



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

**DEPARTMENT OF PHYSICS
DEPARTMENTAL PROFILE – SESSION 2025 -2026**

1. Faculty profile :

Sr. No	NAME	DESIGNATION	QALIFICATION	EXPERIENCE (Years)
1	Dr. Kishor G. Rewatkar	Principal, Professor	M Sc, Ph. D.	37
2	Mr Sadanand R Sarve	Assist Professor	M Sc, SET	14
3	Mr Nitesh D Shambharkar	Assist Professor	M Sc, Ph. D, NET	13

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 Physics (NEP)	18	17	17		15	--	88.23	--
		Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV
2	B.Sc II	17	17	17	--	14	--	82.35	--
		Sem V	Sem VI	Sem V	Sem VI	Sem V	Sem VI	Sem V	Sem VI
3	B.Sc.III	55	55	55	--	55	--	100	--
		Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV	Sem III	Sem IV
4	M Sc II	--	--	--	--	--	--	--	--

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

- The curriculum program of B Sc Semester III & IV is as per New Education Policy (NEP)-2020

4. The learning resources of the department Library :

The Physics Department's library holds over 50 books on physics, extensively used by B.Sc. and M.Sc. students. It includes up-to-date resources like those related to NEP-2020.

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

Major instruments (11) with cost of 7,40,883/- Rs. and minor instruments with cost of 6,71,434/- Rs.

6. Guest Lectures/ Activities:

- Instrument handling workshop on 02nd August 2025 in Physics Laboratory.
- Bridge Course for B Sc Semester-I Physics students from 14 July – 30 July 2025.
- Educational visit at Industrial Training Institute (ITI) Samudrapur, Jam on 19th August 2025.
- Organized Induction program for B Sc & M Sc Semester-I students on 20th August 2025.
- Inauguration of Physics society on 16th September 2025.
- Organised awareness program “Ozone layer Conservation Day” on 16th September 2025.
- Science Quiz competition on 05th March 2026 on the occasion of National Science Day.

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

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

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/UCxJAormxQbjofrxfln_eEPw

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

- Use PPT and Projector in Teaching

8) Teaching work load

Sr. No.	Name of the lecturer	Subject	Class	Periods Allotted		Total Work Load (Hrs.)
				L	P/T	
1	Dr. K.G. Rewatkar	Physics	B Sc I B Sc I B Sc III	02 02 02	-- -- --	06
2	Mr. S. R. Sarve	Physics	B.Sc.I B. Sc II B. Sc. III	03 02 02	06 06 02	21
3	Dr N.D. Shambharkar	Physics	B.Sc.I B. Sc II B. Sc. III	03 02 02	06 06 02	21

1. Dr. K. G. Rewatkar (Professor, Principal):

- Peer Team Member for NAAC assessment Committee.
- Founder General Secretary of Society for Technologically Advanced Materials, India (STAMI).
- Life member of Indian Association of Physics Teachers (IAPT), India
- Life member of Indian Science Congress, India
- Life member of Electron Microscopy of India.

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	Microwave Assisted Sol-Gel Synthesis and Characterization of Co Zr doped Zinc Spinel Ferrite: Structural, Magnetic and Electrical Properties	08	Inorganic Chemistry Communication Volume 180	October 2025	5.4
2	Effect of Sn ²⁺ and Zr ⁴⁺ substitution on structural, magnetic and magneto-dielectric features of calcium hexaferrite nanoparticles	06	Journal of Solid State Chemistry	Oct-2025	3.5
3	Unravelling the transformations: Comparative study of structural, magnetism, morphology, optical and microwave	04	Nano structured and Nano Objects, Volume 43, 2352-507X	Sept-2025	4.219--

	absorptions properties in NiFe_2O_4 and CdFe_2O_4 spinel nanoparticles				
4	Structural and microwave absorption properties of Ni-doped Cd-La nanoferrites synthesized via sol-gel auto combustion route	05	Ceramic International	Nov-2025	5.6
5	A Novel Band Spectrum Emission of Tb^{3+} Ion in $\text{Li}_2\text{MgP}_2\text{O}_7$ Phosphor for near-UV LEDs	05	Integrated Ferroelectrics	July-2025	0.7
6	Green Synthesis, Biological Evolution, and Molecular Docking Investigations of Thiazolidinyl Derivatives Involving Condensation Reaction of 2-Amino-4-Phenyl Thiazole over CDK2	06	Integrated Ferroelectrics	July-2025	0.7
7	Structural and Magnetic Investigation of Zr Doped Spinel Ferrite Prepared by Sol-Gel Auto Combustion Method	04	Integrated Ferroelectrics	July-2025	0.7
8	Study of Structural and Electric Properties of Ni Substituted Cd-Zn Ferrites by Sol-Gel Auto Combustion Method	04	Integrated Ferroelectrics	July-2025	0.7

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

a) National conference/workshop/seminar attended :

Sr. No.	Conference/workshop/seminar	Title	Date	Venue
1	National Conference	Application of Nanophotonics and Advanced Materials for Instrumentaion	26-27 September 2025	Dept. of Physics, Govt. Dungar College, Bikaner
2	National Conference	Emerging Trends in Science For Sustainable Development	30 th January 2026	Online- NKS Model College, Karnja
3	Workshop	Discussion on Newly Implemented B Sc Physics Syllabus NEP-2020	9 th February 2026	SFS College Nagpur

4	One Day State Level Workshop on	"INTELLECTUAL PROPERTY RIGHTS IN RESEARCH AND INNOVATION: FROM IDEA TO IMPACT"	16 th February 2026	Vidya Vikas College Samudrapur
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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	Structural and microwave absorption properties of Ni-doped Cd-La nanoferrites synthesized via sol-gel auto combustion route	05	Ceramic International	Nov-2025	5.6
2	An Investigation of Different Preparation Routes for the Synthesis of Hexferrites: A Review	04	Akshara Multidisciplinary Research Journal	Dec-2025	--
2	MICROWAVE-ASSISTED SOL-GEL SYNTHESIS OF NICKEL FERRITE AND CADMIUM FERRITE NANOPARTICLES FOR ADVANCED APPLICATIONS	07	Indian Patent	Publication Date 13/03/2026	

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

Sr. No.	Programme	Duration	Organised By
1	Refresher Course in Physics	04/08/2025 to 16/08/2025	MMTC Center R T M Nagpur University Nagpur, Nagpur
2	NEP Orientation & Sensitization Program	16/08/2025 to 30/08/2025	MMTC Center R T M Nagpur University Nagpur, Nagpur

3	Workshop- Practical Apporch towards Research paper writing and Publication in Sci/Scopus Index Journals	13/10/2025 to 18/10/2025	Sri Guru Tegh Bahadur Khalsa College, Jabalpur & Condensed Matter Research Society, Bikaner, Rajasthan, India.
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ANY OTHER ACTIVITY :

1. Coordinator Critrion-III of AQAR .
2. Member of Academic Administrative Audit Preparation Committee.
3. Member of API Scrutiny Committee.
4. Member of Conference, Workshop organizing committee.
5. Member of RTMNU Special Task Committee-Paper Moderation.

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

a) National conference/workshop/seminar attended :

Sr. No.	Conference/workshop/seminar	Title	Date	Venue
1	Two Days Workshop	Important of Scientific Terminology in education in regional languages and Sustainable Development of the Country.	September , 10-11, 2025	Saibaba Arts & Science College, arseoni, Nagpur
2	International Conference	International Conference on Green Innovations in Chemistry, Physics,Mathematics & Computer Science (ICGICPMCs-2025)	29 & 30 Setember 2025	Online, VVC Samudrapur
3	INNERVATE 2026: A National Seminar	Recent Trends in Nanotechnology and Biodiversity Conservation	January 20-21, 2026	Bajaj College of Sciences, Wardha

b) Publications (Research Paper/Books/ Patent etc):

Sr. No.	Title of paper/book	No of Authors	Name of Journal ISSN ad ISBN no	Year	Impact Factor
1	Water Quality Assessment and Detection of Parasitic Organisms in Village Area	7	Proceedings of National Seminar on"Recent Trends in Nanotechnology and Biodiversity conservation"- Innervate 2026 ISBN No. 978-81-923254-0-8	2026	
2	Review on Recent Advance in Ferrite Materials application in Optoelectronics Devices and Green Energy	2	International Journal of Science, Engineering, Arts & Management 2025 ISSN No. 3049-4419	2025	
3	Methods of Obtaining a	8	Indian Patent Publish on 28/11/2025	2025	

	Solution to Einstein Field Equations using Quark and Strange Quark Matter				
4	A textbook of Physics B.Sc. Semester-IV	5	Sai Jyoti publication ISSN: 978-93-47088-18-6	2025	

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

Sr. No.	Programme	Duration	Organised By
1	NEP 2020 Orientation & Sensitization Programme	15/08/2025 to 30/08/2025	UGC-MMTTC RTMNU Nagpur

ANY OTHER ACTIVITY :

1. SPOC of NPTEL local Chapter
2. Course coordinator of Value Added Certificate course in Nanoscience and Nanotechnology.
3. Member of ECGC and Mentor mentee Scheme of VVC Samudrapur.
4. Coordinator of Research and Development Cell.
5. IR duty of NTEL Exam.

Date: 28/04/2026

Place: Samudrapur


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


Dr Nitesh D Shabharkar
Assistant Professor
Department of Physics


Principal
Vidya Vikas Arts Centre, B
Science College, Samudrapur