

**VIDYA VIKAS ART'S, COMMERCE & SCIENCE COLLEGE,
SAMUDRAPUR , Dist- Wardha 442305 (MS)**

**DEPARTMENT OF PHYSICS
DEPARTMENTAL PROFILE – SESSION 2023 -2024**

1. Faculty profile :

Sr. No	NAME	DESIGNATION	QALIFICATION	EXPERIENCE (Years)
1	Dr. Kishor G. Rewatkar	Principal, Professor	M Sc, Ph. D.	35
2	Mr Sadanand R Sarve	Assist Professor	M Sc, SET	11
3	Mr Nitesh D Shambharkar	Assist Professor	M Sc, Ph. D, NET	10
4	Ku. Pranali G. Warghane	CHB Let.	M Sc	1

2. Students Profile :

Sr.No.	Class	No.of student admitted		Appeared for exam.		Pass out students		Percentage of passing	
		Sem I	Sem II	Sem I	Sem II	Sem I	Sem II	Sem I	Sem II
1	B.Sc.I	71	71	71		--	--		--
		Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV
2	B.Sc II	49	47	47	--	46	--	97.87	--
		Sem V	Sem VI	Sem V	Sem VI	Sem V	Sem VI	Sem V	Sem VI
3	B.Sc.III	69	69	33	--	32	--	96.96	--
		Sem I	Sem II	Sem I	Sem II	Sem I	Sem II	Sem I	Sem II
4	M Sc I	01	01	01	01	00	--	00	
		Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV
5	M Sc II	12	12	12	12	02	--	16.66	--

3. Changes made in the courses or programmed during the past two years and the contribution of the faculty to those changes.: Yes

- Dr. K G Reawatkar is Member of board of studies Physics, Gondwana University, Gadchiroli.

4. The learning resources of the department Library :

The department of Physics have departmental library with more than 100 books on subject physics and well utilized by students of B. Sc and M Sc.

5. Number of major and minor Instruments in the Department:

Major instruments (11) with cost of 570542/- Rs. and minor instruments (100) with cost of 626969/- Rs

6. Guest Lectures/ Activities:

- Bridge Course for B Sc Semester-I from 21 July – 31 July 2023.
- Organized Induction program for B Sc Semester-I students on 1st August 2023.
- Guest lecture of Dr. Shilpa W Samdurkar on ‘Innovation in Science & Technology’ on 30th September 2023.
- Inauguration of physics society on 25th September 2023.
- Celebration of ‘International Day for the preservation of the Ozone layer’ on 25th September 2023.
- Organized Science Quiz and science day celebration 24th Feb. to 28th Feb. 2024.
- Industrial Visit Microplast Polymer Pvt. Ltd. Jam Dist-Wardha on 23rd March 2024.

8. Participation of students in VUPTA Student Seminar on 24, 25 February 2024 at Government Science College, Gadchiroli. The student of B Sc Sem-IV Neha Lonare wins 2nd Prize, and Payal Deodhe M Sc Sem-IV wins 2nd Prize.

9. Modern teaching methods and use of ICT in teaching – learning

a) Teaching methods: ICT Technologies used are Power Point Presentations, YouTube Video, Google forms and quizzes, etc.

b) Evaluation methods: Evaluation of students are done on the basis of performance test and assignments.

c) Use of ICT: whatsapp groups, OBS software, YouTube, Google Forms, Projector and PPT, etc.

a) YouTube Video Channel:

1. *Mr Sadanand R Sarve, Assistant Professor, Physics*

- More than 100 video lectures on the YouTube.
- Use PPT and Projector in Teaching

- Channel Link: https://www.youtube.com/channel/UCxJAormxQbjofrxfIn_eEPw

2. Dr Nitesh D. Shambharkar , Assistant Professor, Physics.

- Use PPT and Projector in Teaching

A) Teaching work load

Sr. No.	Name of the lecturer	Subject	Class	Periods Allotted		Total Work Load
				L	P/T	
1	Dr. K.G. Rewatkar	Physics	B Sc I B Sc I B Sc III	0 02 02	01	05
2	Shri S. R. Sarve	Physics	B.Sc.I B. Sc II B. Sc. III	03 02 02	06 03+01 03+01	21
3	Shri N.D.Shambharkar	Physics	B.Sc.I B. Sc II B. Sc. III	03 02 02	06 + 01 03 + 01 03+01	22

1. Dr. K. G. Rewatkar (Assistant professor):

- Chairman, International conference on Role of Science, Education and Technology in making India self-reliant and Globally competent, Jabalpur, MP, 3rd -4 th March 2023.
- President of Vidarbha University Physics Teachers Association (VUPTA).
- Faculty member of Board of Studies in Physics, Gondwana University (2018-onwards).

Research Paper Publication: (2023-24)

- Influence of of dopant on characteristics of lithium sulfate monohydrate single crystal KS Salotkar, SK Patle, VD Maske, AZ Khan, SU Bhonsule, KG Rewatkar, ... AIP Conference Proceedings 2974 (1)
- Synthesis and magnetic characterization of nickel and zinc substituted calcium W-type hexagonal ferrite S Tolani, K Rewatkar , AIP Conference Proceedings 2974 (1)
- Accelerated Hydrogen Gas Sensing of SnO₂ Embedded Polyaniline Nanofibers with Doping Pd or Ag Near Room Temperature AMM MORE, SB Kondawar, SP Dongre, PK Nagpure, VM Nanoti, Indian Journal of Engineering and Materials Sciences (IJEMS) 30 (6), 823-823
- Structural, magnetic, and dielectric studies of bismuth-doped nickel nanoferrites synthesized via sol-gel autocombustion method DD Mathankar, NS Meshram, KG Rewatkar, NM Gahane Journal of Materials Science: Materials in Electronics 34 (27), 1845

5. Review Paper on Ni-Cu ferrite PB Wasnik, SD Rokade, KG Rewatkar Proceedings of the National Academy of Sciences, India Section A: Physical ...
6. Exploration of Ce^{+3} substitution on electron density distribution, optical, and magnetic properties of Ni-Co-Zn spinel nano-ferrites AS Kakde, GC Wakde, MA Wani, VM Gaikwad, NS Meshram, AB Lad, Journal of Sol-Gel Science and Technology 107 (2), 401-416

Patent Publication: 02

2. Mr. S. R. Sarve (Assistant professor):

a) National conference/workshop/seminar attended :

Sr. No.	Conference/ workshop/ seminar	Title	Date	Venue
1	One week International Workshop	Nano-Engineering Science and Technology	16-22 Oct 2023	Vidya Vikas College, Samuudrapur
2	VUPTA Seminar	Interuniversity Student Seminar Competition	24-25 th February 2024	Government Science College, Gadchiroli.

b) Publications (Research Paper/Books etc):

Sr. No.	Title of paper/ book	No of Authors	Name of Journal ISSN ad ISBN no	Year	Impact Factor
1	'Luminescence study of Eu^{3+} Co—doped $Y_2SiO_5:Dy^{3+}$ for warm white light application.	05	Paper presented in International Conference	25 th -26 th April 2024	-
2	'The structural and magnetic investigation of Bi^{3+} doped Nickel-lanthanum Spinel Ferrite produced by Sol gel Auto Combustion.	04	Paper presentation on International Conference ICFTEST-2024.	23 rd February-2024	--
3	A Journey Through the History of Chemistry in India	02	Chapter in Book 'Panorama of the Indian Knowledge System'	ISBN No: 978-93-98478-49-1	

c) Refresher/ Orientation/Short term course/ Summer school/MOOC/FDP/Workshop :

Sr. No.	Programme	Duration	Organised By
1	NEP 2020 Orientation and sensitization Program (short term course)	04-03-2024 to 14-03-2024	UGC-MMTC Gujarat University Ahmedabad

ANY OTHER ACTIVITY :

1. Member of IQAC for session 2023-24.
2. Member of Academic Administrative Audit Preparation Committee.
3. Member of Academic Calendar Committee.
4. Member of Library committee.

3. Dr. Nitesh D. Shambharkar (Assistant professor):

a) National conference/workshop/seminar attended :

Sr. No.	Conference/workshop/seminar	Title	Date	Venue
1	One week International Workshop	Nano-Engineering Science and Technology	16-22 Oct 2023	Vidya Vikas College, Samuudrapur
2				
3				

c) Refresher/ Orientation/Short term course/ Summer school/MOOC/FDP/Workshop :

Sr. No.	Programme	Duration	Organised By
1	NEP 2020 Orientation and sensitization Program (short term course)	19-02-2024 to 29-02-2024	UGC-MMTC Gujarat University Ahmedabad

ANY OTHER ACTIVITY :

1. Organized One Week International Program on Nano-Engineering Science and Technology from 16- 22 Oct 2023
2. SPOC of NPTEL local Chapter
3. Course coordinator of Certificate course in Nanoscience and Nanotechnology under Lifelong learning and extension RTMNU, Nagpur
4. One Indian patent is publish on topic “METHOD OF FINDING A SOLUTION TO EINSTEIN FIELD EQUATIONS BY CONSIDERING A MODIFIED TAKABAYASI STRING”

Date: 29/04/2024

Place: Samudrapur

Mr Sadanand R. Sarve
HOD, Assistant Professor
Department of Physics

Mr Nitesh D Shabharkar
Assistant Professor
Department of Physics

Principal