.Y.B.SC.	PHY-111 Mechanics and properties of Matter	N.M.U. Jalgaon
	PHY-112 Electricity and Magatism	N.M.U. Jalgaon
	PHY-103 PRACTICAL COURSE	N.M.U. Jalgaon
S.Y.B.SC.	PHY-241 Modern Physics	N.M.U. Jalgaon
	PHY-242 OPTICS	N.M.U. Jalgaon

ACADEMIC YEAR 2015-2016

Class	Title	Name of University
F.Y.B.SC.	PHY-111 Mechanics and properties of Matter	N.M.U. Jalgaon
	PHY-112 Electricity and Magatism	N.M.U. Jalgaon
	PHY-103 PRACTICAL COURSE	N.M.U. Jalgaon
S.Y.B.SC.	PHY-241 Modern Physics	N.M.U. Jalgaon
	PHY-242 OPTICS	N.M.U. Jalgaon

16. Student progression

Student progression (UG to PG) per Year	Against % enrolled
2012-13	65
2011-12	65
2013-14	50
2014-15	60
2015-16	50

17. Details of Infrastructural facilities

A) Laboratories:

Physics Lab I - 66.81 Sq mt

Physics Lab I I - 22.22 Sq mt

Optics Room - 22.22 Sq mt

Store Room - 11.97 Sq mt

Staff Room - 11.97 Sq mt

B) Number of Books in the Central Library of College:

Sr.No.	Academic Year	No. of Reference Books	No.of Text Books	Total Number of Books
	Upto 2012	586	1656	2242
1	2012-13	627	1656	2283
2	2013-14	630	1941	2571
3	2014-15	630	2111	2741
4	2015-16	661	2111	2772
5	2016-17	671	2231	2902
6	2017-18	685	2386	3071

C) Journals in the Central Library

1. PRAMANA- A Journal of Physics
2. Indian Journal of Pure and Applied Physics
3. Resonance
4. Current Science
5. **Supportive Magazines and Journals in the Department**
Everyman Science ISCA Kolkata

D) List of Books in the Department (Reference)(Departmental Library)

1. Advanced Inorganic Chemistry Vol-II
2. Electronic Devices and Circuits: An Introduction
3. Basic Semiconductor Physics
4. Frontier Science and cutting-edge Technologies-The Road Ahead
5. Nano technology-A Future Technology with Visions
6. Advances in Nano-science & Nano technology
7. Instrumentation for Process measurement and control
8. Spectroscopy
9. Semiconductor Optoelectronic Devices
10. Organic Spectroscopy
11. X-ray Methods
12. Ultraviolet and Visible Spectroscopy
13. Nano technology Principles and Practices(Xerox Copy)
14. Structure and Bonding in Crystalline Materials

15. Thin Film Fundamentals

16. Instrumentation Devices & Systems

E) Language Proficiency:

The department offers all the courses in English medium. The proficiency of the students in English is average in the beginning but later they find themselves comfortable.

F) Trends in the success and drop-out rates of students

There is incremental growth in the pass percentage of the students in the last five years. Likewise the drop-out rate has also considerably come down below five percent.

G) Participation of teachers in academic and personal counseling of the students.

The staff is actively involved in personal counseling of the students in respect of their academic and extra-curricular problems. The faculty members regularly attend seminars and conferences.

H) Number of Books in the Departmental Library, if any(Previous Text Books): 268

I) Number of Journals/Periodicals: 4

J) Number of Computers: 02

K) Annual Budget Rs.25,000/- and additional (Grant by UGC and GOVT)

L) Placements records of the students and contribution of department to aid student placement.

The department constantly encourage students for higher courses after the basic degree ,competitive examinations and other such opportunities in the government ,public and private sectors. Some of our past students are holding worth positions in the public and private subdivisions

M) Plan of action of the Department for the next five years.

1. To develop the departmental library
2. To prepare for major research project.
3. To arrange National/State/University level seminars, workshops, conference etc.
4. To promote research activities and publications
5. To develop well equipped laboratory to carry out research work.

N) Areas of Research of Faculty Members:

Sr. No.	Name of the Faculty Member	Research Degree	Research Topic
01	Dr. S. M. Patil	M. Phil	Surface Modification by Ion Implantation and Laser Techniques
		Ph.D.	Structural, Optical and Photoelectrical Properties of Nanocrystalline CdZnS Thin Films using CBD Techniques.

02	Dr. R. B. Pathak	M. Phil	Density and Ultrasonic Velocity Studies of Aniline – Alkanol Mixtures at Various Temp.
		Ph.D.	Density and Ultrasonic Velocity Studies of Binary and Ternary Liquid Mixtures of Alkanols(C_1 to C_4) with Aniline and Substituted Aniline at Various Temp.
03	Mr. S. T. Suryavanshi	M. Phil	Study on Chemically Deposited $CdCr_2S_4$ thin films.
		Ph.D.	----

18. Number of students receiving financial assistance from college, university, government or other agencies: **90%**

19. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts: **Nil**

20. Teaching methods adopted to improve student learning:

Use of OHP, LCD Projector, Charts, Sheets, Manuals, Demonstrations of Experiments, field visit. Internet facility, In addition to the classical lecture method, the faculty members use teaching methods like seminar, tutorials, and interactive participation of students. They use LCDs, internet and other I.C.T resources for enriching their knowledge. They also visit different departments and institutes to update themselves.

21. Faculty who have attended National and International seminar, workshop, conferences:

21. 1) Dr. S. M. Patil

Sr. No.	Name of the Seminar/Conference/Symposia/Workshop	Name of the Sponsoring Agency	Place and Date
1	UGC sponsored National conference “Recent Advances in Material synthesis and characterization” NCRAMS-2011	U.G.C.	D.N. Bhole Arts, Science and Commerce College, Bhusawal 22-01-2011 to 23-01-2011
2	UGC sponsored National Conference on “Materials and Devices for Future Technology”	UGC-SAP	North Maharashtra University, Jalgaon 07-03-2011 Jalgaon
3	Workshop on “Research methodology” at North Maharashtra University Jalgaon	North Maharashtra University Jalgaon	North Maharashtra University, Jalgaon Sep 24-28, 2012.

4	State Level One Day Conference on “Examination Reforms in Higher Education for Universities and Colleges”	UGC	P.T.C. Education Society’s S.S.M.M. Arts Science and Commerce college Pachora Dist. Jalgaon 12 March 2012
5	Workshop on F.Y.B.Sc.Physics Syllabus Restructuring	North Maharashtra University Jalgaon	L.K.Dr.Ghogrey Science College, Dhule 17 January 2015
6	Workshop on T.Y.B.Sc.Physics Syllabus Restructuring	North Maharashtra University Jalgaon	Nanasaheb Y.N.Chavan Arts,Science and Comm. college Chalisgaon 27 January 2015
7	National conference on Electronic Material Thin Films and Its Applications (NCEMTFA-2016)	UGC sponsored	Nutan Maratha College Jalgaon. 9-10 December 2016
8	Workshop on Screen Evaluation	North Maharashtra University Jalgaon	S.S.M.M. ASC College Pachora 26/09/2016
9	Workshop on S.Y.B.Sc Physics Syllabus Framing	NMU	Arts ,Science and Commerce College Jamner 10February 2013
	Workshop on T.Y.B.Sc Physics Syllabus Framing	NMU	Arts ,Science And Commerce College Shahada 25 February 2017

➤ **Paper Presentation in Seminars /Conferences /Symposia /
Workshop etc.**

1. UGC sponsored National conference on “Recent Advances in Material synthesis and characterization” (NCRAMS-2011)” attended and presented a paper entitled “ Variation of Band Gap in CdS with composition prepared by chemical bath deposition Organized by D.N. Bhole Arts,Science and Commerce College, Bhusawal
2. UGC sponsored National conference on “National conference on Electronic Material Thin Films and Its Applications “ (NCEMTFA-2016) attended and

presented a paper entitled “Optical Properties of Chemically Prepared CdS, ZnS, CuSe thin films by Photosensing Applications” organized by Arts, DMVP Samaj Arts, Science and Commerce College, (Nutan Maratha college)Jalgaon

➤ **Innovations/ Contributions in Teaching:**

- **Designing of Curriculum:** Actively participated in syllabus framing of F.Y., S.Y, and T.Y. B.Sc. Physics subject of North Maharashtra University,Jalgaon
- **Teaching Methods:**
 1. Lecture method
 2. Use of visual charts and models
 3. Use of overhead projector
 - 4.Power point presentation using LCD projector
- **Laboratory Experiments:**
 - 1.Demonstration of Experiments
 2. Providing laboratory manuals and sheets of observations and tables, formulae
 3. Analysis of graphs and results
- **Evaluation Method:**
 - 1.Assignments such as tests and tutorials
 2. Seminars
 3. University Examinations (Theory and Practicals)
- **Motivation to the students:** Science quiz competition at state,college level, AVISHKAR at college and university level
- **Preparation of resource Materials including books, Reading materials Laboratory manuals**
 - : 1. Preparation of short notes, laboratory manuals and sheets for experiments

➤ **Remedial Teaching /Student Counselling (Academic):-**

Counselling of F.Y.B.Sc. students is made to raise an academic interest in Physics so that students should find good interest in Physics at higher classes Accordingly the applied knowledge of Physics is provided. Different methods are used to sustain an academic interest in Physics so that large number of students should be attracted towards Physics.S.Y.B.Sc students are guided accordingly by which they offer

Physics as principal subject at T.Y.B.Sc. level. Applied knowledge with technical background is given to students of higher classes.

➤ Other

Interdisciplinary work- Teaching of environmental science topics and guidance of General Knowledge topics for F.Y & S.Y B.A,B.Com. B.Sc. classes.

Guest lecture on ‘Electronic Communication System’ at Arts, Science and Commerce College Bhadagaon Dist, Jalgaon(Date 24/09/2016)

➤ Extension Work/Community Services:-

1. Life member of Dnyan Prabodhini Mandal, Pachora.
2. Sponsored a prize to topper students in T.Y.B.Sc. Physics
3. Promoted the students for Competitive Examinations.
4. Worked as an internal, external examiner for Theory as well as practical examination by North Maharashtra University ,Jalgaon
5. Worked as L.I.C Member of North Maharashtra University ,Jalgaon
6. Worked as Chairman of Science Association at college level (2013-14 to 2015-16)
7. Working as member of S.S.M.M Mahavidyalayeen Karmchari Patpedhi, Pachora.
8. Actively participated in college activities like **Science Association**, Annual social gathering ,Tree plantation program, students welfare, relief activities for natural calamities. Computer illiteracy programme, Environmental activities.
9. Worked as Chairman of Environmental studies at college level (2011-12to 2013-14)
- 11.Worked as Member of Remedial Coaching studies at college level (2011-12to2015-16)
12. Worked as chairman, Board of Paper setters and examiners at T.Y.B.Sc. Physics theory and practical NMU examination
13. Life Member of Indian Science Congress Association
14. Life Member of Material Research Society.

2 1.2. Prof S.T.Suryawanshi

Sr.No	Name	Agency	Place	Date
1	National seminar on “Advances in Nano-structured Materials And Their Applications”	U.G.C	C.H.S. Arts, S.G.P.Commerce and B.B.J.P Science College Taloda. Dist -Nandurbar	22-1-2013& 23-1-2013

2	Orientation Course	U.G.C	Dr.Babasaheb Ambedkar University Aurangabad	2/1/2014 to 30/01/2014
3	Refresher Course	U.G.C	HRDC Panjab University Chandigarh	20/05.2015 to 09/06/2015
4	National conference on “Recent Development in Nanomaterials And Their Applications”	U.G.C	GTP College Nandurbar	05/02/2016 to 06-02-2016
5	Workshop on syllabi revision.	U.G.C	P.S.G.V.P.Mandal’s ASC College, Shahada. Dist-Nandurbar	25-02-2017
6	Refresher Course	U.G.C	Sant Gadge Baba University Amravati	10/07/2018 to 29/07/2018

Publications (Book)	“Structural, Electrical And Optical properties of copper selenide thin films”-	Published by Lulu Book Publication USA
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➤ **Innovations/Contribution in teaching:**

Designing of curriculum—Design of Syllabus of T.Y.B.Sc, for N.M.U at Poojya Sane Guruji Vidya Prasarak Mandal’s Arts ,Science And Commerce College Shahada Dist -Nandurbar

➤ **Extension work and community services:**

1. Worked as Student Welfare Officer during Academic year 2012,13 -2014,15.
2. Worked as a team manager of a team Participated in Yuva Rang 2014 at GTP College Nandurbar.
3. Working as a member of Examination Committee at college level from academic Year 2016-17
- 4 Worked as an Internal & External Examiner in practical as well as theory examinations conducted by North Maharashtra University Jalgaon.

21.3. Dr. R.B. Pathak

Sr. No.	Name of the Seminar/Conference/Symposia/Workshop - Invited/Organized/Attended	Name of the Sponsoring Agency	Place and Date
1	Organized a state level one day conference on “Examination Reforms in Higher Education for Universities and Colleges”	U.G.C	S.S.M.M.Arts ,Science and Commerce College, Pachora 12-03-2012
2	Organized a university level one day workshop on “Examination Reforms in Higher Education for UG and PG students”	U.G.C	S.S.M.M.Arts ,Science and Commerce College, Pachora
3	Attended a national seminar on “Advances in Nano-Structured Materials and Their Applications”	U.G.C	CHC.Arts,SGP.Commerce and BBJP Science College, Taloda 22-01-2013 & 23-01-2013
4	Attended a “One Day Workshop on Syllabus Framing of S.Y.B.Sc,Physics”	North Maharashtra University,Jalgaon	GDM.Arts,SKRN.Commerce and MD Science College, Jamner 10-02-2013
5	Attended a “Workshop on Syllabus Re-structuring in Physics for T.Y.B.Sc.”	North Maharashtra University,Jalgaon	R.C.Patel Arts,Commerce and Science College,Shirpur 23-02-2014 & 24-02-2014
6	Invited as a Judge on a panel to examine participants of “Thirteenth University Level Students Seminar”	GDM.Arts,SKRN.Commerce and MD Science College, Jamner	GDM.Arts,SKRN.Commerce and MD Science College, Jamner 10-01-2015
7	Attended a ”One Day Workshop on F,Y.B.Sc Physics Syllabus Revision”	North Maharashtra University,Jalgaon	L.K.Dr.P.R.Ghogarey Science College ,Dhule 17-01-2015
8	Attended “Second Interdisciplinary International Conference on “Role of Higher Education in Creation of	Sunit's Institute of English Language, Literature & Research,Jalgaon(M.S.)	Sunit's Institute of English Language,Literature & Research,Jalgaon 20-02-2015 & 21-02-

	Knowledge Society”		2015
9	Attended a “One Day Workshop on Revision of syllabi for S.Y.B.Sc. Physics”	North Maharashtra University, Jalgaon	Uttamrao Patil Arts and Science College, Dahiwal Dist.Dhule 14-01-2016
10	Attended a One Day Workshop on “On Screen Evaluation of Answer Books”	North Maharashtra University, Jalgaon	S.S.M.M.Arts, Science and Commerce College Pachora 26-09-2016
11	Attended a National Conference on “Electronic Materials Thin Films & Its Applications”	U.G.C.(WRO),Pune	JDMVPS s Arts, Commerce and Science College, Jalgaon 09-12-2016 &10-12-2016
12	Attended a “One Day Workshop on Syllabus Framing in Physics for T.Y.B.Sc.”	North Maharashtra University, Jalgaon	S.I.Patil Arts,G.B .Patel Science & S.T.K.V.S. Commerce College, Shahada 25-02-2017

➤ **Conference /Symposium/Workshop Organized:-**

- 1) Organized a state level one day conference on “Examination Reforms in Higher Education for Universities and Colleges” on 12-03-2012
- 2) Organized a university level one day workshop on “Examination Reforms in Higher Education for UG and PG students”

Students get good opportunities in almost all fields after completion of graduation in physics. If an opportunities of campus interview and tie up with other higher institutes will benefit more to build the corner and future of the students.

staff needs to be increased ,otherwise the strength of students may suffer. Job oriented courses and tie up with other companies- institutes need to attend regularly.

➤ **Innovations/ Contributions in Teaching:**

Design of Curriculum: Actively participated in syllabus framing of F.Y.,S.Y,and T.Y. B.Sc. Physics subject of North Maharashtra University,Jalgaon
B.O.S in Physics of North Maharashtra University arranges workshops for restructuring of syllabi.

- Teaching Methods:
1. Lecture method
 2. Use of visual charts and models
 3. Use of overhead projector
 4. Power point presentation using LCD projector
- Laboratory Experiments:
1. Demonstration of Experiments
 2. Providing laboratory manuals and sheets of observations and tables, formulae
 3. Analysis of graphs and results
- Evaluation Method:
1. Assignments such as tests and tutorials
 2. Seminars
 3. University Examinations (Theory and Practicals)
- Preparation of resource materials including books, reading materials
- Laboratory manuals:-
1. Preparation of short notes, laboratory manuals and sheets for experiments
 2. Active involvement in writing books of Physics at F.Y.B.Sc. & S.Y.B.Sc. level of each semester as per the syllabus designed by North Maharashtra University, Jalgaon.

➤ **Teaching /Student Counselling (Academic):**

Counselling of F.Y.B.Sc. students is done to increase an interest in Physics. Different methods are used to sustain an academic interest in Physics so that large number of students should be attracted towards Physics. S.Y.B.Sc students are guided accordingly by which they offer Physics as principal subject at T.Y.B.Sc. level. Applied knowledge with technical background is given to students of higher classes.

➤ **Other:-**

Publication of the Project: Interdisciplinary work- Teaching of environmental science topics and guidance of General Knowledge topics for F.Y & S.Y B.A,B.Com. B.Sc. classes. Actively involved in Remedial Teaching Program of college.

➤ **Extension Work/Community Services:**

1. Life Member of Indian Association of Physics Teachers
2. Life Member of Indian Science Congress Association
3. Life Member of Indian Physics Association

4. Worked as internal/external examiner for theory as well as practical examinations in Physics of North Maharashtra University Jalgaon.
5. Worked as Local Inquiry committee member of North Maharashtra University Jalgaon
6. Worked as Chairman, Environmental Studies Section at college level from academic years 2013-2014 and 2015-2016
6. Worked as Chairman, Environmental Studies Section at college level from academic years 2013-2014 and 2015-2016
7. Worked as a Chairman, Science Association at college level during academic year 2016-2017
8. Worked as an Examiner for "College Level Poster Presentation competition held on 26-01-2017
9. Delivered lecture on AIDS awareness in N.S.S camp (winter)
College
10. Director, Ex-students Association who run the residential school for Dumb and Deaf boys at Pimpalgaon (Hare) Tal- Pachora
11. Worked as subject expert in interview panel at different colleges.
12. Inaugurated Science Association and delivered a talk on "Progress of Science" at Jamner
13. Worked as a Judge on a panel for University level students seminar at Jamner College.
14. Worked as coordinator of API Committee under IQAC at college level
15. Worked as a referee of three students (2 in Sept.2015 and 1 in Sept.2016) who applied for IUCAA-NCRA admission test to select for INAT. This test was conducted online for doctoral research program of IUCAA-TIFR, Pune.
16. Worked as a coauthor of 23 books of F.Y. and S.Y.B.Sc Physics of two publications during 2012 to 2016
17. Held the positions as member of IQAC at college level
18. Worked as a Teachers' Representative Member for LMC of P.T.C.Ed.Society, Pachora.

22. Participation in Institutional Social Responsibility (ISR) and Extension activities Nil

23. SWOT analysis of the department and Future plans:

Students are motivated to offer Physics subjects at special level by good laboratories and academically strong faculty members. Faculty and laboratory staff work whole heartedly throughout the day in the department. Faculty is well equipped and laboratory staff is excellent and cooperative in their work. All laboratories are well equipped. The outcome shows good results of students.

Still department wants to improve further. The department is short of teaching and laboratory staff, by which due to overburden of work load, the staff gets exhausted. There is need of modernization of laboratories with increasing number so that a separate research laboratory can be developed.

24. *Our Prides of the Departments*

➤ ACADEMIC YEAR--- 2012-13

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Jadhav Tejaswini Karansing	Pachora	Asstt. Prof. CHB. Asmita Foundation Pachora	9561917742
2	Thakare Dipeeka Kailas	Pachora	Asstt. Prof. CHB. SSMM College, Pachora	9028124229
3	Chaudhahri Kirti Vishwanath	Pachora	Talathi Tahsil Pachora Region	8087566390
4	Teli Vishal Ishwar	Mumbai	Asstt. Teacher Polytechnique Wasim Mumbai	9503547847

➤ ACADEMIC YEAR--- 2013-14

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Bhosale Priyadarshani Eknath	Pachora	Clerk Bank of Maharashtra Pachora	
2	Patil Tushar Namdev	Wakordji	Central Railway Mumbai Region	

➤ ACADEMIC YEAR--- 2014-15

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Desale Shamal Bhausaheb	Bambrud	M.Sc. Passed	
2	Ghodke Ashwariya Gopal	Pachora	M.Sc. Passed	
3	Gosavi Sachin Hirageer	Galan	Police Department	

4	Malpure Neha Nilesh	Bhadgaon	Asstt. Professor Art, Com.Sci. College Bhadgaon	
5	Patil Sonali Digambar	Pachora	M.Sc. Passed	
6	Patil Swati Suresh	Shindkheda	M.Sc. Pased	

➤ **ACADEMIC YEAR--- 2015-16**

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Joshi Deol Hari	Bambarud	M.Sc.	8275168643
2	Patil Archana Ramesh	Pimpalgaon	M.Sc.	9545606810
3	Patil Mayur Arun	Sindad	M.Sc.	9657626769
4	Patil Rajshwari Arun	Bhadgaon	M.Sc.	9156033894
5	Patil Shubhangi Prakash			8698554110
6	Patil Swati Bhagwan	Pachora	M.Sc.	9766784534

➤ **ACADEMIC YEAR--- 2016-17**

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Bhavsar Swati Shashikant	Pachora	M.Sc.	9272872992
2	Borase Aishwarya Pradip	Pachora	M.Sc.	9834690410
3	Gaykawad Amit Sharad	Pachora	M.Sc.	
4	Patil Apurva Satyawar	Pachora	M.Sc.	
5	Patil Akanksha Tarachand	Kasoda Tal-Erandol	M.Sc.	
6	Ramse Kavita Balu	Pachora	M.Sc.	
7	Wagh Aswini Deepak	Pachora	M.Sc.	9158796018

➤ **ACADEMIC YEAR--- 2017-18**

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Akash Mohan Bhoi	Bhadgaon	B.Sc. Appeard	9922239024
2	Desale Mukesh Nagraj	Bhadgaon	B.Sc. Appeard	9730858632
3	Deshmukh Zeba Harun	Pachora	B.Sc. Appeard	8484880050
4	Gujar Neha Anil	Pachora	B.Sc. Appeard	9657373472
5	Joshi Sampada Shekhar	Pachora	B.Sc. Appeard	8888528745

6	Kshirsagar Jagdish Vikram	Pimpalgaon	B.Sc. Appeard	7387609872
7	Patil Priyanka Samadhan	Bambarud Kh.	B.Sc. Appeard	8329609339
8	Patil Priyanka Sanjay	Bambarud	B.Sc. Appeard	9623895754
9	Patil Sonali Pravin	Jargaon	B.Sc. Appeard	9420109499
10	Rajput Shamal Arun	Bambarud Kh	B.Sc. Appeard	9145133754
11	Raul Radha Sardarsing	Nagardeola	B.Sc. Appeard	9996381871
12	Shaikh Farana Munir	Pachora	B.Sc. Appeard	9960897743
13	Naik Dhanshri Pandurang	Pachora	B.Sc. Appeard	7558259555
14	Patil Dipika Vikram	Bhadgaon	B.Sc. Appeard	9158730643
15	Patil Dipshri Narendra	Bhadgaon	B.Sc. Appeard	9158908356
16	Patil Harshada Arun	Shindad	B.Sc. Appeard	9503547812
17	Patil Jayshri Dadabhau	Pachora	B.Sc. Appeard	8805127595
18	Patil Monali Pravin	Jargaon	B.Sc. Appeard	9420109499
19	Patil Priyanka Arun	Pachora	B.Sc. Appeard	7219557522

25. Name of the Students for Online Feed Back

Sr. No.	Academic Year	Class	Name	Contact Number
01	2017-18	S.Y.B.Sc.	Badgujar Pooja Rajendra	9028681240
02	2017-18	S.Y.B.Sc.	Garud Vrushali Vilasrao	9028120497
03	2017-18	S.Y.B.Sc.	Nivatkar Varsha Satish	7798769071
04	2017-18	S.Y.B.Sc.	Shelar Poonam Ravindra	7775990495
05	2017-18	S.Y.B.Sc.	Sonar Nikhil Devidas	9403385391
06	2017-18	S.Y.B.Sc.	Patil Abhijit Sunil	8177943957
07	2017-18	S.Y.B.Sc.	Ghodake Vaishnavi Vijay	7875980787
08	2017-18	F.Y.B.Sc.	Deore Gaurav Kailas	
09	2017-18	F.Y.B.Sc.	Ghodake Gauri Goplal	
10	2017-18	F.Y.B.Sc.	Gosavi Krutika Ganeshgir	
11	2017-18	F.Y.B.Sc.	Patil Prajakta Prakash	
12	2017-18	F.Y.B.Sc.	Patil Prashant Bhagwat	
13	2017-18	F.Y.B.Sc.	Patil Pallavi Sanjay	

Index

1. Name of the Department
2. Year of Establishment
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
4. Names of Interdisciplinary courses and the departments/units involved :
5. Annual/ semester/choice based credit system (programme wise):-
6. Number of Teaching posts Sanctioned
7. Faculty profile with name, qualification, designation, specialization
8. List of senior visiting faculty
9. Total Workload
10. Student -Teacher Ratio (Programme wise):-- * Strengths of Students :
11. * Student-Teacher Ratio:
12. Result Anyalisys:
13. Number of academic support staff (technical) and administrative staff; sanctioned and filled:
14. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.
15. Publications:
16. Student progression
17. Details of Infrastructural facilities
18. Number of students receiving financial assistance from college, niversity, government or other agencies:
19. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:
20. Teaching methods adopted to improve student learning:
21. Faculty who have attended National and International seminar, workshop, conferences:
22. Participation in Institutional Social Responsibility (ISR) and Extension activities.
23. SWOT analysis of the department and Future plans:
24. Our Prides of the Departments
25. Name of the Students for Online Feed Back

Our Prides of the Departments

➤ ACADEMIC YEAR--- 2012-13

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
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2	Thakare Diptee Kailas	Pachora	Asstt. Prof. CHB. SSMM College, Pachora	9028124229
3	Patil Arita Tejavsing			9764558177
4	Jagtap Rupali			-
5	Sanghavi Dimple			8412012020
6	Chaudhahri Kirti Vishwanath	Pachora	Talathi Tahsil Pachora Region	8087566390
7	Bhosale Divya Ravidra			8698257691
9	Patil Pratiksha			8421376720
10	Teli Vishal Ishwar	Mumbai	Asstt. Teacher Polytechnique Wasim Mumbai	9503547847

➤ ACADEMIC YEAR--- 2013-14

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1	Bhosale Priyadarshani Eknath	Pachora	Clerk Bank of Maharashtra Pachora	
2	Kasar Rupali Gajanan	Pimpalgaon		
3	Metkar Nikita Samadhan	Shindad		
4	More Rahul Sitaram	Pungaon	Asstt. Teacher at Jr. College, Jamner	
5	Nemade Durgeshnandani Prabhakar	Pachora		
6	Patil Nikita Bhagawan	Girad		
7	Patil Tushar Namdev	Wakordji	Central Railway Mumbai Region	
8	Purnani Pooja Rajkumar	Sindhi colony, Pachora		
9	Vyavhare Kishore Vijay	Shindad		
10	Rohida Pooja Kalu	Pachora		
11	Ubhale Vaishali Sanjay	Bhoje		
12	Vadawani Bharka Thakurdas	Pachora		

➤ ACADEMIC YEAR--- 2014-15

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2	Ghodke Ashwariya Gopal	Pachora		
3	Gosavi Sachin Hirageer	Galan		
4	Malpure Neha Nilesh	Bhadgaon		
5	Patil Shital Subhash	Bhadgaon		
6	Patil Sneha Babulal	Pachora		
7	Patil Sonali Digambar	Pachora		
8	Patil Swati Suresh	Shindkheda		

➤ **ACADEMIC YEAR--- 2015-16**

Sr No.	Name	Place Of Residence	Position/ Designation	Mob No.
1	Joshi Deol Hari			8275168643
2	Khan Shahina Akif			7267999060
3	Mali Harshali Dnyaneshwar			9403127639
4	Mali Kishor Ramesh			9503034249
5	Patil Archana Ramesh			9545606810
6	Patil Mayur Arun			9657626769
7	Patil Nikhil Sandiprao			8793933705
8	Patil Pankaj Ramesh			9403304682
9	Patil Rajshwari Arun			9156033894
10	Patil Shubhangi Prakash			8698554110
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4	Patil Apurva Satyawar	Pachora		
5	Patil Akanksha Tarachand	Kasoda Tal-Erandol		
6	Patil Harshali Vinayak	Pachora		
7	Patil Nitin Narayan	Pachora		
8	Nikam Komal Dattatray	Pachora		
9	Jadhav Suvarna Yuvraj	Pachora		
10	Patil Jayashri Komalsing	Pachora		
11	Patil Manisha Vithhal	Pachora		
12	Patil Pragati Rajendra	Pachora		
13	Patil Priyanka Premsing	Pachora		
14	Patil Savita Dagadu	Pachora		
15	Prajapat Rinkal Shyamkumar	Pachora		
16	Ramse Kavita Balu	Pachora		
17	Sonawane Sharada Sahebrao	Pachora		
18	Wagh Aswini Deepak	Pachora		9158796018
19	Yeole Bhagyashri Rajendra	Pachora		
20	Yeole Deepali Panduyang	Bhadgaon		

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5	Joshi Sampada Shekhar	Pachora			8888528745
6	Kshirsagar Jagdish Vikram	Pimpalgaon			7387609872
7	Patil Priyanka Samadhan	Bambarud Kh.			8329609339
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10	Rajput Shamal Arun	Bambarud Kh			9145133754
11	Raul Radha Sardarsing	Nagardeola			9996381871
12	Shaikh Farana Munir	Pachora			9960897743

13	Naik Dhanshri Pandurang	Pachora		7558259555
14	Patil Dipika Vikram	Bhadgaon		9158730643
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20				