

**VEER NARMAD SOUTH GUJARAT
UNIVERSITY, SURAT**

DEPARTMENT OF PHYSICS



PLACEMENT BULLETIN

YEAR :2024-25

office.dph@vnsgu.ac.in

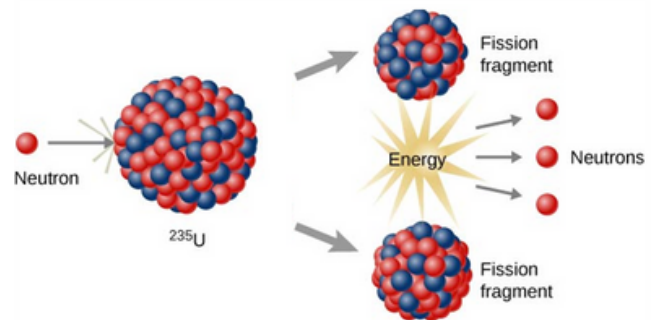
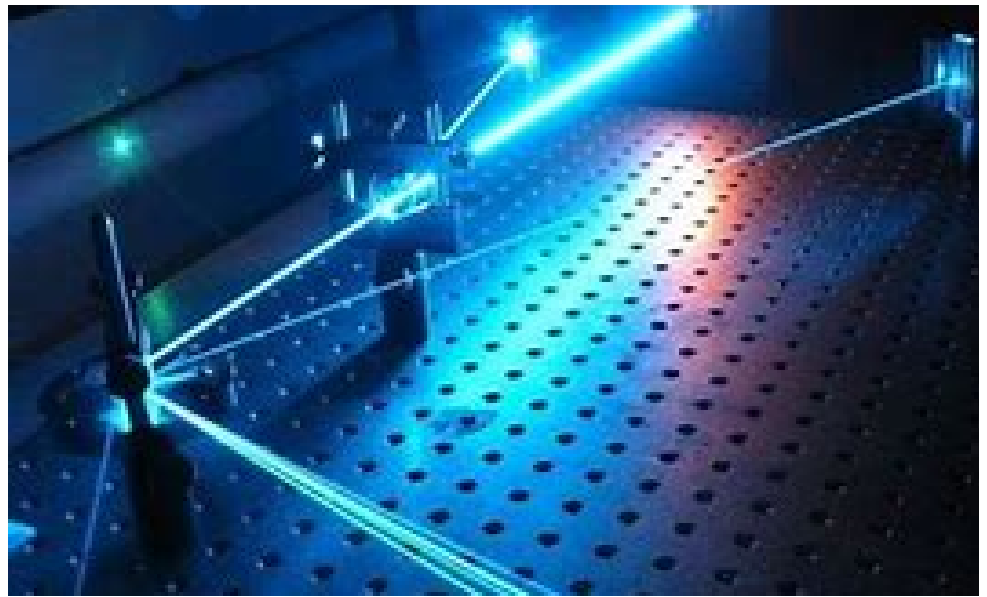
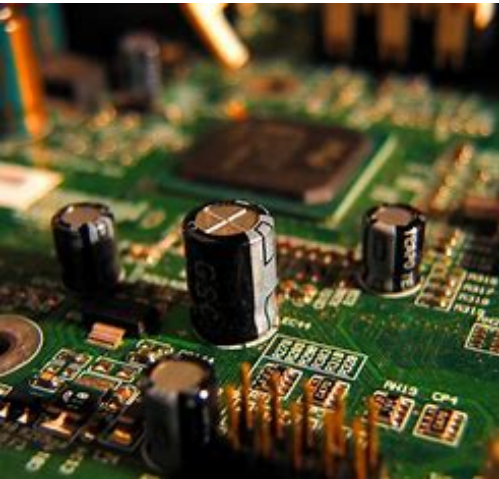
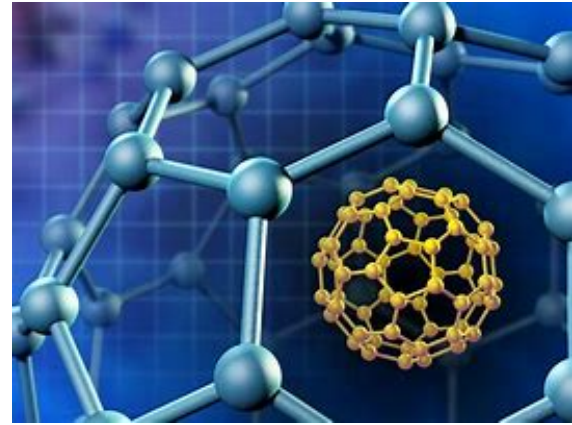
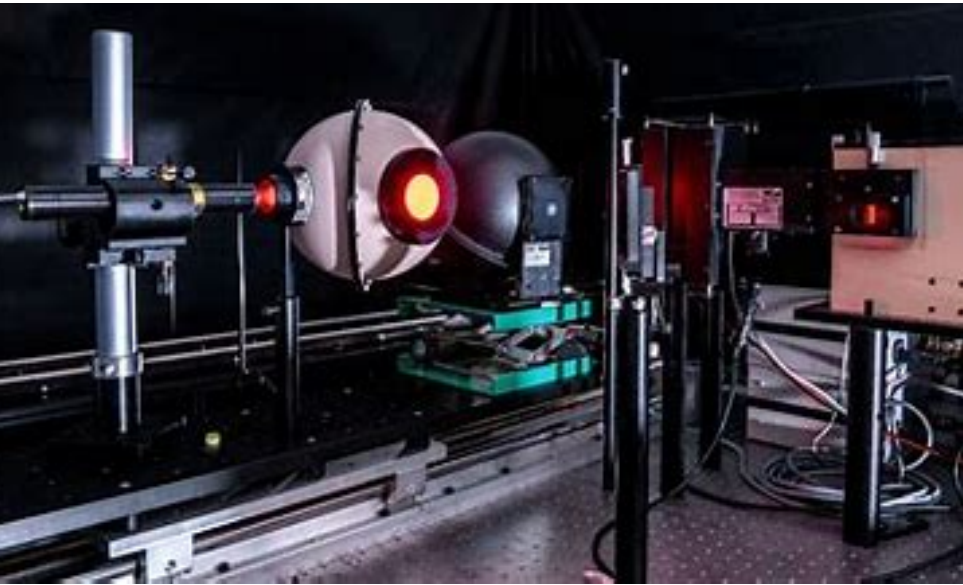


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Message from the Vice Chancellor



DR. K.N. CHAVDA

To fulfill the motto “Satyam Gyanam Anantam” of our University the Department of Physics was started in the year 1970 to meet the requirement of academic, industrial and other sectors. As one of the oldest departments of Gujarat, the department has been playing a significant role for teaching and research.

In Order to satisfy the needs of recent scenario, the Department is running two years full time PG programme M.Sc. (Physics). It gives me proud to mention that students are successfully placed in academic as well as other sectors.

The Department employs a blend of varied teaching methodologies comprising of lectures, case studies, seminars, field visits, projects, computer-aided instructions and interaction with practitioners in order to enhance the analytical abilities of the students. the curriculum is updated regularly, based on the needs of the time and inputs from academic and other sectors.

The placement bulletin is designed to provide brief information about the Department, the Profile of M.Sc. (Physics) Sem-IV students of the department.

I am sure that the academic institutes and other organizations would find the required talents in these students to propel the growth of their organizations.

Message from the Registrar



DR.R.C.GADHAVI

University education encompasses teaching, research, and social service activities at both the graduate and postgraduate levels. Veer Narmad South Gujarat University's campus offers a variety of resources to students, allowing them to pursue extracurricular activities outside of their normal course studies.

Our university has taken significant steps to effect qualitative and quantitative reforms in the sphere of higher education. The university boasts great infrastructure facilities, including hostels, a sports complex, a central library with internet access, a convention centre, an Amphitheatre and laboratories. The university placement cell assists students in finding careers in their fields of study. My blessings are always with all of the students that strive so hard to build a bright future.

VISION

- Provides quality education which makes one ready to face the challenges in the emerging “ Knowledge Era”.
- To build foundation for excellence by igniting and nurturing young minds.

MISSION

- The Department provides a full spectrum of courses coupled with mentoring and opportunities.
- The Department provides courses that enhance their skills and their appreciation for science.
- To encourage and guide graduate students and enable them to transform into an organized physicist with knowledge core competence, ethics, ability and right attitude.

About Department of Physics

- Since the establishment, department provide a creative and stimulation environment to students. Department offer the PG course in Theoretical Physics, Material Science and Electronics. Course curriculum is designed as per UGC guidelines. The key research areas of the department are Crystal Growth, Theoretical, Condensed Matter Physics, Digital communication, Thin Film and Electronic devices etc. Department inspires students to participate in summer and winter schools at TIFR, BARC, PRL ...etc. Department also regularly Organized the popular talks on Nobel Prize in Physics, Popularization of science and on Theoretical Physics. The department has provided skilled manpower in physics and related fields. Many Past students are presently serving in the state and national level institute, university and colleges indicate our credit in the scientific community and society.
- M.Sc. in Physics and Electronics Recently our syllabus is revised as per New Education Policy (NEP) guidelines and UGC. We are offering three Electives subject choices to us students. Electives are in area of Theoretical Physics, Material Science and Electronics. One skill -based course offered at all semesters for this course. M.Sc. Electronics and Ph.D. Physics Courses may revise in due time as per NEP and State Government norms.

Programmes Offered

M.Sc. (Physics)

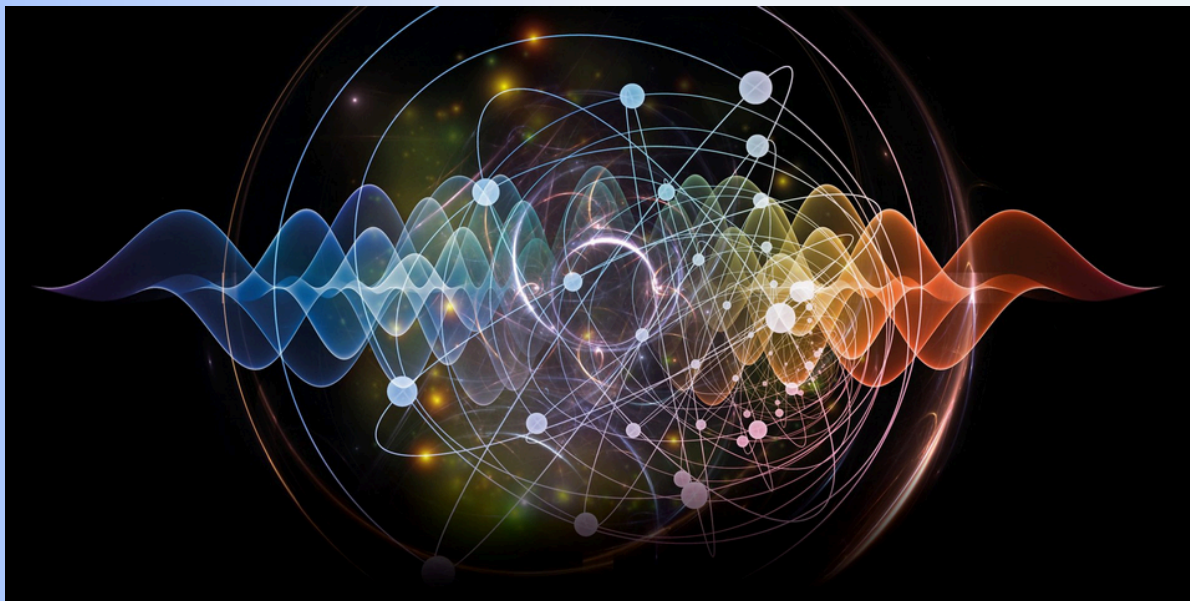
Ph.D. (Physics)

Objective of the Programmes

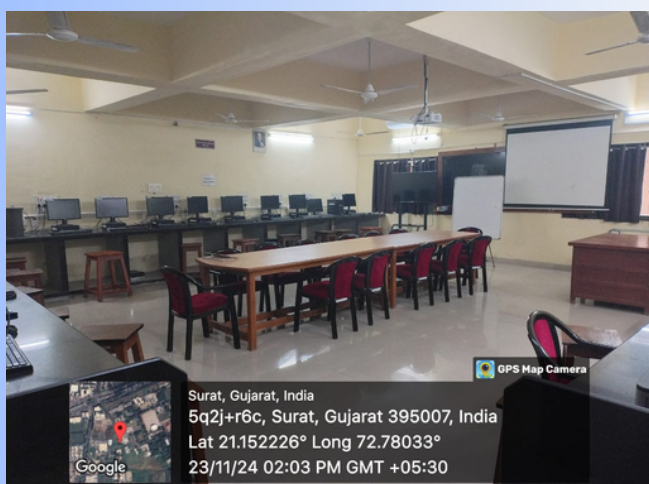
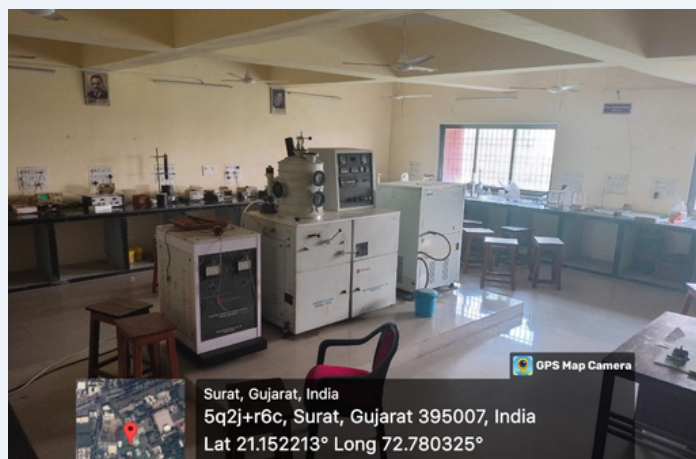
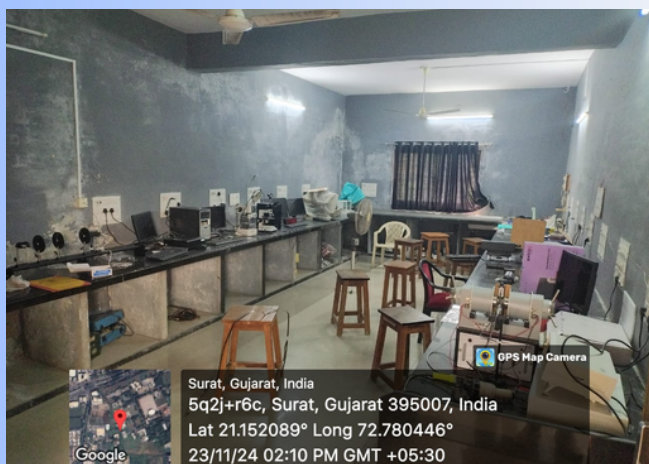
An advanced training in application of physics theory and practical designed to equip the students to meet successfully to the open challenges of real world situation. These programmes are focussed on field experience.

Career opportunities in Physics

- In Education /Teaching
- Appearing competitive exam related to physics
- join government institute like DRDO, PRL, ISRO, BARC.
- joining in research and project work.
- creating own business for manufacturing of Electronic Circuit and devices.



Infrastructure Facilities



- Department is housed in New Science Building.
- Research Laboratories Including Jena Pole Research Microscope with CCD, Vacuum Coating unit, High Temperature Furnace with Temperature Controller, Spectral Analyser, 100 MHz Digital storage oscilloscopes, Multi -Channel Gamma analyser, Alpha spectrometer, Radioactive Source, Micro Hardness tester, (CCD Camera and Software attached) Hydraulic pump, Diffusion pump, Glass Glowing unit and High -Speed computing facilities with Mathematica, Sigma plot, Winteracter for research facilities.
- All basic instruments for M.Sc. Courses are available like Lattice Dynamic kit, Hall Effect kit, Normal Mode, Transducers, Di Para, Ferro Magnetic Experiment Kit Diac-Triac Characteristics Susceptibility for measurements for Solids and Liquid, NDT Set, Software for Classical and Quantum Mechanics, and all required Electronics equipment for design built and test for regular practical and Project work plus dedicated computing facilities with LAN and Wi-Fi internet facilities for Theoretical Simulations.
- A small library including all study related books for helping teachers and students.
- 4 class room , 2 computer lab and 5 Laboratories are available for study.

Course Curriculum

M.Sc. Physics

SEMESTER -1

Course Type	Course Code	Course Name
Core	PH -411	Mathematical Method of Physics
	PH-412	Classical Mechanics
	PH -413	General Electronics
Elective (Any one Can be selected)	PH-414	Elective 1: Physics of Semiconductor Devices
	PH-414	Elective 2: Crystal Growth and Characterization
	PH-414	Elective 3: Numerical Methods
	PH-414	Elective 4: Basic Nuclear Properties and Radioactivity
Skill based course	PH -415	Practical
	PH-416	Measurement and Industrial Instrumentation

SEMESTER -2

Course Type	Course Code	Course Name
Core	PH -421	Quantum Mechanics 1
	PH-422	Solid State and Condensed Matter Physics
	PH -423	Classical Electrodynamics and Plasma Physics
Elective (Any one Can be selected)	PH-424	Elective 1: Electronic Communication
	PH-424	Elective 2: Thin Film Technology
	PH-424	Elective 3: Numerical Techniques and Fortran Programme
	PH-424	Elective 4: Nuclear and Particle Physics
Skill based course	PH -425	Practical
	PH-426	Electronic and Biomedical Instrumentation

SEMESTER - 3

Course Type	Course Code	Course Name
Core	PH -531	Quantum Mechanics 2
	PH-532	Basic Nuclear and Particle Physics
	PH-533	Laser Fundamentals and Applications
Elective (Any one Can be selected)	PH-534	Elective 1: Microcontrollers
	PH-534	Elective 2: Advanced Materials Science
	PH-534	Elective 3: Python programming and Computational Physics
	PH-534	Elective 4: Nuclear Reactions
Skill based course	PH -535	Practical
	PH-536	Microprocessors

SEMESTER - 4

Course Type	Course Code	Course Name
Core	PH-541	Advanced Quantum Mechanics
	PH-542	Atomic and Molecular Physics
	PH-543	Statistical Mechanics
Elective (Any one Can be selected)	PH-544	Elective 1: Micro and Nano Electronics
	PH-544	Elective 2: Properties of Material
	PH-544	Elective 3: Simulation Techniques of Computational Physics
	PH-544	Elective 4: Nuclear Reactions
Skill based course	PH-545	Practical
	PH-546	Remote Sensors

Profile of Faculties



Dr. I.B. PATEL
M.Sc. (Physics), P.G.D.M.L.T, Ph.D.
Professor & Head

Experience : 34 years
Publications : 45
PATENT Registered : 2
Area of Specialization: Experimental Solid State Physics
Crystal Growth Characterization and It's
Application.
Industrially Important Materials
Email ID: ibpatel@vnsgu.ac.in



Dr. P.B. THAKOR
M.Sc. (Physics), Ph.D.
Professor

Experience: 27 years
Publications: 111
Area of Specialization: Theoretical Condensed Matter Physics;
Application of Pseudopotential Theory
Email ID: pbthakor@vnsgu.ac.in



Dr. B.P. MODI
M.Sc.(Physics), M.Phil. , Ph.D.
Professor

Experience: 32 years
Publications: 58
Area of Specialization: Solid State Device;
Thin Films Fabrication and Characterization;
Crystal Growth and Characterization.
Email ID: bpmodi@vnsgu.ac.in



DR. J.M. DHIMMARR
M.Sc. (Physics), M.Phil., Ph.D.
Professor

Experience: 33 years
Publications: 37
Area of Specialization: Experimental Solid State Physics;
Electronics, Optoelectronics;
Lasers.
Email ID: jmdhimmarr@vnsgu.ac.in

Profile of Ad hoc Faculties:



Dr. Hardipsinh Mahida
M.Sc(Physics), M.Phil., Ph.D
Assistant Professor

Experience: 9 years
Publications: 11
Area of Specialization: Theoretical Condensed Matter
Physics

Email ID: hrmahida@vnsgu.ac.in



Mr. Pruthvisinh Parmar
M.Sc(Physics) ,GSET
Assistant Professor

Experience: 2 years
Publications: 22
Area of Specialization:
Theoretical Condensed
Matter Physics
Email ID: prparmar@vnsgu.ac.in



Mr. Rahul Mistry
M.Sc(Physics) , GSET
Assistant Professor

Experience: 1 year
Publications: 11
Area of Specialization:
Theoretical Particle Physics
Email ID: rmmistry@vnsgu.ac.in



Dr. Nipa Shastri
M.Sc. (Physics), M.Phil, Ph.D.
Assistant Professor

Experience: 10 years
Publications: 7
Area of Specialization:
Thin film and Technology;
Dielectrics, Gas sensors
Electronics
Email ID: nmshastri@vnsgu.ac.in



Dr. Ameer Kakadiya
M.Sc. (Physics), Ph.D.
Assistant Professor

Experience: 2 years
Publications: 14
Area of Specialization:
Particle Physics (Phenomenology)
High Energy Physics

Email ID: aakakadia@vnsgu.ac.in



Miss Herry Patel
M.Sc. (Physics), GSET
Assistant Professor

Experience: 1 year
Area of Specialization:
Theoretical Physics ;
Material Science
Email ID: hk_patel@vnsgu.ac.in



Miss Priya Chaudhari
M.Sc. (Physics), GSET
Assistant Professor

Experience: 5 years
Area of Specialization:
Theoretical Physics

Email ID: pdchaudhari@vnsgu.ac.in

Profile of Students



Dr. Rameshchandra Makavana

Qualification: M.Sc., Ph.D.
Designation: Associate Professor
joining Institute: Gujarat Arts & Science
College, Ellisbridge, Ahmedabad
Email ID: chinatn551997@gmail.com



Pawar Maneshbhai M

Qualification: M.Sc., B.Ed.
Designation: Assistant Teacher
joining Institute: Jivan Sadhana Vidyalaya
Ukai
Email ID: manishpawar1411@gmail.com



Chudasama Chintan M

Qualification: M.Sc., B.Ed.
Designation: Teacher and own start-up
joining Institute: Jeevjoy career App,
Jahangirpura, Surat
Email ID : chinatn551997@gmail.com



Patel Neel Amaratbhai

Qualification: M.Sc., B.Ed.
Designation: Teacher
joining Institute: R.N. Naik High Secondary
School, Gandevi, Navsari
Email ID: neelpatelsrv@gmail.com



Tiwari Kalpesh Shripat

Qualification: M.Sc., B.Ed.
Designation: Teacher
joining Institute: Eklayva Model Residential
School Waghodia, Vadodara
Email ID: kalpeshitiwari786@gmail.com



Birari Jigneshbhai B

Qualification: M.Sc., B.Ed.
Designation: PGT teacher
joining Institute: Sainik School, Bilwan, Vadi
Email ID: birarijigu2504@gmail.com



Lad Paras Dilipbhai

Qualification: M.Sc., GSET
Designation: Lecturer
joining Institute: B & B Institute of Tech.,
V.V.Nagar
Email ID: paraslad8111996@gmail.com



Patel Unnati Umeshbhai

Qualification: M.Sc., B.Ed.
Designation: Teacher
joining Institute: Vidhyadeep University, Surat
Email ID: unnati3999master@gmail.com



Sorathiya Abhishek Kishorbhai

Qualification: M.Sc.
Designation: Pharmaceutical Analyst
joining Institute: Invitron Advanced
Analytics Pvt.Ltd
Email ID: abhisheksorathiya16@gmail.com



Baraiya Zarana Rameshkumar

Qualification: M.Sc., M.Phil.
Designation: Reasearch Scholar
joining Institute: Vidhyadeep University, Surat
Email ID: unnati3999master@gmail.com



Patel Aparna Mukeshbhai

Qualification: M.Sc., NET(LS), GATE, GSAT
Designation: Research Scholar
joining Institute: SVNIT, SURAT
Email ID: aparna2467@gmail.com



Parmar Jayeshkumar Dilipbhai

Qualification: M.Sc., B.Ed.
Designation: PGT Teacher
joining Institute: Gov. H.S. School, Naroli
Email ID: jayeshparmar555@gmail.com

Profile of Reasearch Scholars



Parmar Pruthvisinh

Research Area: Theoretical condensed Matter Physics

Email ID: pr.pruthvisinh@gmail.com



Patel Herry

Research Area: Theoretical Physics; Material Science

Email ID: harrypatel7196@gmail.com



Mistry Rahul

Research Area: Theoretical Particle Physics

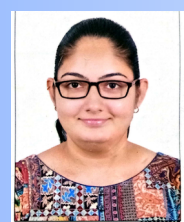
Email ID: mistryrahul24@gmail.com



Naik Yashasvi

Research Area: Theoretical Condensed Matter Physics

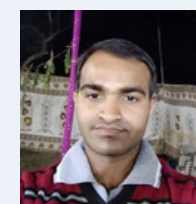
Email ID: yashasvinaik18@gmail.com



Modi Khyati

Research Area: Nanoscience

Email ID: kmody1997@gmail.com



Patel Pradip

Research Area: Crystal Growth and Characterization

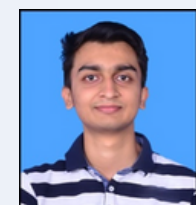
Email ID: pradipphysics86@gmail.com



Prajapati Nisha

Research Area: Condensed Matter Physics and Semiconducting Properties

Email ID: nishab1358@gmail.com



Khengar Siddhrajsinh

Research Area: Theoretical Condensed Matter Physics

Email ID: pr.pruthvisinh@gmail.com



Modi Nidhi

Research Area: Theoretical Condensed Matter Physics

Email ID: nidhimodi2000@gmail.com



Desai Riddhi

Research Area: Theoretical Condensed Matter Physics

Email ID: desairiddhi.phy@gmail.com



Patel Hetali

Research Area: Material Science & Crystal Growth

Email ID: hetalimpatel1018@gmail.com



Mehta Disha

Research Area: Theoretical condensed Matter Physics

Email ID: dishamehta47@gmail.com



Sikliger Sanket

Research Area: Material Science & Crystal Growth

Email ID: sikligerthesis67@gmail.com



Patel Krishna Kiranbhai

Research Area: Theoretical Particle Physics.

Email ID: patelkrishna468@gmail.com

List of Alumni Students

SR NO	NAME	DESIGNATION	INSTITUTE
1	Dr. Pruthul R . Desai	Principal	Sir P.T.Sarvajanik college of Science, athvalince surat
2	Dr. Arvind R . Bajaj	I/C Principal	V.S. Patel College of Arts & Science , Billimora
3	Prof. Sadanand Sutar	Head of the Department	Sir P.T.Sarvajanik college of Science, athvalince surat
4	Prof. Vireshkumar Thakkar	Professor	Sir P.T.Sarvajanik college of Science, athvalince surat
5	Dr. Ketki Mistry	Associate Professor	Navyug science college,surat
6	Dr. Pinank Jariwala	Associate Professor	Navyug science college,surat
7	Dr. Dipak Adhroja	Head of the Department	Shree Jayendrapuri science college ,Bharuch
8	Dr.Atul M. Shah	Head of the Department	Shree A.N. Shah Science college, Kamrej
9	Dr. Kamlesh Joshi	Associate Professor	B.P. Bariya Science college, Navsari
8	Dr. Mukesh Tandel	Associate Professor	B.P. Bariya Science college, Navsari
9	Dr.Anil Pillai	Associate Professor	B.P. Bariya Science college, Navsari
10	Dr.Sandhya Vani	Associate Professor	B.K.M Science College ,Valsad
11	Dr.Bhadresh Parmar	Principal	Government Science College, Valod
12	Parmar Tushar	Principal	P.P. Savani School
13	Langaliya Mahesh	Manager	S.R.Steels Pvt. LTD INDUSTRY
14	Singh Sailesh	CEO	IBM Bengaluru Division
15	Dr.Tejal Rawal	Assistant Professor	Prince Eward University, Canada
16	Dr. Aarti Prajapati	Lecturer	Engineering college London
17	Panchal Krishna	Lab Assistant	Research Laboratory of Material Science in Australia

List of Companies/institutions: Project and Placement

- Education /Teaching Institutes
- Defence Research and Development Organization (DRDO)
- Physical Research Laboratory (PRL)
- Indian Space Research Organization (ISRO)
- Bhabha Atomic Research Center (BARC)
- Gujarat Energy Transmission Corporation (GETCO)

Glimpses of The Department

Co-Curricular Activity:

1. Special Lecture Organized by Department:

“Avenues and Perspectives in Physics”

2. Workshop Organized by Department:

“Nanoscale Materials Devices Modelling and Simulations (NMDMS-2023)”

3. Academic Tour was Organized for PG Students of the Department.

Extra-Curricular Activity:

- Welcome Party Organized by Students of M.Sc. semester 4 for the Fresher students.
- Various Day Celebration (Navratri, Tree Plantation.etc)
- Various Competitions organized by the Department under the title “Viksitbharat@2047”

Competitions:

1. Wall Painting Competition
2. Development Pledge about “Viksitbharat@2047”
3. Essay Competition
4. Elocution Competition
5. Start-up Talk Arranged
6. Quiz Competition

Students Cultural and Sports Activity



Dancing competition

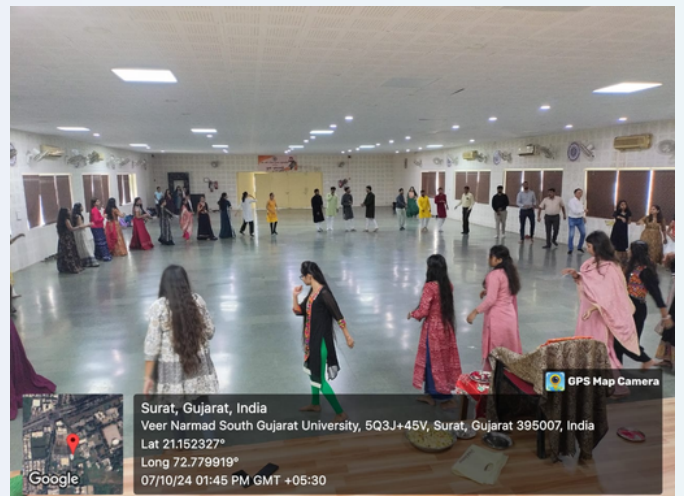


Singing competition



SPORT DAY

Department Gallery



Department Gallery



DEPARTMENT OF PHYSICS





Department of Physics

Re Accredited B++ 2.86 CGPA by NAAC

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