

# UNIVERSITY INDUSTRY INTERACTION CELL

## A Guide to INFRASTRUCTURE, TESTING FACILITIES, CORE COMPETENCE & EXPERTISE



## UNIVERSITY & INDUSTRY INTERACTION CELL

# SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar 388120, Gujarat, India

December 2022



#startupindia



## UNIVERSITY & INDUSTRY INTERACTION CELL

UIIC Committee

1	Prof. Niranjana P. Patel	Offg. Vice Chancellor, SPU	Chairperson
2	Prof. K. N. Lad	Department of Physics, SPU	Convenor
3	Prof. Y. C. Joshi	Department of Business Administration, SPU	Member
4	Prof. S. S. Kalamkar	Agro-Economic Research Centre, SPU	Member
5	Prof. S. H. Chaki	Student Start-up & Innovation Policy, SPU	Member
6	Prof. Shahera S. Patel	Department of Electronics, SPU	Member
7	Prof. Shivani Mishra	Department of Social Work, SPU	Member
8	Shri J. A. Patel	Warm Stream, GIDC, Vithal Udyognagar	Member
9	Shri Sheel Dholkia	Alpha Paint Pvt Limited, Vithal Udyognagar	Member
10	Dr Bhailalbhai P. Patel	Registrar, SPU	Invitee
11	Dr Bhautik A Patel	Chief Account Officer (I/c), SPU	Invitee
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### Published By:

The Registrar,

Sardar Patel University, Vallabh Vidyanagar

December 2022

## ACKNOWLEDGEMENTS

The first task after the re-constitution of the University Industry Interaction Cell (UIIC) in January 2022 was to come up with an updated booklet providing an overall outlook of the infrastructure, facilities and expertise in the ecosystem of academics, research, extension and outreach activities at the university. A two-member sub-committee including Prof. S. S. Kalamkar, AERC, SPU and Prof. Shahera S. Patel, Department of Electronics, SPU was entrusted with the responsibility of collection of the data and preparation of draft of this booklet. Their diligent efforts to bring out the booklet in its present form are gratefully acknowledged. In the painstaking task of collection of verified data from different departments of the university, we were greatly helped by Dr Lavji N. Zala, Assistant Professor, Department of Library & Information Science, the PhD students Mr Nikhil Vekaria, Department of Materials Sciences, Ms Anjali Thakkar, Department of Applied & Interdisciplinary Sciences, and Dr Thansingh Parihar, AERC, SPU. We thank them for their humble support. The guidance and the administrative support from the honorable Offg. Vice Chancellor Prof. Niranjana P Patel and the Registrar, Dr Bhailal P Patel is highly acknowledged.

**UIIC Committee**

## Key Features, Facts and Figures about the University

1955

Year of Establishment:

27

University Departments

45

No. of Academic Programs offered

116

Affiliated Colleges

4000+

No. of Students on Campus

300+

No. of Ph. D. Scholars

225

No. of Faculties

09

No. Academic Chairs:

600+

No. of Students undergoing Internships annually:

### Research & Consultancy (2016-21)

1086

No. of Research Papers

396

No. of Books

12\*

No. of Patents

112

Research Projects

4683 lakhs

Research Fund Received

13

Consultancy Projects

32 lakhs

Revenue Generated from Consultancy Projects

57\*

MoUs

#### Key Research & Outreach Centers

- » Agro Economic Research Centre (Ministry of Agriculture & Farmers Welfare)
- » Cost of Cultivation Scheme (Ministry of Agriculture & Farmers Welfare)
- » Community Science Centre (GUJCOST, DST, Govt. of Gujarat)
- » Community Radio Station (90.4 FM)
- » Model Career Centre (Ministry of Labour & Employment)
- » Museum
- » Human Resource Development Centre (UGC, Govt. of India)
- » SSIP (Student Startup and Innovation Program) (Govt. of Gujarat)
- » International Students Centre

#### Support Centers and Facilities

- » University Health Center
- » RT-PCR Lab
- » University Press
- » University Sophisticated Instrumentation Centre (USIC)
- » YUVI Sports Complex
- » Gymnasium and Swimming Pool

#### Central Auditoriums

- » M. P. Patel Auditorium (Capacity: 266)
- » Adi Shankaracharya Auditorium (Capacity: 165)
- » Multipurpose Auditorium with Exhibition Gallery (Capacity: 1036)

\* Total Number till date



## Foreword

It is a great pleasure to write a foreword for this booklet which gives a detailed information about the resources and expertise available at the Sardar Patel University (SPU). Being a leading state university for academics and research, SPU had taken up an initiative to establish the University and Industry Interaction Cell (UIIC) for promoting collaboration among the academia and the industries to achieve technical adeptness and excellence for developing indigenous technologies in tune with the contemporary challenges of regional and national needs. It has led to several active links with industries, government and non-government organizations, private agencies and entrepreneurs. The expert, skilled human resources and technical facilities of different departments of the university have facilitated fruitful collaborations with these stakeholders in terms of sponsored research and consultancy projects, professional training programs, student internships and placements etc. In the last 5 years, the advancements and progress in the research, consultancy, extension and outreach activities at the university and its departments have led to addition of many new infrastructural facilities for research and development. Therefore, it is the need of the hour to provide updated information to all the stakeholders to explore new possibilities and opportunities for academia-industry interaction.

In the backdrop of the fast-changing national and global landscapes of technological, business and social needs of the society, a strong and result-oriented interaction of the industrial, corporate, service and social sectors with the academia has become inevitable. This booklet intends to facilitate the stakeholders in these sectors by providing up-to-date information about the infrastructure, testing facilities, expertise and core competencies of the faculties.

I strongly believe that this booklet provides an overall outlook of the academics, research and consultancy ecosystem at the university. I am also sure that it will be immensely helpful to all the interested stakeholders and effectively guide them to explore the opportunities to establish links with the university.

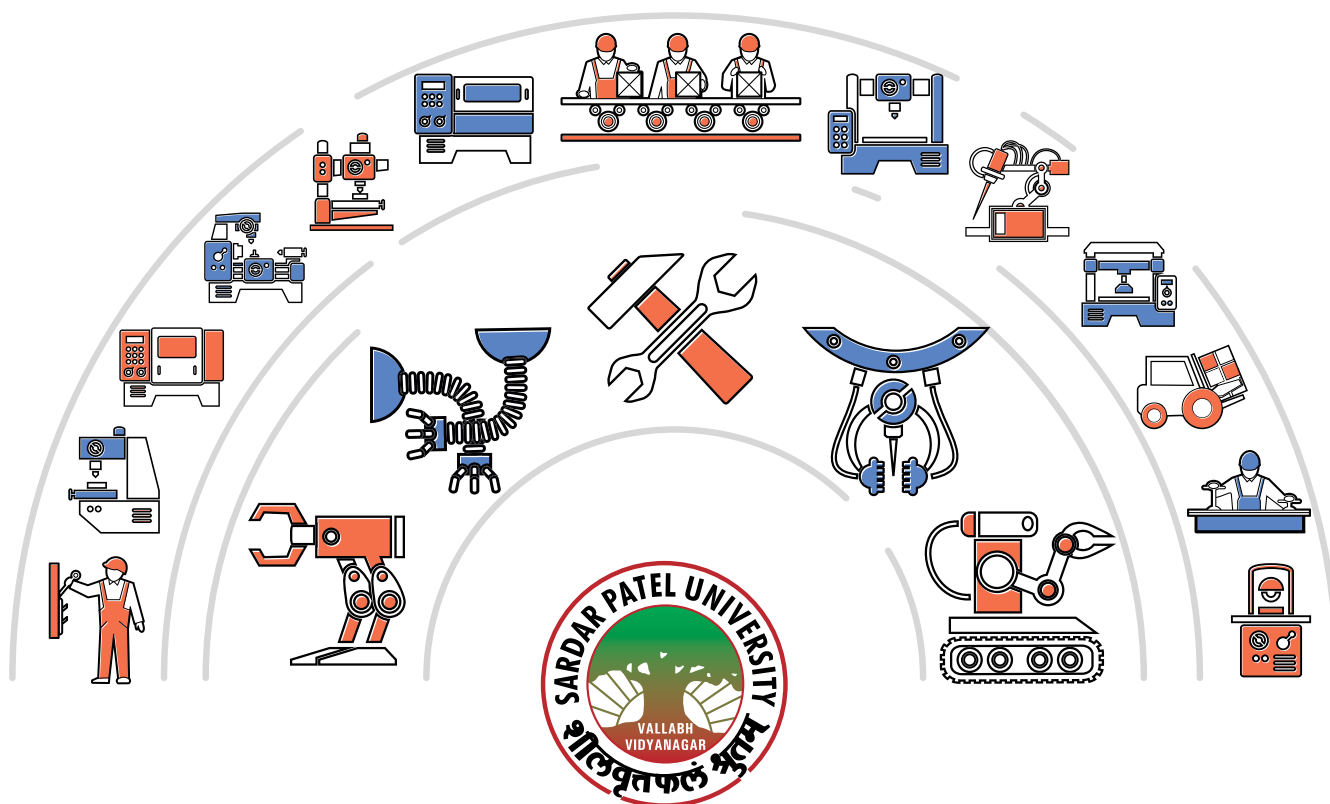
Vallabh Vidyanagar  
December, 2022

**Prof. Dr Niranjana P. Patel**  
Offg. Vice Chancellor

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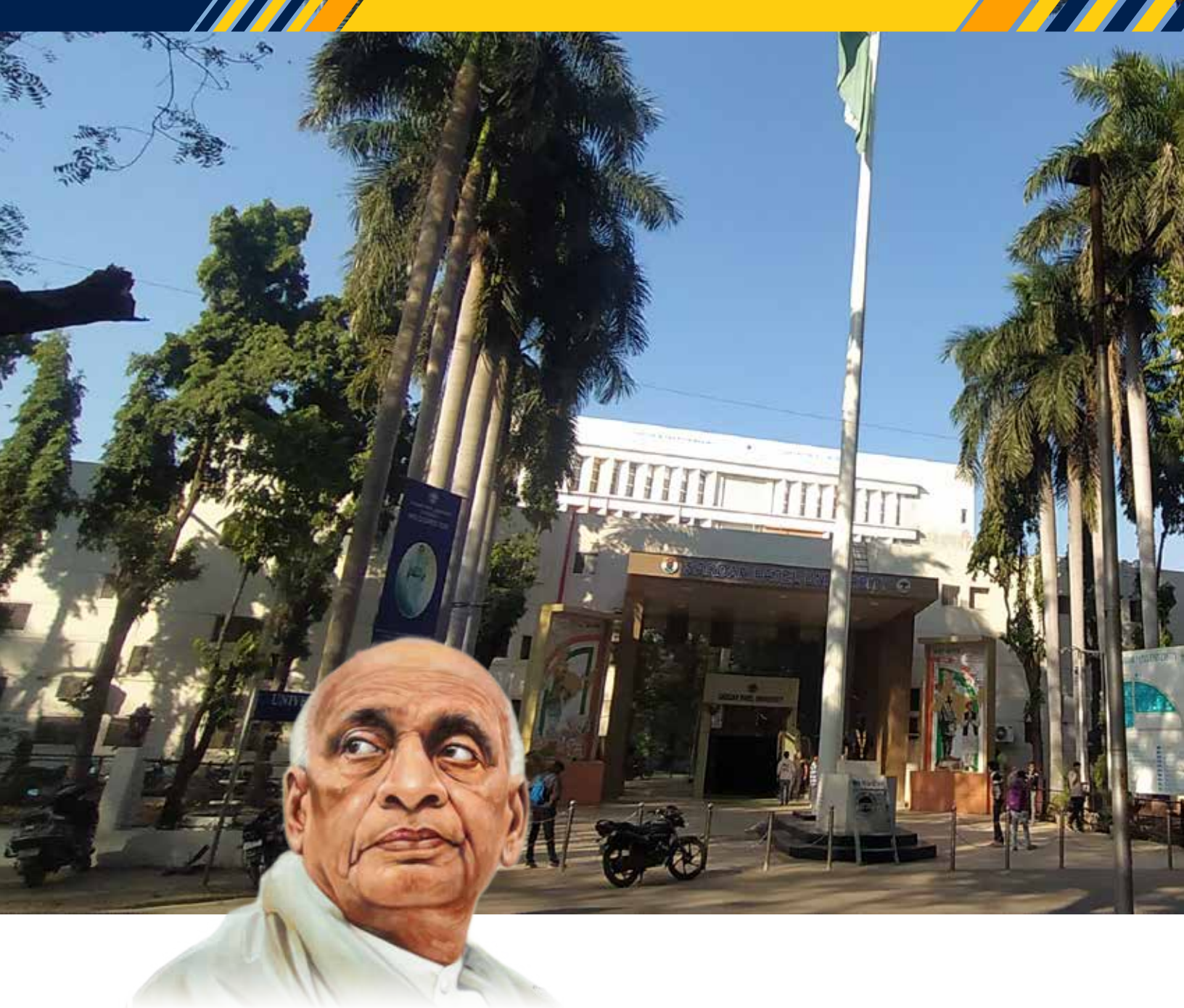
## About UIIC

With the emergence of free market economy in India, considerable emphasis is being given for the close cooperation between industries and universities. University-Industry Interaction Cell (UIIC) has been established at Sardar Patel University to promote cooperation amongst faculty members of the University and the leaders of the industrial, business, corporate and social sectors to achieve technical proficiency and excellence. Active and fruitful interaction between industry and academia has gained impetus due to the movements like 'Make in India', 'Skill India', 'Startup India' and 'Atma Nirbhar Bharat' of the Government of India to promote research and innovations for making India a self-reliant, world class manufacturing hub. In the present scenario of Nation Building engulfed with global competition and challenges, National Education Policy 2020, UIIC has an important role to play for establishing a symbiotic relationship with the various sectors of the industries.

### The UIIC works with the following specific objectives:

- » To create a database on Need Analysis of Industries in the state
- » To create a database on expertise/facilities on the campus
- » To coordinate R & D projects/consultancy/sponsored projects/ to address technical problems facing the Industry and the University and explore technology transfer of the new processes and technology developed by the University Departments.
- » To assist in signing of MOU, promote patent awareness and development of IPR/Patents by the University faculty based on their products and processes developed
- » To help testing/characterizations of the materials or samples of Industrial applications
- » To offer training programs/to co-ordinate Seminars relating to research outcomes with potential Industrial Applications.
- » To characterize, test and analyze industrial products
- » To keep liaison with various funding agencies and Govt. organizations
- » To make aware about the expertise resources available with the University





## About Sardar Patel University

Sardar Patel University is a state university located in the educational township-Vallabh Vidyanagar- specifically developed by the motivation of the great freedom fighter and the architect of current integrated India, Shri Sardar Vallabhbhai Patel. Since its inception in 1955 (as Sardar Vallabhbhai Vidyapith) as a rural university with a mission of regeneration and rejuvenation of rural Indian life through higher education and research in all the discipline of knowledge, Sardar Patel University has evolved as a modern semi-urban university with 27 postgraduate departments, 01 constituent college, 04 academic centres, 09 academic chairs within the campus and 116 affiliated colleges. The university relentlessly caters to the educational needs of the people for career in higher studies, research, jobs, and professional services by offering a variety of UG, PG, PG Diploma, Ph.D. programmes and Certificate courses in tune with the developments at local, regional, national and global levels.

The university has completed 67 golden years of a fruitful existence and excelled in academics as well as research. Sardar Patel University was re-accredited with "A" Grade by NAAC (CGPA 3.25) and is well recognized for its academic and research excellence. It can be judged from the fact that 13 departments of the university are sponsored under various national research schemes such as UGC DRS/SAP/DST





FIST/PURSE, UGC CPEAPA etc. Faculties of the universities has published more than 1000 research papers in reputed peer-reviewed national and international journals indexed in SCOPUS and Web of Science during last 5 years. During the same period, Rs. 47 crores have been received as research grants and consultancy fees under 106 sponsored projects by the central and state government agencies like UGC, DST, DBT, DAE, GUJCOST, ICAS, ICSSR, MHRD, etc. The faculties of the university has 12 patents to its credit till date. The University hosts NBHM (under the DAE, Government of India) Western Region Library at the Department of Mathematics. The research work by individual faculty members is also well recognized. Three faculty members (1 on roll, 2-superannuated) are included in the recent list of world's top 2% scientists published by Stanford University.

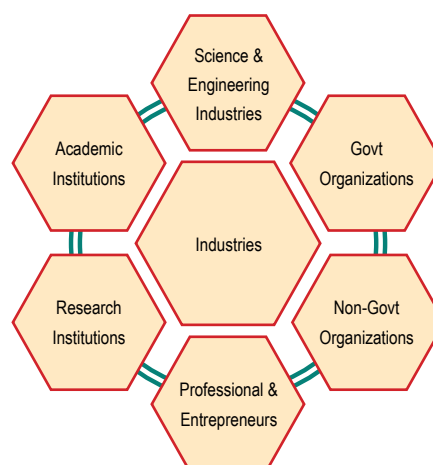
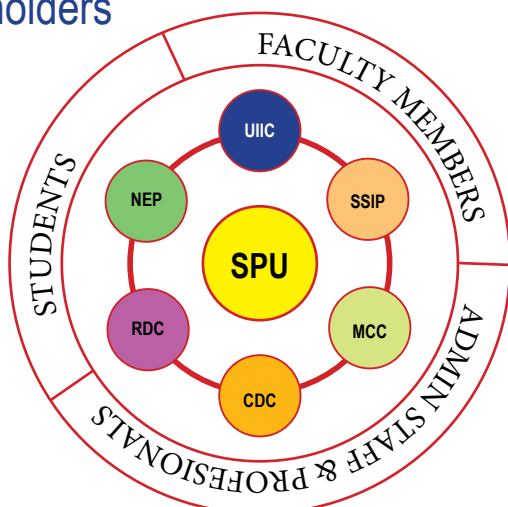
The University has several unique features namely, it is the only one university in the western India and in the state of Gujarat for getting recognition as the center of excellence in applied polymers for multi-disciplinary research. It has its own community Radio Station and GUJCOST funded Community Science Center. It has an Agro-Economic Research Centre (for the states of Gujarat, Rajasthan, Dadra and Nagar Haveli) and Cost of Cultivation Scheme for Gujarat.

# Avenues for University Industry Interaction

The possible avenues for the university industry interaction are listed below. The list is suggestive and not exhaustive.



## Stakeholders



- » UIIC : University Industry Interaction Cell
- » RDC : Research and Development Cell
- » SSIP : Student Start up & Innovation Policy Cell

- » MCC : Model Career Centre
- » CDC : Career Development Centre
- » NEP : National Education Policy Cell



## MOUs

University has undertaken various Memorandum of Understanding with various Universities/ Institutes/ Development of Academic Orientation, Guidance to identify research area, interdisciplinary orientation, sharing the facility with each other, joint visit of research institute and industries, etc.



## Exposure Visits

In order to prepare the students for global competition, students are equipped with both theoretical as well as practical knowledge. Students are exposed to a life-changing experience through exposure visits to Universities/ Institutes/Firms. These travels provide students with an opportunity to stretch their views and transform their understanding of self, their world and the way business is conducted in a globalized world. Such trips allow a kind of cross-cultural exchange that goes miles in helping students attain their ultimate goal of having a paid job.



## Earn while Learn program

University has a unique pioneering project for the student i.e. Earn While learn program which helps the students to find part-time work on the campus to meet their educational/living costs while simultaneously helping them gain work experience and inculcate work values.



# Infrastructure Facilities Expertise

@

# DEPARTMENTS & CENTRES

## Department of Biosciences

Email: [hodbios\\_spu@spuvvn.edu](mailto:hodbios_spu@spuvvn.edu)

## Department of Chemistry

Email: [hodchem\\_spu@spuvvn.edu](mailto:hodchem_spu@spuvvn.edu)

## Department of Home Science

Email: [hodhs\\_spu@spuvvn.edu](mailto:hodhs_spu@spuvvn.edu)

## Department of Physics

Email: [headphys@spuvvn.edu](mailto:headphys@spuvvn.edu)

## Department of Mathematics

Email: [hodmath\\_spu@spuvvn.edu](mailto:hodmath_spu@spuvvn.edu)

## Department of Electronics

Email: [hodelec\\_spu@spuvvn.edu](mailto:hodelec_spu@spuvvn.edu)

## Department of Materials Science

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## Department of Statistics

Email: [hodstat\\_spu@spuvvn.edu](mailto:hodstat_spu@spuvvn.edu)

## Department of Computer Science and Technology

Email: [hodcst\\_spu@spuvvn.edu](mailto:hodcst_spu@spuvvn.edu)

## Department of Pharmaceutical Sciences

Email: [hodpharma\\_spu@spuvvn.edu](mailto:hodpharma_spu@spuvvn.edu)

**Department of Applied and Interdisciplinary Sciences**

Email: cisst\_head@spuvvn.edu

**Department of Business Management**

Email: hodbm\_spu@spuvvn.edu

**Department of Business Studies**

Email: hodbs\_spu@spuvvn.edu

**Department of Economics**

Email: hodecon\_spu@spuvvn.edu

**Department of Education**

Email: hodeduc\_spu@spuvvn.edu

**Department of Hindi**

Email: hodhind\_spu@spuvvn.edu

**Department of Psychology**

Email: hodpsyc\_spu@spuvvn.edu

**Department of English**

Email: hodengl\_spu@spuvvn.edu

**Department of Gujarati**

Email: gujarati.spu@gmail.com

**Department of History**

Email: hodhist\_spu@spuvvn.edu

**Department of Political Science**

Email: hodps\_spu@spuvvn.edu

**Department of Sanskrit**

Email: hodsans\_spu@spuvvn.edu

**Department of Social Work (MSW)**

Email: hodsw\_spu@spuvvn.edu

**Department of Sociology**

Email: hodsoci\_spu@spuvvn.edu

**Department of Law**

Email: hodlaw\_spu@spuvvn.edu

**Department of Library & Information Science**

Email: hodlis\_spu@spuvvn.edu

**M B Patel College of Education**

Email: spuvvnmbpce@gmail.com

**UGC Human Resource Development Centre**

Email: director@hrdcspu.ac.in

**Community Science Centre**

Email: cscspuvvn@yahoo.com

**Agro Economic Research Centre**

Email: aerc@spuvvn.edu

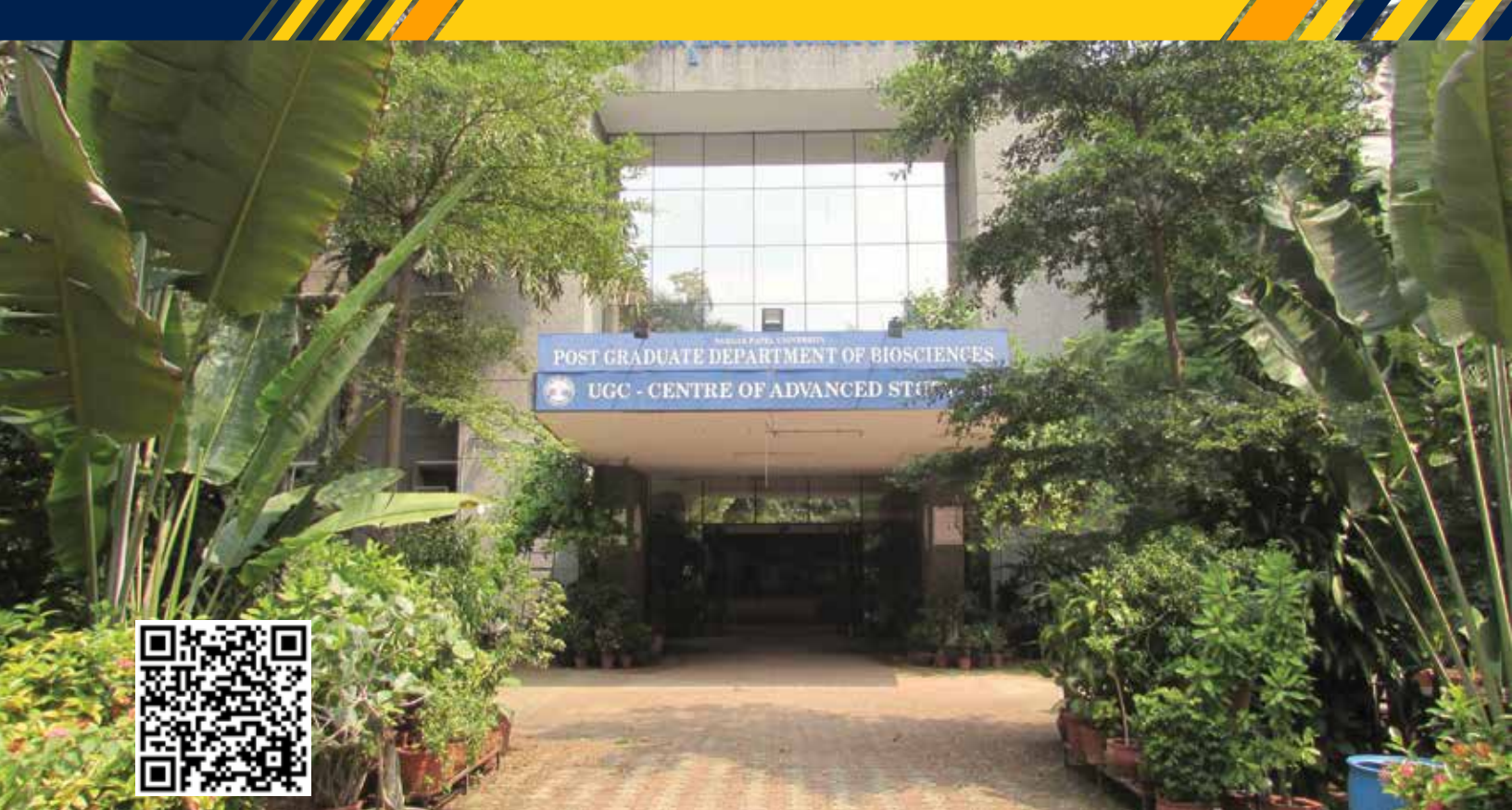
**Cost of Cultivation Scheme**

Email: ccsgujarat@gmail.com

**Community Radio Station**

Email: spuradiocampus@gmail.com





# Department of Biosciences

## A) Specific Areas of Research Activities

- » Microbial and Environmental Biotechnology
- » Plant Morphogenesis and Physiology
- » Plant and Animal Biotechnology
- » Plant and Microbial Biodiversity
- » Photochemistry and allied areas
- » Microbial and Environmental Biotechnology
- » Purification and structural characterization of phycobiliproteins from Cyanobacteria
- » Identification of novel genes for bioremediation through metagenomic approach
- » Characterization of Arsenic hypertolerant microorganisms
- » Microbial and Environmental Biotechnology
- » Production, purification and characterization of microbial secondary metabolites
- » Production of microbial enzymes and their applications
- » Production and modification of biodegradable polymers
- » Lactobacilli and their probiotic potential
- » Plant and animal Biotechnology
- » Genetic variants in diabetic population and its association with onset of diabetes and its secondary complications
- » Proteomic identification and characterization of new Biomarkers in diabetic complications.
- » Elucidation of disease resistance mechanisms in plants at structural, biochemical and molecular level
- » Development of novel feed with probiotics for aquaculture
- » Micropropagation of economically important medicinal plants
- » Plant and microbial diversity
- » Bridging the knowledge gaps in the flora of Gujarat
- » Distribution mapping of medicinal plants in Shoolpaneshwar wildlife sanctuary
- » Diversity assessment of culturable and unculturable microorganisms from various ecological niches and their bioprospecting
- » Phytochemistry and allied areas
- » Screening and characterization of Indian plants for their antimicrobial properties

## B) Sophisticated Equipment and Experimental Facilities



High Performance Liquid Chromatography (HPLC)

Shimadzu LC20AD



High Performance Liquid Chromatography (HPLC)

Agilent1100 Series



High Performance Thin Layer Chromatography (HPTLC)

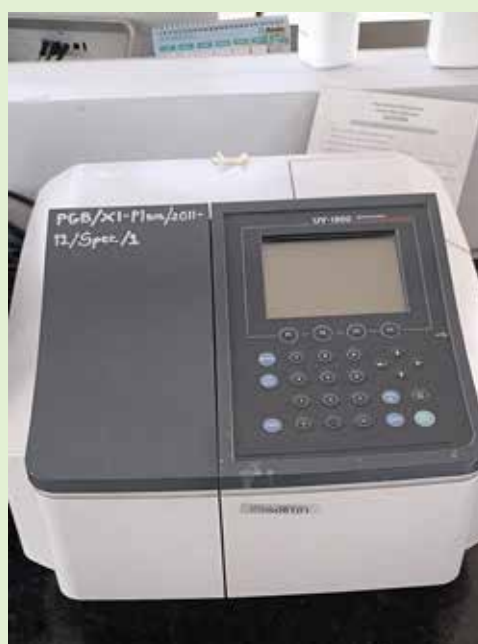
CAMAG, LINOMAT 5, Scanner-3  
Sample application and TLC scanning  
in UV and visible range



Ion Chromatography System

METROHM IC 940

Anion & Cation Analysis  
with Conductivity &  
Amperometric Detectors



UV Visible Spectrophotometer

Shimadzu UV 1800  
Range 200-800 N  
Single, Multiple  
Wavelengths  
Scanning  
Transmission & ATR  
Modes





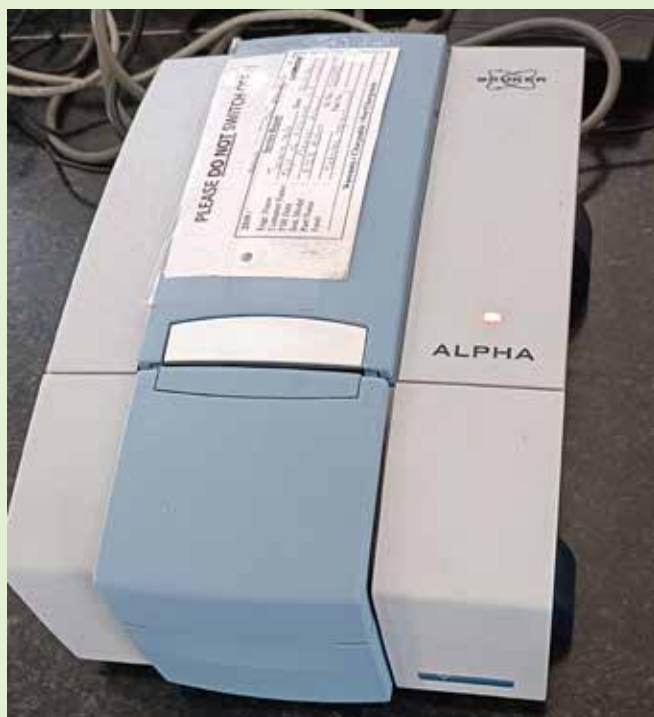
**Flash Purification System**  
BIOTAGE ISOLERA 1, PDA DETECTOR



**Gel Documentation System**  
Biorad Chemi Doc Xrs+  
Gel imaging in UV and Visible range



**Refrigerated Centrifuges** Eppendorf 5430R ,SIGMA 3K30, 30K-RPM, 4°C TEMP



#### FTIR Spectrometer

**Bruker Alpha 2-Transmission and ATR Modes of Measurements**



#### Ultrapure Water Purification System

**ELGA PURELAB classic**

### C) Profile of faculty members and their expertise

#### Dr Ujjval Trivedi

M. Sc., Ph. D. (Microbiology)

Professor

<https://spuvvn.irins.org/profile/40786>

#### Dr Haresh Keharia

M. Sc., Ph. D. (Microbiology)

Professor

<https://spuvvn.irins.org/profile/169776>

#### Dr Kamlesh C. Patel

M. Sc., Ph. D. (Microbiology)

Professor

#### Dr Vasudev Thakkar

M. Sc., Ph. D. (Microbiology)

Professor

<https://spuvvn.irins.org/profile/40790>

#### Dr Hetal Panchal

M. Sc., Ph. D. (Biochemistry)

Professor

<https://spuvvn.irins.org/profile/204703>

#### Dr Akshaya Gupte

M.Sc. Ph.D. (Microbiology)

Associate Professor

<https://spuvvn.irins.org/profile/28606>

#### Dr M. Nataraj

M. Sc., Ph. D. (Botany)

Assistant Professor

<https://spuvvn.irins.org/profile/265583>

#### Dr Kalpesh Ishnava

M.Sc. Ph.D. (Botany)

Associate Professor

<https://spuvvn.irins.org/profile/291589>

#### Ms. Poonam Bhagriya

M.Sc., (Zoology)

Assistant Professor

#### Mr. Dinesh Vasava

M.Sc., (Biochemistry) B.Ed.

Assistant Professor

<https://spuvvn.irins.org/profile/265585>



# Department of Chemistry

## A) Specific Areas of Research Activities

- » Organic synthesis especially synthesis of bioactive heterocyclic, thermochromic and photochromic compounds
- » Microwave synthesis
- » Polymer Chemistry
- » Coordination & Bio-inorganic Chemistry
- » Organometallic Chemistry
- » Colloid and surfactant Chemistry
- » Nanomaterials
- » Smart materials
- » Sensors
- » Hydrogels and Drug release systems
- » Domino Chemistry
- » Supramolecular Chemistry
- » Ionic liquids
- » Material Chemistry
- » Dye Sensitized Solar Cell
- » Energy Storage & Generation Devices
- » Electrochemistry
- » Catalysis
- » Green Chemistry
- » Metal Extraction Chemistry





## B) Sophisticated Equipment and Experimental Facilities



### SAXS & WAXS

SAXSpace system Anton Paar

Generator with X-ray tube, Vacuum equipment, 2D HPC Detector, GISAXS Stage



### NMR Spectrometer

400 MHz

Bruker Avance-1, 1H and 13C with multi element Probe



**Size-exclusion High Performance  
Liquid Chromatography**  
Prominence SHIMADZU



**IR Spectrometer**  
MB3000 ABB  
500 to 4000  $\text{cm}^{-1}$



**UV-Visible Spectrometer**  
SHIMADZU, Double Beam, (200 to 800 nm Wavelength)  
absorbance 0 - 4.



**Elemental Analyser (CHNS)**  
EURO-EA-3000, EURO-vector, Temp. upto 1100°C



**Solartron Electrochemical workstation**  
SI-1260, SI-1296 and SI-1287  
Solartron, UK, 1Hz to 1.2 MHz frequency sweep,  
Electrochemical workstation with Electrical study



**Fluoromax-4 Spectrophotometer**  
FLUROMAX 4CP-TCSPC, Horiba Jobin Vira Edison, USA,  
Excitation and emission analysis 250-800 nm





### Microwave Reactor

U wave -1000  
SINEO  
Microwave  
source – 2000  
MHZ, 0-1000W,  
IR sensor  
range – 0 to  
800°C and  
temperature  
sensor arrange  
– 0 to 250°C



### Atomic Force Microscope (AFM)

C-3000  
Nanosurf,  
Switzerland  
Max scan  
range -5nm,  
Sample size  
\*100mm on  
sample stage  
Scan Head  
100µm and  
10µm



### Thermogravimetric Analyzer (TGA)

STA-7200 HITACHI, Ambient to 1500 °C, 0 to 100 °C/min)  
(0.1 to 25°C/min)



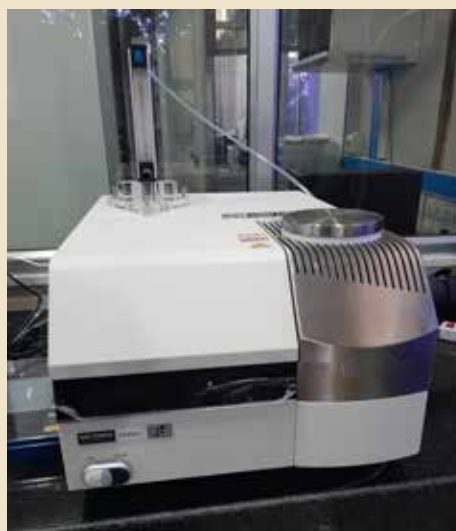
### Flash Chromatography

Biotag select



### Density and sound velocity meter

DSA 5000M Anton Paar  
Density -0 to 3 g/cm<sup>3</sup> sound velocity -1000 m/s to 2000 m/s



### Differential Scanning Calorimeter (DSC)

DSC-7000X HITACHI  
-80 to 500 °C with 0.01 to 100°C/min scan



**Universal Testing Machine**

LLOYD

Up to 3 MT



**Brookfield viscometer**

Brookfield USA

Viscosity in CPS and SS. ( Up to 106)

### C) Profile of faculty members and their expertise

**Dr D. K. Raval**

M.Sc., Ph.D. (Chemistry)

Professor

<https://spuvvn.irins.org/profile/42036>

**Dr Hitendra M. Patel**

M.Sc., Ph.D. (Chemistry)

Professor

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**Dr Keshav Lalit Ameta**

M.Sc., Ph.D. (Chemistry)

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**Dr Mohanbhai N. Patel**

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**Dr Saurabh S. Soni**

M. Sc., Ph. D. (Chemistry)

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<https://spuvvn.irins.org/profile/206764>

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**Dr Manishkumar P. Patel**

M. Sc., Ph D. (Chemistry)

Professor

<https://spuvvn.irins.org/profile/265602>

**Dr Pragneshkumar N Dave**

M.Sc., Ph.D. (Chemistry)

Professor

<https://spuvvn.irins.org/profile/265603>

**Dr Jignesh Harikrishna Trivedi**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/265598>

**Dr Narsidas Jeramdas Parmar**

M.Sc. (Org.Chem.), Ph.D. (Chemistry)

Professor

<https://spuvvn.irins.org/profile/40802>

**Dr Manish Kumar Mishra**

M.Sc., Ph.D. (Chemistry)

Associate Professor

<https://spuvvn.irins.org/profile/265599>

**Dr Navinbhai Punambhai Chikhaliya**

M.Sc. Ph.D.(Chemistry)

Assistant Professor (Senior Scale)

<https://spuvvn.irins.org/profile/265597>

**Dr Bhupesh Bhatt**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/255143>

**Dr Komal M. Vyas**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/265595>

**Dr Kesur Rajade Ram**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/265596>

**Dr Pinkeshkumar G. Sutariya**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/271023>

**Dr Sharadkumar Karad**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/283519>

**Dr Priyaka Yadav**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/283659>

**Ms. Shailykumari K. Patel**

M.Sc. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/283578>

**Dr Tushar Ravjibhai Sutariya**

M.Sc., Ph.D. (Chemistry)

Assistant Professor

<https://spuvvn.irins.org/profile/283531>

**D) Industries availing analytical services**

- » Anton Paar India Pvt. Ltd., Gurgaon, Haryana
- » Magnus Industrial Corporation, GIDC Estate, Vitthal Udyognagar
- » Jubilant Agri and Consumer Products Ltd., Savli, Vadodara
- » Shree Radha Soami Traders, GIDC, Vitthal Udyognagar
- » Laksh Finechem Pvt. Ltd., GIDC, Vitthal Udyognagar
- » GMM PFAUDLER Ltd., GIDC, Karamsad
- » Colour Flex Laminators Limited, Sola, Ahmedabad
- » Elecone Engineering Company Ltd., Vallabh Vidyanagar
- » EIMCO ELECON(IND) Ltd., Vallabh Vidyanagar
- » Gujarat Industrial Research and Development Agency (GIRDA), Vadodara
- » CIPET, Ahmedabad
- » Camphor and Allied Products Ltd., Vadodara
- » Nikikem Industries. V.U. Nagar
- » Om Irritech Ltd., Rajkot
- » SVNIT, Surat
- » Navin Fluorine Int. Ltd., Surat
- » Cadila Healthcare Ltd., Ahmedabad
- » Navin Fluorine Int. Ltd., Dewas (M.P.), India
- » Chembond Chemicals Ltd., Dudhavad, Padra
- » Maghmani Organic Ltd., Ahmedabad
- » Om Irritech Ltd., Rajkot
- » Arrowplast Ltd., Vadodara
- » Dip Enterprise, GIDC, Karamsad, Gujarat
- » KEMROCK Industries & Experts Ltd., Waghodia, Vadodara
- » Anik Silver Shine, Soni Bazar, Rajkot
- » ZCL Chemicals Ltd., G.I.D.C., Ankleshwar
- » IDMC Ltd, GIDC Estate, Vitthal Udyognagar
- » Mini Sarvodyog Sira, Vitthal Udyognagar
- » Chemical Examiner Gr I, Central Excise & Customs Laboratory, Vadodara
- » Asiatic Composite Ltd., Chandkheda, Ahmedabad
- » Gujarat Narmada Valley, Fertilizers & Chemicals Limited, Bharuch
- » Camphor and Allied Products Ltd., GIDC, Nandesari
- » Silikem Industries, GIDC, Vitthal Udyognagar





# Department of Home Science

## A) Specific Areas of Research Activities

- » Oxidative stress and inflammation in diseases
- » Nutraceuticals –antioxidant, anti-inflammatory and antidiabetic activity of plant foods, probiotics
- » Community nutrition – Dietary intervention for specific health claims (anemia, diabetes, cardiovascular disease, osteoporosis), obesity, undernutrition in preschool children, breastfeeding practices
- » Bio-processing (fermentation and germination)
- » Community development- Adolescent health and psychosocial adjustment, women, and health
- » Natural dyes, textile finishes (antimicrobial, anti-soil, flame retardant etc.)
- » Traditional textiles, textile crafts, and contemporary wear
- » Garment design
- » Textile waste management
- » Ergonomics
- » Environment management, waste management
- » Hospitality management
- » Consumerism
- » Interior decoration
- » Entrepreneurship



## B) Sophisticated Equipment and Experimental Facilities

### ELISA multimode microplate reader and strip washer

Synergy H1, and 50TS Medisec (I) Ltd, Mumbai

Automation Compatibility : BioSpa, BioStack, BenchCel

Environment Control : 4-Zone Incubation to 45 °C, 4-Zone Incubation to 70 °C, Condensation Control, CO<sub>2</sub>, O<sub>2</sub> Control , Filter Detection Modes : Fluorescence Intensity, Fluorescence Polarization, BRET (ii) LuminescenceTime Resolved FluorescenceTR-FRET (iii)UV-Vis Absorbance

Imager/Reader Options : Reagent injectors, Instrument Control : Computer Software, Monochromator Detection Modes : UV-Vis Absorbance, Fluorescence Intensity (variable bandwidth), Shaking : Double-orbital LinearOrbital, Supported labware : 6 to 384-well platesTake3/ Take3 Trio



### CO<sub>2</sub> incubator

CLM-170B-8-UV, cellmate,

Esco Biotech, Singapore

Interior Volume :170 L (6 ft<sup>3</sup>)

Temperature Control Method Direct Heat and Air Jacket using Microcontroller PI

Ambient Temperature Range : 18 to 34°C (64 to 93°F)

Temperature Range: Ambient +3 to 60°C

CO<sub>2</sub> → Range, % CO<sub>2</sub> : 0-20

CO<sub>2</sub> → Accuracy, % CO<sub>2</sub> ± 0.1°C

CO<sub>2</sub> → Sensor Infra(1R) Sensor, % CO<sub>2</sub> ± 0.1°C

Humidity

Humidification Method :Humidity pan

Humidity Range : RH Up to 95%



## Blood cell counter

Sysmex, Japan

Analysis parameters: WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, RDW-SD,

Whole Blood : RDW-CV, MPV, NEUT#, LYMPH#, MONO#, EO#, BASO#, IG#,

NEUT%, LYMPH%, MONO%, EO%, BASO%, IG%

RET (optional license available) : RET#, RET%, IRF; RET-He

Body Fluids: XN-BF: Sample Types: CSF, Synovial, Serous

WBC-BF, RBC-BF, MN#, PMN#, MN%, PMN%, TC-BF#

Measurement principles : WBC DIFF/RET: Fluorescent

Flow Cytometry, RBC/PLT: DC Impedance method with

hydrodynamic focusing, HGB: Cyanide-free SLS method

Throughput : Up to 60 samples/hour in whole blood (WB) mode

Aspiration volume: 25  $\mu$ L in whole blood (WB) mode, 70  $\mu$ L in

pre-dilute (PD) and body fluid (BF) mode

Data storage capacities: 100,000 samples



## RT PCR

High throughput Light Cycler 480 II

Wells : 96-well, 384-well,

Application : Gene detection / Gene expression analysis / And genetic variation analysis,

Volume: 96-well PCR plate: 10 - 100  $\mu$ L and 384-well PCR plate: 5 - 20  $\mu$ L,

Time : < 40 minutes (384-well PCR plate),

Excitation Source: Broad-spectrum, high-intensity LED (390 – 710 nm) , Excitation Wavelength: 420 nm - 670 nm, Detection: Six detection filters; Cooled CCD camera

## Gel Document System

EC3 410 Chemi System Gel Document System

Sys Compa 9 CQ 34551X

The EC3 systems are designed for chemiluminescence, fluorescence, and colorimetric imaging. Systems can be used with fluorescent and colorimetric gels; colony plaques; microtiter plates; autoradiograph film; Northern, Southern, Western, and dot blots; 1D analysis; colony counting; densitometry; membrane arrays; and live plant studies. Three types of 115V, 8W single intensity UV transilluminators are available, each with a built-in ethidium bromide emission filter. The FirstLight\* FI-26X model offers a 302nm wavelength and a 25x26cm (97/8x101/4") filter. The LM-26 model offers 302 and 365nm wavelengths, and a 21x26cm (81/4x101/4") filter. The LMS-26 model offers 254, 302, and 365 wavelengths, and a 21x26cm (81/4x101/4") filter. Five scientific-grade, high resolution cameras are available with the EC3 systems.



## Spectrofluorometer

HITACHI F-7000

Sensitivity (Raman light of water): Noise Background S/N 15,000 or above\*1 Noise Peak 800 or above\*2

Minimum sample volume: 0.6 mL (in use of standard 10 mm rectangular cell)

Photometric principle :Monochromatic light monitoring ratio calculation

Light source: 150 W xenon lamp, self-deozonating lamp house

Measuring wavelength range: (on both EX and EM) 200 to 750 nm, and zero-order light

(Expandable up to 900 nm with optional detector)

Wavelength scan :speed 30, 60, 240, 1,200, 2,400, 12,000, 30,000, 60,000 nm/min



## Auto analyzer

Cobas Integra 400 Plus

System: Random and continuous access, sample selective analyser. Integration of 4 measuring principles 36 tests onboard

Absorbance photometry: Enzymes and substrates, Turbidimetry: Specific proteins, drugs of abuse, Fluorescence polarimetry: Therapeutic drugs, thyroid tests, Ion-selective electrode potentiometry: Na<sup>+</sup>, K<sup>+</sup>, Cl<sup>-</sup> and Li<sup>+</sup>, Test throughput: Up to 400 tests/hr (including ISE),

Sample types: Serum, plasma, urine, CSF, hemolysate and whole blood (HbA1c), Sample handling: 90 primary or secondary tubes on-board, p to 6 x RD15 racks on-board, Cooled rack position for controls and calibrators, Automatic sample dilution and concentration

Barcode reading via laser scanner, with immediate STAT recognition, Reaction cells: Holds 1,000 disposable cuvettes with 5 mm path length, and 120-240 µL reaction volume



## Colour Analyzer

Colour Flex EZ 45°/0° (Hunter L\*a\*b\*)

Easy Match QC Software

Measurement Principle: Port up or Port forward dual-beam spectrophotometer, Geometry:

Directional annular 45° illumination / 0° viewing, Spectrophotometer: Sealed optics; 256-element

diode array and a high resolution concave holographic grating, Spectral Range: 400 nm - 700 nm

Spectral Resolution: < 3 nm, Effective Bandwidth: 10 nm equivalent triangular, Reporting

Interval: 10 nm, Photometric Range: 0 to 150 %, Light Source: Pulsed Xenon Lamp, Flashes

per Measurement: 1 flash, Measurement Time: < 1 second from button push to measurement 2

seconds from button push to data display, Minimum Interval Between Measurements: 3 seconds

Standards Conformance: CIE 15:2004, ISO 7724/1, ASTM E1164, DIN 5033, Teil 7 and JIS Z 8722

Condition C

### Texture analyzer

CT3-50 kg, Brookfield, USA, Load Range/Resolution\*: 2-50000g/5.0g  
Speed: Range 0.01-0.1mm/s(increments 0.01mm/s) and 0.1-10mm/s  
(increments 0.1mm/s), Accuracy  $\pm 0.1\%$  of the set speed, Position:  
Range 0-101.6mm, Resolution 0.1mm\* and Accuracy 0.1mm



### Polarimeter

Auto Pol- I, Rudolph, Germany, Measures Optical Rotation, Specific Rotation, Concentration, as well as °Z (ISS) Sugar Degrees. **Resolution:** 0.01° Arc Optical Rotation. **Accuracy:** 0.02° Arc Optical Rotation as well as 0.03°Z (ISS) Sugar Degrees. Designed as a single wavelength instrument for Food and certain Pharmaceutical applications. It is also used for less demanding applications where budget is critical, but quality is still important.



### Viscometer

LVDV- II + Pro/RVDV- II + Pro, Brookfield, USA, **Speeds:** Standalone: Interleaved: LV/RV (18 speeds), **Sequential:** LV/RV (18 speeds), Custom: 54 speeds, user selectable  
External (PC Control) .01 - 200 rpm, 0.01 rpm increments from 0.01 to 0.99 rpm  
0.1 rpm increments from 1.0 to 200 rpm Temperature Sensing Range: -100°C to 300°C (-148°F to 572°F), Viscosity Accuracy:  $\pm 1.0\%$  of full scale range, Viscosity Repeatability:  $\pm 0.2\%$   
Temperature Accuracy:  $\pm 1^\circ\text{C}$  | -100°C to +149°C,  $\pm 2^\circ\text{C}$  | +150°C to +300°C, Operating Environment: 0°C to 40°C temperature range (32°F to 104°F) 20% - 80%R.H.: non-condensing atmosphere



### Sonicator

VC-750, Sonics, Power Output: 750 watt maximum, **Frequency:** 20kHz,  
**Dimensions:** H x W x D: 9.25 x 7.5 x 13.5" (235 x 190 x 340mm), Converter  
Cable: Part #201-0300, Length: 6 ft. (1.8m), **Ultrasonic Converter:** Part #CV334,  
**Diameter:** 2.5" (64mm), Length: 7.25" (183mm), **Tool Kit:** Part #381-0005,  
**Includes:** 2 spanner wrenches and 1 open-end wrench, **Standard Probe:**  
Part #630-0220, **Tip Diameter:** 0.5" (13mm) with replaceable tip, **Length:** 5.5"  
(139mm), **Material:** Ti6Al4V titanium alloy







### Protein Analyzer

Kelplus- KEL VAC, Kelplus-KES 06L E and Kelplus- SUPRA LX VA Pelican Kelplus, KEL VAC- Four Stage Semi Automatic Acid Neutralizer Scrubber (Regular Version), **KES 06 LE:** v Automatic block digestion with built in exhaust fume manifold system v Automatic Microprocessor based temperature controller, **Automatic distillation system:** **APPLICATIONS:** For digestion of plant samples, Microprocessor based temperature controller (Ambient to 450°C), Digital display of temperature and time, Casted Aluminium Alloy Heaters for uniform heating and even digestion, Auto fix exhaust manifold system for absolute fume trapping, KEL FLOW suction assembly for pollution free analysis, Feather touch membrane keys with built-in safety features

### Soxhlet apparatus

SCS- 3, Pelican Kelplus  
SOCS PLUS Three Place Fully Automatic Solvent Extraction System with auto time temperature integrated programming facility and auto phase change over with PC compatibility feature.  
There is time & temp gradient, Casted Aluminium Alloy Heater, 65-80 % Solvent recovery.



## C) Profile of faculty members and their expertise

### Dr Vinayak H. Patel

M.Sc. Ph. D  
Professor  
<https://spuvvn.irins.org/profile/265654>

### Dr Namrita Kola

M.Sc. Ph. D  
Professor  
<https://spuvvn.irins.org/profile/265652>

### Dr Neeta R. Dave

M.Sc. Ph. D  
Associate Professor  
<https://spuvvn.irins.org/profile/265652>

### Dr Viraj Roghelia

M.Sc. Ph. D  
Assistant Professor  
<https://spuvvn.irins.org/profile/265651>

### Dr Komal Patel

M.Sc. Ph. D  
Assistant Professor  
<https://spuvvn.irins.org/profile/269286>



## Department of Physics

### A) Specific Areas of Research Activities

- » Crystal Growth, Characterization and Device Fabrication
- » Nanomaterials and their applications
- » Crystallographic study of Biomolecules
- » Computer simulation study of materials using classical molecular dynamics & DFT methods
- » Optical physics, Biomedical optics, 3D Microscopy, Optical Instrumentation
- » Microwave Dielectrics
- » Theoretical High Energy Physics





## B) Sophisticated Equipment and Experimental Facilities



### Hall Effect Measurement System

Lakeshore 7504

**Sample geometry:** van der pauw

**Number of contacts:** 4

**Sample volt. & current:** V max 8V, I max 100mA, I min – 500fA

**Resistance range:** 100  $\mu\Omega$  to 100G $\Omega$

**Magnet power supply:** Four quadrant 2kW

**Minimum Temperature of Measurement:** 10K



### High Vacuum Coating Unit

Hindhivac

**Achievable vacuum level:**  $1 \times 10^{-3}$  mbar

(liquid nitrogen trap) **Thin film deposition**

**techniques:** Thermal evaporation



### Particle Size Analyzer

Carl Zeiss Malvern Instruments Limited, **Red Laser (He-Ne)**: 10mW, **Wavelength**: 632.8 nm  
**Detector**: Avalanche Photodiode Range: 0.3 nm to 5  $\mu$ m



### Thermal Analyzer System

SII Nano Technology Inc., **Temperature Range**: RT to 1100°C  
**Rate of Heating**: 0.1°C to 50°C/Min., **Sample Type**: Solid Sample (min. 5 mg and max. 20 mg)



### Micro Raman Spectrometer

Horiba, **Two Laser sources**: 532 nm and 785 nm, **Gratings**: 1200, 1800, 2400  $\text{cm}^{-1}$ , **Intensity**: 0.1 to 100 %



### Trinocular Upright Metallurgical Microscope

Carl Zeiss, **Light Source**: Halogen lamp  
**Lenses**: 5X, 10X, 20X, 50X



### X-Ray Powder Diffractometer

Rigaku Ultima IV



### C) Profile of faculty members and their expertise

**Dr V. M. Pathak**

M.Sc, Ph.D. (Physics)

Professor

<https://spuvvn.irins.org/profile/40819>

**Dr M.P. Deshpande**

M.Sc, Ph.D. (Physics)

Professor

<https://spuvvn.irins.org/profile/40821>

**Dr K. D. Patel**

M.Sc, Ph.D. (Physics)

Professor

<https://spuvvn.irins.org/profile/265675>

**Dr Brijmohan Thakore**

M.Sc, Ph.D. (Physics)

Professor

<https://spuvvn.irins.org/profile/40822>

**Dr Gunvant Kantilal Solanki**

M.Sc., Ph.D. (Physics)

Professor

<https://spuvvn.irins.org/profile/40824>

**Dr Sunil Chaki**

M.Sc, Ph.D. (Physics)

Professor

<https://spuvvn.irins.org/profile/265674>

**Dr Kirit N. Lad**

M. Sc., Ph. D. (Applied Physics)

Professor

<https://spuvvn.irins.org/profile/172651>

**Dr Arun Anand**

M. Sc. Ph. D. (Applied Physics)

Professor

<https://spuvvn.irins.org/profile/318180>

**Dr Jignesh N. Pandya**

M. Sc., Ph. D. (Physics)

Professor

<https://spuvvn.irins.org/profile/318035>

**Dr Ashvin N Prajapati**

M. Sc., Ph. D. (Physics)

Associate Professor

<https://spuvvn.irins.org/profile/318283>

**Dr Swati Pandya**

M.Sc, Ph.D. (Physics)

Assistant Professor

<https://spuvvn.irins.org/profile/286322>

**Mr. Bhavin H. Brahmbhatt**

M.Sc. (Physics)

EM Operator

**Mr. Rajeshkumar J. Rajpara**

B.Tech (EC)

Technical Assistant (EC)

**Dr Jayesh R Gandhi**

M.Sc, Ph.D. (Physics)

Technician

### D) Industries availing analytical services

- » Supernova Tech. Pvt. Ltd, GIDC, Vithal Udyognagar
- » Deepak Nitrides, Vadodara
- » The M. S. University, Baroda, Vadodara
- » V.P and R.P.T.P Science College, Vallabh Vidyanagar
- » Smt. S. M. Panchal College, Talod
- » Department of Physics, Jiwaji University, Gwalior



# Department of Mathematics

## A) Specific Areas of Research Activities

- » Analysis
- » Banach and Topological Algebras
- » Function Algebras and Function Spaces; Harmonic Analysis
- » Operator Algebras
- » Operator Theory
- » Mathematical Analysis: Financial Mathematics
- » Relativity Theory
- » Differential Equations
- » Graph Theory
- » Mathematical Modeling

## B) Profile of faculty members and their expertise

### Dr A H Hasmani

Ph.D. (Mathematics)

Professor

<https://spuvvn.irins.org/profile/46035>

### Dr H V Dedania

Ph.D. (Mathematics)

Professor

<https://spuvvn.irins.org/profile/40810>

### Dr J C Prajapati

Ph.D. (Mathematics)

Professor

<https://spuvvn.irins.org/profile/270182>

### Dr Himali S. Mehta

Ph.D. (Mathematics)

Associate Professor

<https://spuvvn.irins.org/profile/22796>

### Dr Sanjay Jivrajibhai Ghevariya

Ph.D. (Mathematics)

Assistant Professor

<https://spuvvn.irins.org/profile/265670>

### Dr Jay Gopalbhai Mehta

Ph.D. (Mathematics)

Assistant Professor

<https://spuvvn.irins.org/profile/265669>

### Mr. Kamlesh Ratilal Baleviya

Ph.D., Pursuing

Assistant Professor

<https://spuvvn.irins.org/profile/265668>

### Dr Meera H Chudasama

Ph.D. (Mathematics)

Assistant Professor

<https://spuvvn.irins.org/profile/156281>

### Dr Nagjibhai S. Rabari

Ph.D. (Mathematics)

Assistant Professor

<https://spuvvn.irins.org/profile/280161>

### Dr Prashantkumar Patel

Ph.D. (Mathematics)

Assistant Professor

<https://spuvvn.irins.org/profile/219301>

### Dr Ravikumar R Panchal

Ph.D. (Mathematics)

Assistant Professor

<https://spuvvn.irins.org/profile/269289>



# Department of Electronics

## A) Specific Areas of Research Activities

- » Thin Films (Bulk & Nano Particles)
- » Thin Film Electronic Devices
- » Optoelectronics
- » Bulk Crystal Growth and Characterization
- » Analog and Digital Circuit Design
- » Embedded system Design
- » VLSI Circuit Design and Simulation
- » Computer Hardware and Networking
- » Wi-Fi Networking Technology
- » Gas Sensors and Bio sensors
- » Microcontroller/ IoT based Design, Development and control Instrumentation
- » Chemical Vapour Sensors and e-Nose
- » Pollution Monitoring and Control
- » Higher Order Filter Designing
- » Cognitive Analysis of the Stakeholders
- » PLC Based Industrial Control



## B) Sophisticated Equipment and Experimental Facilities



### Vacuum Coating Unit

**Make:** Hind Hivac

**Vacuum range:**  $10^{-2}$  to  $10^{-6}$  torr



### DC Sputtering System

**Make:** Mansha Vacuum Equipment

**50VDC to 2000VDC**



### High Temperature Rotary Tube Furnace

**Make:** Naskar & Co, Hawrah

**Temperature range:**  $30^{\circ}\text{C}$  to  $1500^{\circ}\text{C}$



### Pulse Laser Deposition System (PLD)

Compex Pro-102F, Coherent GmbH, Germany  
Turbo Molecular Pump for PLD

**Make:** Pfeiffer Vacuum GmbH, Germany

High Vacuum chamber for PLD

High Vacuum Chamber for PLD

HiPace 700 DN-160CFF, Excel Instrument, Mumbai

Output Wavelength (nm): 193 Max., Pulse

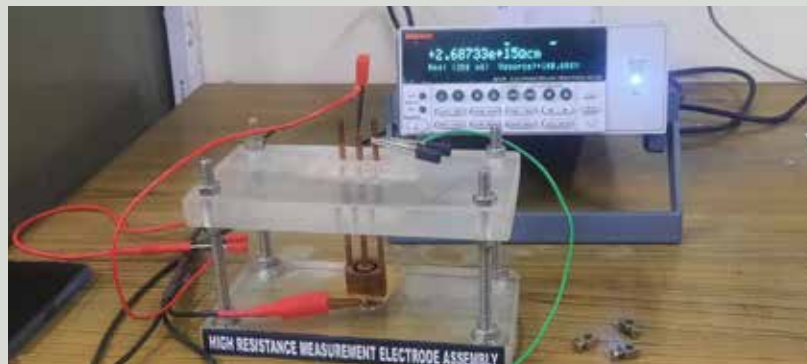
Frequency: 20 (Hz) Max., Pulse Energy: 400 (mJ)



### High Temperature Tube Furnace

**Make:** Naskar & Co,

Hawrah, **Temperature range:**  $30^{\circ}\text{C}$  to  $1400^{\circ}\text{C}$



### Electro Meter/ High Resistance Meter

Keithley 6517B

**DC voltage measurements:**  $1\ \mu\text{V}$  to 200 V **DC current measurements:** 10

$\mu\text{A}$  to 20 mA **Resistance measurements:**  $1\ \Omega$  to  $10^{16}\ \Omega$





#### **Nano-volt Meter**

**Make:** Keithley 2182A, 15nV p-p noise at 1s  
Response time 40–50nV, p-p noise at 60ms, Current  
source at up to 24Hz with 30nV p-p noise



#### **Source Meter**

Keithley 2602A  
**Dynamic range:** 1fA to 10A and 1μV to 200V  
**Timer accuracy:** ±2μs



#### **Double beam UV-Visible Spectrophotometer**

Systronics 2203, **Wavelength:** 200nm to 1100 nm,  
**Bandwidth:** 2.0 nm

### **C) Profile of faculty members and their expertise**

#### **Dr (Mrs.) Shahera S.Patel**

M.Sc., Ph.D. (Electronics)  
Professor  
<https://spuvvn.irins.org/profile/265637>

#### **Dr (Miss) Vibha S. Vaishnav**

M.Sc., Ph.D. (Electronics)  
Associate Professor  
<https://spuvvn.irins.org/profile/265636>

#### **Mr. Divyang B.Dave**

M.Sc. (Electronics)  
Associate Professor  
<https://spuvvn.irins.org/profile/265634>

#### **Mr. Paresh B.Patel**

M.Sc. (Electronics)  
Associate Professor  
<https://spuvvn.irins.org/profile/265635>

### **D) Industries availing analytical services**

- » TWIN Engineering, Vadodara
- » ADIT Engg. College, Vallabh Vidyanagar

- » GCET Engg. College, Vallabh Vidyanagar



# Department of Materials Science

## A) Specific Areas of Research Activities

- » Flame retardant polymers for water borne coatings
- » Oxidative resistant coating using PECVD technique
- » Biomass derived porous carbon for waste water treatment
- » Materials for the prevention of environment
- » Development of Carbon Nanomaterials, Nanoclays, Porous materials
- » Nanomaterials reinforced Composites for Biomedical applications
- » Graphene and Nanoceramics as Heterogeneous catalytic materials
- » Carbon/carbon composites for advanced engineering applications





## B) Sophisticated Equipment and Experimental Facilities



### ■ Scanning Electron Microscope

Hitachi S-3000N

**Magnification:** Up to x3,00,000

**Resolution:** 3 nm

**Sample nature:** Ceramic and metallic



### ■ Differential Scanning Calorimeter

Mettler Toledo DSC822e

**Temperature range:** 30°C to 500°C

**Heating rate:** 1°C/min to 20°C/min

**Sample amount:** 2-20 mg



### ■ Thermo-mechanical Analyzer (TMA)

**Model:** Mettler Toledo TMA/SDTA840

**Temperature range:** 30°C to 800°C

**Heating rate:** 1°C/min to 20°C/min

**Sample amount:** 2\*2\*2 mm

**Sample Type:** Ceramic and metallic



### BET surface Area Analyzer

Micromeritics ASAP 2020

**Sample amount:** 20-50 mg

**Sample nature:** Solid samples



### Raman Spectrometer

Renishaw InVia-H43299

**Workable Lasers:** 514 nm (Argon laser, 20mW Beam Power)

785nm (Diode laser ,300mW Beam Power)

**Sample amount:** 20-50 mg

**Sample nature:** Solid



### Tribometer

CSM 01-003394

**Load:** 1N, 2N, 5N, 10N, 20N

**Sample size:** Round sample (20 mm to 50 mm in diameter)

**Sample Type:** Solid Sample

### Particle Size Analyzer

Microtrac Zetatrac

**2 lasers:** 780 nm

**Sample Type:** 1mg solid sample dispersed in 10 ml solvent

**Particle size range:** 0.8 nm to 6.5 um



### UV-Visible Spectrophotometer

Shimadzu UV-1601

**Wavelength:** 200 nm to 1100 nm

**Spectra Band Width:** 2 nm

**Sample Type :** Liquid sample





### ■ Polarized Optical Microscope

Leitz Leborlux 12 POLS

**Sample Type:** Solid sample embedded in epoxy resin with highly polished surface

**Lenses:** 20X, 50X, 100X



### ■ Fourier Transform Infrared (FTIR) spectroscopy

**Model:** Bruker Alpha

**Wavelength:** 400 cm<sup>-1</sup> to 4000 cm<sup>-1</sup>

**Sample Type:** Solid sample (5 mg), liquid sample (pH between 5 to 8)

## C) Profile of faculty members and their expertise

**Dr (Miss) R. H. Patel,**

M.Sc., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265666>

**Dr Jignesh Valand**

M.Sc., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265664>

## D) Industries availing analytical services

- » Sud-Chemie India Pvt. Ltd., Nandesari, Vadodara
- » Kana Advanced Composite, Por Baroda

- » Global Innovative Excellence, Baroda
- » HSV Aditya Glass Line Private Limited, Vallabh Vidyanagar



## Department of Statistics

### A) Specific Areas of Research Activities

- » Design of Experiments
- » Statistical Inference
- » Survey Sampling
- » Statistical Quality Control Techniques
- » Biostatistics, Pharmaceutical Statistics
- » Statistical Computing
- » Statistical Modelling
- » Response Surface Methodology
- » Operations Research
- » ISO standard documentation
- » Lean Six Sigma Methodology

### B) Sophisticated Equipment/Software and Experimental Facilities

- » SPSS
- » R
- » STATA
- » Minitab
- » Matlab
- » Design Expert



### C) Industries availing analytical services

A) 3 Week Certification Course on “Lean Six Sigma Green Belt” (See Appendix)

B) QPM Course Internship Projects at (last two years)

- |  |  |
|--|--|
| » Power Build Pvt. Ltd., Elecon Group of Industries, Vallabh Vidyanagar              | » Freudenberg Gala Household Product Pvt. Ltd., Mogar  |
| » Vidya Wires Pvt. Ltd., Vitthal Udyognagar  | » SUN PHARMA, Vadodara 9. Stat Modeller, Vadodara  |
| » Rhino Machines Pvt. Ltd., Vitthal Udyognagar                                       | » Precision Plastic Pvt. Ltd., Halol   |
| » Tripcorn Pvt. Ltd., Vitthal Udyognagar   | » Amneal Pharmaceutical Pvt Ltd, Pharmez (Special Economic Zone - SEZ, Highway, Matoda, Sarkhej-Bavla Rd, Sanand, Gujarat 382213 |
| » Atlanta Electricals Pvt. Ltd., New Vallabh Vidyanagar, GIDC, Anand, Gujarat 388345 | » Sahajanand Medical Technologies Ltd., Surat  |
| » Maksim Alloys. Vithal udhyognagar, GIDC, Anand                                     |  |

### D) Profile of faculty members and their expertise

#### Dr J.M.Divecha

Ph.D.  
Professor  
<https://spuvvn.irins.org/profile/209243>

#### Dr D.P.Raykundaliya

Ph.D.  
Assistant Professor (SS)  
<https://spuvvn.irins.org/profile/265691>

#### Dr Khimya S. Tinani

Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/291109>

#### Dr Rupal C. Rabari

Ph.D.  
Assistant Professor (Ad hoc)

#### Mr. Agniva Das

Ph.D (Pursuing)  
Assistant Professor (Ad hoc)

#### Mr. Tanaji V. Mane

Ph.D. (Pursuing)  
Assistant Professor (Ad hoc)





# Department of Computer Science and Technology

## A) Specific Areas of Research Activities

- » Computer Networks
- » Simulation and Modeling
- » IT enable Services
- » Distributed Systems
- » Computer Graphics
- » Image Processing
- » Multimedia
- » Database Management Systems
- » Operating Systems
- » Artificial Intelligence
- » Systems Analysis and Design
- » Software Engineering
- » Object Oriented Technology
- » Web Applications
- » Compiler Design
- » Search Engine Optimization
- » Analysis of Computer Algorithms
- » Business Information System

## B) Profile of faculty members and their expertise

### Dr D. B. Shah

Ph.D.  
Professor & Director  
<https://spuvvn.irins.org/profile/40807>

### Dr D. B. Choksi

Ph.D.  
Professor  
<https://spuvvn.irins.org/profile/32579>

### Dr P. V. Virparia

Ph.D.  
Professor  
<https://spuvvn.irins.org/profile/265607>

### Dr P. S. Sajja

Ph.D.  
Professor  
<https://spuvvn.irins.org/profile/43431>

### Dr S. A. Jain

Ph.D.  
Professor  
<https://spuvvn.irins.org/profile/281493>

### Mr. B. B. Patel

Associate Professor  
<https://spuvvn.irins.org/profile/270258>

### Dr P. P. Pittalia

Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/265605>

### Dr V. L. Desai

Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/291052>

### Dr J. V. Smart

Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/290449>

### Dr R. D. Gaharwar

Ph.D.  
Lecturer  
<https://spuvvn.irins.org/profile/265606>

### Ms K. D. Kalvani

Teaching Assistant





## Department of Pharmaceutical Sciences

### A) Specific Areas of Research Activities

- » Analytical Method development,
- » Herbal Standardization
- » NDDS
- » Formulation development

### B) Sophisticated Equipment and Experimental Facilities



#### UV-Visible Spectrophotometer

UV-1800, Shimadzu Corporation

**Wavelength Range:** 200 - 800 nm

**Spectral bandwidth:** 1 nm

**Photometric range:** Absorbance (-4 to 4 Abs);

Transmittance (0% to 400%)



#### High Performance Liquid Chromatography (HPLC) System

1260 Infinity, Agilent Technologies

C-8, C-8 column, Quarternary Mobile Phase composition,

Manual Injector and PDA detector



### High Performance Thin-Layer Chromatography (HPTLC) System

CAMAG (Linomat 5, Scanner 4)

Semiautomatic Sample Application with Scanner, Plate Heater and Development Chamber for Quantitative Analysis



### FTIR Spectroscopy System

IR Affinity, Shimadzu

4000  $\text{cm}^{-1}$  to 400 $\text{cm}^{-1}$ , Diffuse Reflectance Sampling Accessories



### Lyophilizer

Benchtop Pro,  
VirTis  
RBG Bottle 500  
ml / 1000 ml



### Spray Dryer

Labultima



**Dissolution Test Apparatus**  
TDT-08, Electrolab



**Probe Sonicator**  
Vibracell, Sonics INC.



**Diffusion Test Apparatus**  
EDC-07, Electrolab

### C) Profile of faculty members and their expertise

**Dr Vijaykumar K. Parmar**

M.Pharm, Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/208368>

**Dr (Mrs.) Bhavna A. Patel**

M.Pharm., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265673>

**Dr Shraddha J. Parmar**

M.Pharm, Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265672>

**Dr Mihir Kishorchandra Raval**

M.Pharm, Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/288469>



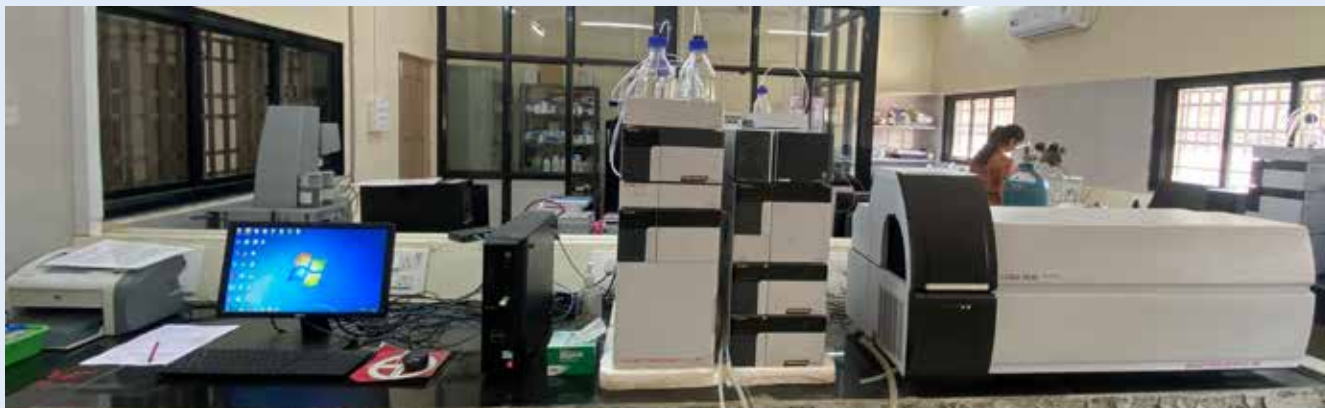


## Department of Applied and Interdisciplinary Sciences

### A) Specific Areas of Research Activities

- » Metagenome analysis of Cattle, Buffalo and Human milk.
- » Transcriptome analysis of fungi.
- » Biocontrol of plant and animal parasitic nematodes by using nematophagous fungi.
- » Cloning, Characterization and Functional screening of industrially important enzymes using metagenomics approach.
- » Phytochemical and pharmacological studies of plant extracts on microorganisms
- » Synthesis and characterization of nanomaterials such as graphene, metal & metal oxide-based nanoparticles.
- » Development of polymer-based nanocomposites, carbon-ceramic composites.
- » Development of Electro-ceramics and Bio-ceramic materials.

## B) Sophisticated Equipment and Experimental Facilities



### Triple Quadrupole Liquid Chromatography Mass spectrometry (LC-MS/MS)

LCMS 8030, Shimadzu, Japan

**Mass Range:** 10 to 2000 m/z, **Sensitivity:** ESI positive: 1 pg Reserpine, S/N>200(RMS), **Resolution:**  $R < 0.7FWHM$ , **Application flow rate:** ESI 1ul/min to 2ml/min, **Scan Speed:** Ma 15,000 u/sec, **Polarity switching time:** 15msec, **MRM transition speed:** Max 500 channels/sec



### Research Rotary and Oscillatory Rheometer

MCR 102 Modular Compact, Anton Paar, Graz, Austria

**Bearing design:** Air, fine-pored carbon, **Working modes:** Combined Motor Transducer (CMT), **Min. torque (rotation):** 5 nN, **Min. torque (oscillation):** 5 [1] nNm, **Max. torque:** 200 mNm, **Min. angular deflection (set value):** 0.5  $\mu$ rad, **Max. angular deflection (set value):**  $\infty$   $\mu$ rad, **Min. angular velocity:** 0 rad/s, **Max. speed:** 314 -3000 rad/s **Normal force range:** -50 to 50 N

### Complete DCI-VC-V Semiconductor Characterization System

4200-SCS, Keithley, USA, C

**Current-Voltage (I-V) Range:** 10

aA - 1A,

0.2  $\mu$ V - 210 V, capacitance-Voltage

(C-V) **Range :** 1 kHz - 10 MHz  $\pm$

30V DC bias, ULSIED I-V RANGE

:  $\pm 40$  V (80 V p-p),  $\pm 800$  mA 200

MSa/sec



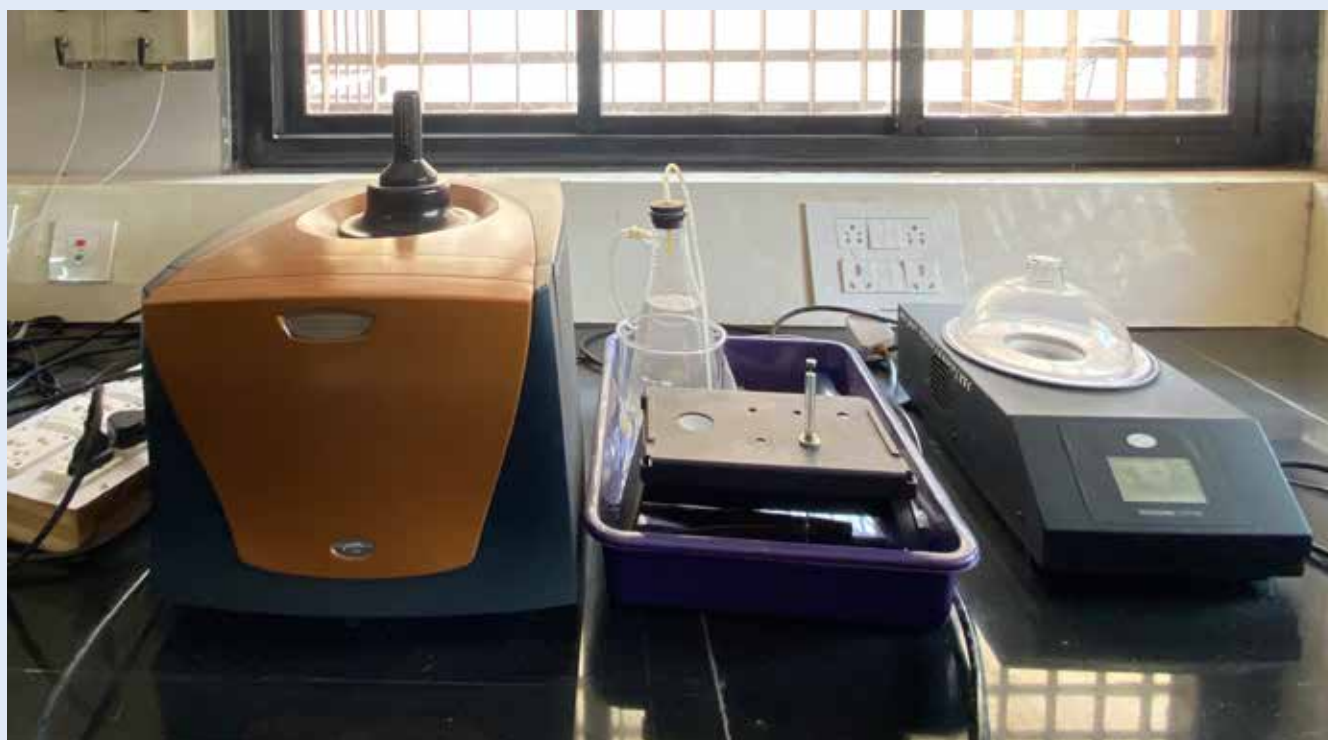




### High Performance Particle Size Analyzer along with Zeta Potential

SZ100 Nanopartica, Horiba, Japan

**Particle Size :** Range: 0.3 nm - 8.0  $\mu\text{m}$ , **Accuracy:** +/- 2%, ISO 13321/22412 compliant. NIST traceable polystyrene latex particle **standard:** 100 nm **Measurement time:** Approx. 2 minutes in general for particle size analysis, **Sampling cell:** Cuvette cell, Sampling volume: 12  $\mu\text{L}$  ~4 mL, **Zeta Potential Measurement:** Range: -200 mV – +200mV, **Measurement time:** ~ 2 minutes, **Sampling cell:** Disposable cell or dip cell, **Sampling volume:** ~100  $\mu\text{L}$  for disposable cell, **Temp control range:** 1-90° for particle size, 1-70° for zeta potential, **Laser:** DPSS 532 nm, 10 mW Class **Molecular weight:** Static light scattering Debye plot technique, **Measurement Range:** Mw:  $1 \times 10^3$  -  $2 \times 10^7$  g/mol



### Isothermal Titration Calorimeter

Nano ITC Standard Volume System, Water TA

**Temperature Range :** -10 °C to 130 °C, **Scan Rates :** 0.001 °C to 2 °C/min, **hort-term Noise :** 0.015  $\mu\text{Watts}$ , **aseline Repeatability :** 0.028  $\mu\text{Watts}$ , **ell Configurations :** Fixed Capillary /Cylindrical, **ell Materials :** Platinum / Gold, **esponse Time :** 5 sec, **ctive Cell Volume :** 300  $\mu\text{L}$  / 330  $\mu\text{L}$ , **equired Sample Volume :** 500  $\mu\text{L}$  / 450  $\mu\text{L}$ , **ressure Control Built-in :** 0 to 6 atmospheres, Heat Measurement Type Power Compensation





### RT-PCR

CFX Connect, BioRad, USA, **ax. ramp rate** : 5 °C/sec, **Average ramp rate** : 3.3 °C/sec, **Heating and cooling method** : Peltier **Temperature Range** , : 0 - 100 °C, **Accuracy** :  $\pm 0.2$  °C of programmed target at 90°C, **Uniformity** :  $\pm 0.4$  °C well-to-well within 10 sec of arrival at 90°C, **Gradient Operational range** : 30 – 100 °C, **Programmable span**: 1–24 °C **Scan Time All channels** : 12 sec, **AM/SYBR® Green only** : 3 sec (Two channel system)



### Inductive Coupled Plasma Optical Emission Spectroscopy (ICP-OES)

Optima 8000, Perkin Elmer, Singapore, **Operating Temperature**: 15 - 35°C (59 - 95°F), **Max. rate of change** : 2.8°C (5°F)per hour **Optimum Room Temperature** : 20°C  $\pm 2$ °C, **Relative Humidity** : 20% to 80%, without condensation, **Optimum Relative Humidity** : 35% - 50% **Resolution** : 0.1nm,  $\pm 4\%$



### Simultaneous Thermal Analyzer (DTA-DSC-TGA System)

STA 8000, Perkin Elmer, Singapore, **Max. Temperature**: 1000 °C, **Min. Temperature** : 25 °C



### Prominence Preparative cum Analytical HPLC System

Prominence, Shimadzu, Japan, **Solvent delivery method**: Parallel-type double, lunger, **Plunger capacity**: 10  $\mu$ L, ax. discharge pressure: 44 MPa **Flow rate setting range** : 0.0001 to 5.0000 mL/min (1.0 to 44 MPa), 5.0001 to 10.0000 mL/min (1.0 to 22 MPa), **Flow rate accuracy**: Not more than  $\pm 1\%$  or  $\pm 2$   $\mu$ L/min, whichever is greater (under specified conditions), **Flow rate precision**: Not more than 0.06% RSD or 0.02 min SD, whichever is greater **Operating temperature range**: 4 to 35 °C



### Gas Chromatograph with Head Space Sampler

MASTER GC, DANI Instruments, Italy

**COLUMN OVEN :** Operating temperature : 5°C above ambient to 500°C **Temperature resolution :** 0.1°C

**Thermal accuracy :**  $\pm 0.1^\circ\text{C}$ , **Thermal stability :**  $\pm 0.1^\circ\text{C}$ , **Max Heating Ramp Rate :** 140°C/min, 0.1 °C/min, Injectors available Packed (PK), Split/splitless (SL/IN), Detectors available FID flame ionization detector

### Gel Permeation Chromatography

NEXERA GPC System, Shimadzu, Japan

**Measurement method:** Single Flow, **Mobile phase flow rate setting range :** 0.1 to 1 mL/min, **Mobile phase flow rate accuracy :** Not more than 1% or 2  $\mu\text{L}/\text{min}$ , whichever is greater (0.1 to 1 mL/min), **Sample injection volume setting range :** 0.1 to 100  $\mu\text{L}$  (standard), **Molecular weight calculations:** Mn, Mw, Mz, Mz1, Mv, Mw/Mn, Mv/Mn, Mz/Mw



### Microplate Reader

SPECTRAMAX M2e, Molecular Devices

**Read modes :** Absorbance, Fluorescence (top/bottom read) **Wavelength ranges :** Abs: 200 - 1000 nm, FL Ex: 250 - 850 nm, **FL Em:** 360 - 850 nm (M2), **FL Em:** 250 - 850 nm (M2e)

**Wavelength selection :** Monochromator tunable in 1-nm increments, **Absorbance photometric accuracy/linearity :**  $< \pm 1.0\%$  and  $\pm 0.006$  OD (0.0-2.0 OD), **Light source(s) :** Xenon flashlamp

**Detector(s) :** Silicon photodiode, Photomultiplier tube

**Read types (endpoint, kinetic, etc) :** Endpoint, Kinetic, Spectrum scan, Well scan, **Temperature control :** Ambient + 4°C to 45°C



### Spectrofluorophotometer

RF-6000, Shimadzu, Japan

**Light source:** 150 W Xenon lamp, **Scanning Wavelength range:** 200 to 900 nm and 0 order, **Resolution :** 1.0 nm or less (Emission), **Sensitivity :** The SN ratio of the Raman line of distilled water is 350 and more (P-P) 1,000 and more (RMS)





#### ■ Inverted Fluorescence Phase contrast Microscope

Axis observer, Carl-zeiss

Phase contrast microscopy and Fluorescence image taken

**Filters available :** Normal filter for phase contrast microscopy, DAPI, FITC and TRITC, **Specimen visualized :** In slide, culture flask, petriplate and 96 well plate

### C) Profile of faculty members and their expertise

#### Dr Anju P. Kunjadiya

M.Sc, Ph.D (Biotechnology)

Associate Professor

<https://spuvvn.irins.org/profile/265584>

#### Dr Rakesh V. Patel

M.Sc, Ph.D (Material Science)

Assistant Professor

<https://spuvvn.irins.org/profile/265667>

### D) Industries availing analytical services

- » Department of Zoology, MSU, Vadodara
- » DDIT, Nadiad
- » Kidney Hospital, Nadiad
- » Rex Tone Industry Ltd.
- » SPRERI, Vallabh Vidyanagar
- » Department of Chemistry, MSU, Vadodara
- » Department of Pharmacy, Changa

- » Department of Chemistry, VNSGU, Surat
- » Department of Bioscience, VNSGU, Surat
- » Anand Agricultural University, Anand
- » Department of Pharmaceutical Sciences, Saurashtra University, Rajkot
- » GCET, Vallabh Vidyanagar





# Department of Business Management

## A) Specific Areas of Research Activities

- » Consumer Behaviour & Research activities
- » Research methodology
- » H.R.M
- » Marketing Management
- » Consumer Behavior
- » Business Economics, International Business,
- » Development Economics
- » Human Development
- » Public Policy
- » Finance
- » Technology based Enterprises
- » Stock Markets
- » Business Policy & Strategic Management
- » Financial Accounting: Cost & Mgt. Accounting

## B) Industries availing analytical services

- » Government of Gujarat: Analytical services of the Baseline Survey & End line Survey

## C) Profile of faculty members and their expertise

### Prof.(Dr) P. K. Priyan

M.Com, Ph.D. (Management)  
Professor  
<https://spuvvn.irins.org/profile/265663>

### Prof. (Dr). Yogesh C. Joshi

M.A., Ph.D. (Economics)  
Professor  
<https://spuvvn.irins.org/profile/265589>

### Prof. (Dr) Darshana Dave

MBA, Ph.D. (Management)  
Professor  
<https://spuvvn.irins.org/profile/221332>

### Dr R. M. Rathod

MBA, Ph.D. (Management)  
Professor  
<https://spuvvn.irins.org/profile/269312>

### Dr Mitesh M. Jayswal

MBA, Ph.D. (Management)  
Professor  
<https://spuvvn.irins.org/profile/94935>

### Dr Vilas V Kulkarni

MBA, Ph.D. (Management)  
Associate Professor  
<https://spuvvn.irins.org/profile/265588>

### Dr K. S. Prasad

MBA, Ph.D. (Management)  
Assistant Professor (S.S.)  
<https://spuvvn.irins.org/profile/265662>

### Dr Ashish C. Mehta (S.S.)

M.Com, Ph.D. (Commerce)  
Assistant Professor  
<https://spuvvn.irins.org/profile/265661>

### Dr Hitesh Parmar

MBA, Ph.D. (Management)  
Assistant Professor  
<https://spuvvn.irins.org/profile/265587>



# Department of Business Studies

## A) Specific Areas of Research Activities

- » Commerce,
- » General Management,
- » Marketing Management
- » Human Resource Management,
- » Taxation,
- » Finance and Accounting

## B) Profile of faculty members and their expertise

### Dr Sandip K. Bhatt

M.Com., Ph.D.

Professor

<https://spuvvn.irins.org/profile/30858>

### Dr Yagnesh M. Dalvadi

M.Com., Ph.D.

Professor

<https://spuvvn.irins.org/profile/265594>

### Dr Kamini Shah

M.Com., L.L.B., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265593>

### Dr Suresh P. Machhar

MBA, M.Com., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/268680>

### Dr Komal Mistry

MBA, Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/285731>

### Dr Jayendrasinh Jadav

M.Com., Ph.D.

Associate Professor

### Dr Darshna S. Rohit

M.Com., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265592>

### Dr Ankur D. Amin

MBA, Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265660>



# Department of Economics

## A) Specific Areas of Research Activities

- » Agricultural Economics
- » Rural Development and allied areas
- » Environmental Economics
- » Human Development
- » Monetary Economics
- » Economics of Natural Resources
- » Economics of Higher Education
- » Gender Economics
- » Industrial economics
- » Economics of Health
- » Economics of Co-operatives

## B) Profile of faculty members and their expertise

### Dr Kinjal Ahir

M.A., Ph. D.  
Associate Professor  
<https://spuvvn.irins.org/profile/172888>

### Dr Sonal Bhatt

M.A., M. Phil, Ph.D  
Associate Professor  
<https://spuvvn.irins.org/profile/265612>

### Dr J. K. Barot

M.A., Ph. D.  
Associate Professor  
<https://spuvvn.irins.org/profile/265610>

### Dr Vijay S. Jariwala

M.A., Ph. D.  
Associate Professor  
<https://spuvvn.irins.org/profile/264989>

### Dr Bhaveshkumar R Parmar

M.A, M.Phill, Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/290712>

### Mr. Hitesh R. Luhar

M.A., M. Phil.,  
Assistant Professor  
<https://spuvvn.irins.org/profile/290521>

### Mr. Ashishkumar R. Vasava

M.A., M. Phil  
Assistant Professor  
<https://spuvvn.irins.org/profile/288785>

### Dr Rajnikant P. Parsaniya

M.A., M. Phil, Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/252898>





# Department of Education

## A) Specific Areas of Research Activities

- » Researches on Pedagogical aspects for School subject Science and Technology
- » Advanced Cognitive Science in Learning perspective
- » Advance Educational Psychology
- » Teacher Education
- » Indian Knowledge System

## B) Profile of faculty members and their expertise

### Dr Paresh B Acharya

M.Sc., M. Ed., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/243826>

### Dr Alka J. Macwan

M.A., M. Ed., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265630>

### Dr Bhumikaben J. Barot

M.Com., M. Ed., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/283596>

### Dr Amrita J Marshal

M.A., M. Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265619>

### Dr Mohitgiri Goswami

M.A., M. Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/241280>

### Dr Hashmukh L. Rathwa

M.A., M. Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265616>

### Dr Rita A. Parmar

M.A., M. Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/241303>



## Department of Hindi

### A) Specific Areas of Research Activities

» Hindi Language, Literature

### B) Profile of faculty members and their expertise

#### Dr D.S.Tripathi

Ph. D.

Professor

<https://spuvvn.irins.org/profile/245631>

#### Dr Dilip Mehra

M.A., M.Phil., Ph.D.

Professor

<https://spuvvn.irins.org/profile/281729>

#### Dr H. M.Parmar

Ph. D.

Associate Professor

<https://spuvvn.irins.org/profile/265646>

#### Dr Seema. R. Rathod

Ph. D.

Assistant Professor

<https://spuvvn.irins.org/profile/265645>

#### Dr Anila M. Mishra

Ph. D.

Assistant Professor

<https://spuvvn.irins.org/profile/265644>

#### Dr Parvati Gosai

Ph. D.

Assistant Professor

<https://spuvvn.irins.org/profile/265643>





## Department of Psychology

### A) Specific Areas of Research Activities

- » Social psychology
- » Industrial Psychology
- » Counseling
- » Organizational Behaviour
- » Clinical Psychology
- » Disability & Abnormal
- » Special Children

### B) Profile of faculty members and their expertise

#### Dr S. M. Makvana

M.A., M.Phil., Ph.D.

Professor

<https://spuvvn.irins.org/profile/265680>

#### Dr Samir J Patel

M.A., Ph.D.

Professor

<https://spuvvn.irins.org/profile/30280>

#### Dr Pankaj S. Suvera

M.A., M.Phil., Ph.D

Professor

<https://spuvvn.irins.org/profile/265678>

#### Dr Sangita N. Pathak

M.A., M.S.W., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265679>





# Department of English

## A) Specific Areas of Research Activities

- » Discourse Analysis
- » War and Literature
- » Queer Studies
- » Partition Literature
- » Literature, Film and Media Studies
- » Studies of Race and Gender
- » Environment and Literature
- » Translation Studies
- » English Language Teaching
- » Influence and Integration of Technology in Teaching, Learning and Assessment Activities
- » Digital HumanitiesB) Industries availing analytical services

## B) Profile of faculty members and their expertise

### Dr Parul Popat

MA (English), PhD  
Associate Professor  
<https://spuvvn.irins.org/profile/152847>

### Dr Manish R. Solanki

MA, Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/294540>

### Dr Pranava J. Dave

MA, Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/294532>

### Dr Piyush B. Raval

MA, Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/287105>



## Department of Gujarati

### A) Profile of faculty members and their expertise

#### Dr Pinakini Pandya

M.A., M.Phil, Ph.D

Professor

<https://spuvvn.irins.org/profile/265642>

#### Dr Param Pathak

M.A., Ph.D

Professor

<https://spuvvn.irins.org/profile/290472>

#### Dr Mahendra Nayee

M.A., Ph.D

Professor

<https://spuvvn.irins.org/profile/295177>

#### Dr Sudha Chauhan

M.A., M.Phil, Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265641>

#### Dr Rameshchandra Chaudhri

M.A., M.Phil, Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/282284>

#### Dr Rajeshvari Patel

M.A., M.Phil, Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265639>





# Department of History

## A) Profile of faculty members and their expertise

### Dr J. M. Pandya

Ph. D.

Professor

<https://spuvvn.irins.org/profile/32447>

### Dr S. B. Solanki

Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265650>

### Dr Vasantkumar R Patel

Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265648>

### Dr D. C. Chaudhari

Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265647>

### Dr Hemant. Dave

Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265649>





## Department of Political Science

### A) Specific Areas of Research Activities

- » Panchayati Raj, Indian Freedom Struggle and Politics and International Relations.

### B) Profile of faculty members and their expertise

#### Dr Baldev Agja

M.A. M.Phil, Ph.D

Professor

<https://spuvvn.irins.org/profile/265677>

#### Dr Arpit Patadiya

M.A., M.J.S., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/193386>



## Department of Sanskrit

### A) Specific Areas of Research Activities

- » Sanskrit Poetics, Classical & Sanskrit Literature, Vedant, Vyakarana & Nyaya

### B) Profile of faculty members and their expertise

**Prof. Dr Niranjan P. Patel**

Ph.D.

Professor

<https://spuvvn.irins.org/profile/265682>

**Dr Priyankkumar N. Raval**

Ph.D.

Assistant Professor (Adhoc)

**Dr Mahesh G. Patel**

Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265681>





# Department of Social Work (MSW)

## A) Specific Areas of Research Activities

- » Medical & Public Health
- » Psychiatric Social Work
- » Correctional Social Work
- » Human Resource Management
- » Change Management
- » Social Psychology
- » Social Entrepreneurship
- » Aging & Gerontology
- » Youth Welfare
- » Gender Equity
- » Community Development
- » Emotional Quotient (EQ)
- » Corporate Social Responsibility
- » Human Resource Development
- » Organizational Behaviour & Development
- » Industrial Psychology
- » Child Development
- » Disability
- » Life Skill Education

## B) Industries availing analytical services

- » GIPCL, Bharuch
- » CEAT tyres, Vadodara
- » Meet Manpower Solutions, Vadodara
- » Shri Parmukh Swami Medical College, Karamsad
- » IWMI, Anand
- » Skill Guru Academy, Ahmedabad

## C) Profile of faculty members and their expertise

**Dr Shivani Mishra**  
MSW, Ph.D.  
Professor  
<https://spuvvn.irins.org/profile/278240>

**Dr Manisha Parmar**  
MSW, Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/291051>

**Dr Maukshita Dhangadhariya**  
MSW, Ph.D.  
Assistant Professor (Adhoc)  
<https://spuvvn.irins.org/profile/265686>

**Dr Bigi Thomas**  
MSW, Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/265687>

**Ms. Anamika Christi**  
MSW, Ph.D. (Pursuing)  
Assistant Professor  
<https://spuvvn.irins.org/profile/291054>

**Dr Radha Shukla**  
Ph. D.  
Assistant Professor (Adhoc)  
<https://spuvvn.irins.org/profile/265683>





## Department of Sociology

### A) Profile of faculty members and their expertise

**Dr I. M. Macwan**

Ph.D.

Professor & Hon. Director of Dr Babasaheb Ambedkar Chair

<https://spuvvn.irins.org/profile/265690>

**Dr M. M. Makwana**

Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265688>

**Dr Ramesh H. Makwana**

Ph.D.

Professor

<https://spuvvn.irins.org/profile/265689>



## Department of Law

### A) Specific Areas of Research Activities

- » Constitutional law
- » Insurance Law
- » Cyber Law
- » Criminal Law
- » Family Law
- » Law on Women and Child and such other

### B) Profile of faculty members and their expertise

#### Ms. Mamta Karkar

Assistant Professor

<https://spuvvn.irins.org/profile/265657>

#### Ms. Pragnya Kansara

Assistant Professor

<https://spuvvn.irins.org/profile/265656>

#### Ms. Sneha Marathe

Assistant Professor

<https://spuvvn.irins.org/profile/295973>

#### Ms. Dwiti Vyas

Assistant Professor

<https://spuvvn.irins.org/profile/295814>





# Department of Library & Information Science

## A) Specific Areas of Research Activities

- » Institutional Repository, Knowledge Management,
- » Corporate librarianship, Information Seeking Behavior,
- » Library Networking, bibliometric
- » Study, Internet of Things,
- » Scientometrics Study, Academic Social Networks,
- » Research Data Management,
- » LIS Education and Research,
- » Digital Library in Vernacular Language,
- » Library Consortium, Web based Services. Open Access.

## B) Profile of faculty members and their expertise

### Dr N.D. Oza

MLISc, Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/49725>

### Dr Shishir Mandalia

M.Sc., MLISc, Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/209241>

### Dr Jignesh C. Makwana

Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/265659>

### Dr Meghna Vyas

Ph.D.  
Associate Professor  
<https://spuvvn.irins.org/profile/57538>

### Dr Lavji N. Zala

Ph.D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/90441>

## C) Industries availing analytical services

- » Analysis of required and anticipated need of information may be operated through collective engagements which may be useful in many areas such as production, sales, marketing, packaging, etc.





# M B Patel College of Education

## A) Specific Areas of Research Activities

- » Innovative Practices in Teaching
- » Advanced Pedagogy
- » Standardization of Tests
- » Integration of Technology
- » Curriculum Development
- » Recent Issues : Environmental awareness

## B) Profile of faculty members and their expertise

### Dr Hitesh P. Patel

M.Com., M.Ed., Ph.D.

Principal

<https://spuvvn.irins.org/profile/291432>

### Dr Amitaben B. Patel

M.A., M.Ed., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265631>

### Dr Neepaben D. Bharucha

M.Sc., M.Ed., Ph.D.

Associate Professor

<https://spuvvn.irins.org/profile/265632>

### Dr Jitendra B. Patel

M.Sc., M.Ed., M.Phil., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265628>

### Dr Jayshree Kantilal Dave

M.A., M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265626>

### Dr Deepalee Ambalal Mahida

M.A., M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265627>

**Dr Urmilaben G.Gamit**

M.A., M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265620>

**Dr Rinaben N. Vohra**

M.Com., M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265614>

**Dr Gopalbhai Bathabhai Bharvad**

M.A, M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265624>

**Mr. Ashwinkumar H. Rathava**

M.A., M.Ed.

Assistant Professor

<https://spuvvn.irins.org/profile/265625>

**Dr Samir Bhupendrakumar Vaghrodia**

M.A., M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/291100>

**Dr Rajeshkumar Ishwarbhai Bhatt**

M.Com., M.Ed., M.Phil., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265618>

**Dr Neha Jethabhai Nandaniya**

M.A.(Guj), M.Phil. (Edu), Ph.D., NET

Assistant Professor

<https://spuvvn.irins.org/profile/265622>

**Mr. Dilipbhai Jaysing Vasava**

MA, M.Ed., PhD, Pursuing

Assistant Professor

<https://spuvvn.irins.org/profile/265621>

**Dr Payal Rameshbhai Bhatia**

M.Com, M.Ed. Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/288315>

**Dr Samir Dilipbhai Ajmeri**

M.A., M.Ed., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265629>

**Dr Jetalkumar J. Panchal**

M.Sc., M.Ed., M.Phil., Ph.D.

Assistant Professor

<https://spuvvn.irins.org/profile/265617>

**Mr. Brijeshkumar Balubhai Chaudhari**

M.Sc., M.Ed.

Assistant Professor

<https://spuvvn.irins.org/profile/265623>





# UGC Human Resource Development Centre

## A) Profile of faculty members and their expertise

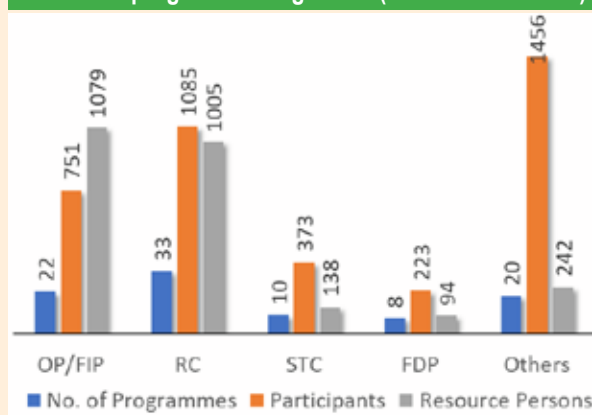
Dr Mitesh M. Jayswal

MBA, Ph.D. (Management)

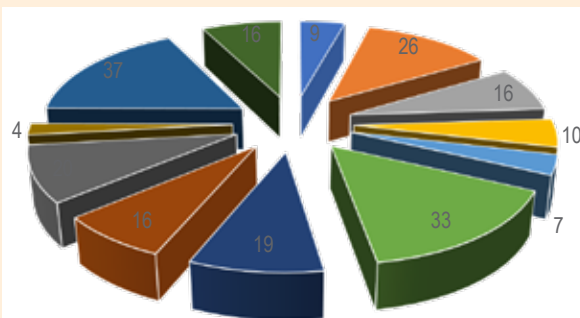
Hon. Director

<https://spuvvn.irins.org/profile/94935>

Details of programmes organized (2016-17 to 2021-22)

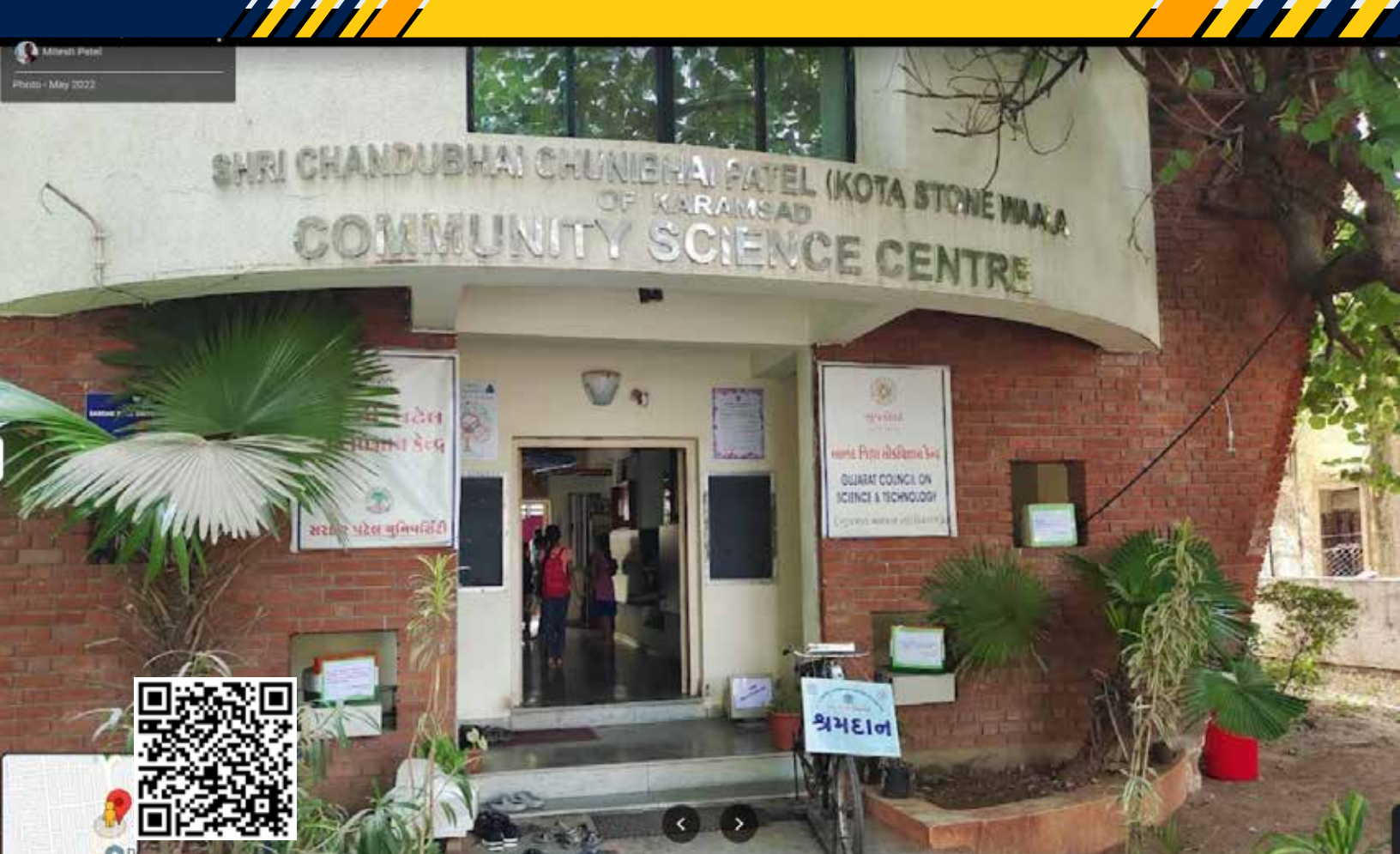


## Areas in courses were organized



- Ethics [9]
- Research Methodology [16]
- Gender, Marg. Communities [7]
- Communication Skills [19]
- Plagiarism [20]
- Microteaching [37]
- Environment [26]
- Agricultural Sciences [10]
- Mobile Applications [33]
- e-content Development [16]
- Basic legal awareness [4]
- Disaster Management [16]





# Community Science Centre

## A) Specific Areas of Activities

- » Imparting Education about Science and Technology useful to the Community
- » Demonstration of Science and Maths Models
- » Poster Exhibition
- » Competitions/Celebrations
- » Awareness Generation Programmes
- » Training Programmes/Workshops

## B) Profile of faculty members and their expertise

**Dr (Miss) Vibha S. Vaishnav**

M.Sc., Ph.D. (Electronics)

Honorary Director

<https://spuvvn.irins.org/profile/265636>

**Dr Vijaykumar K. Parmar**

M.Pharm, Ph.D.

Honorary Jt. Director

<https://spuvvn.irins.org/profile/208368>

### Mission:

- » Science to People People towards Science
- » Inclusive Approach
- » Average Activities per year : >300
- » Average number of Beneficiaries : > 50,000 per year





# Agro - Economic Research Centre

## A) Specific Areas of Research Activities

- » Village Surveys and Resurveys
- » Agricultural Production & Resource Economics, Prices & Incomes Policy
- » Biotechnology in Agriculture, SRR, Post-Harvest Losses, Crop Insurance, Crop diversification, Crop Cutting Experiments, Farm Profitability
- » Water Management, Participatory Irrigation, Micro irrigation Systems, Skill Gap, NWDPRA
- » Agricultural Credit, Credit plus, KCC
- » Agriculture Marketing, Post-harvest Management
- » Agrarian Crisis and Farmers Suicides
- » Use of Renewable Energy Sources for Agriculture
- » Dairy development, Economics of Milk Production, Cost of Milk Production, RBP, Break Even Point, Livestock Fodder
- » Fishery Development, Post-harvest losses
- » Export Marketing of Agriculture and Allied output
- » Parampangat Krishi Vikas Yojana, Organic Farming, Natural Farming, MSP, Decentralized Procurement, MIS
- » Market Risk, Government Interventions, eNAM, Emerging marketing Channels
- » Contract Farming

## B) Industries availing analytical services

- » National Dairy Development Board (NDDB), Anand
- » Directorate of Economics and Statistics, Government of Gujarat,
- » IASRI, New Delhi, Directorate of Agriculture, Government of Gujarat
- » Irrigation Department, Government of Gujarat
- » National Dairy Research Institute, Karnal (Haryana)
- » Vidarbha and Marathwada Dairy Development Project, GOM, Nagpur.

## C) Profile of faculty members and their expertise

### Dr S. S. Kalamkar

M.Sc., Ph.D.  
Professor (Director)  
<https://spuvvn.irins.org/profile/281864>

### Dr Kinjal Ahir

M.A., Ph. D.  
Hon. Director  
<https://spuvvn.irins.org/profile/172888>

### Dr Hemant Sharma

M.Sc., Ph. D.  
Assistant Professor  
<https://spuvvn.irins.org/profile/282091>

### Dr. M. R. Ojha

M. A. (Economics)  
Research Associate

### Shri M. C. Makwana

M.A. (Economics)  
Research Associate

### Ms. Kalpana Kapadia

M. A., M. Phil. (Economics)  
Research Associate

### Dr. Thansingh B. Parihar

M. Sc., Ph.D.  
Research Associate





# Cost of Cultivation Scheme

## A) Specific Areas of Research Activities

- » Cost of cultivations studies
- » Field Survey
- » Data used for Fixation of Minimum Support Price (MSP)
- » Data Analysis

## B) Profile of faculty members and their expertise

### Dr Mitesh M. Jayswal

MBA, Ph.D. (Management)

Hon. Director

<https://spuvvn.irins.org/profile/94935>

### Dr Shantilal R. Bhaiya

MA, M.hil, Ph.D.

Field Officer

<https://spuvvn.irins.org/profile/283549>

## C) Profile of Technical Staff members and their expertise

### Mr. Gopal S. Machhi

MA, M. Phil (Economics)

Assistant Statistician

### Mr. Brijesh P. Pandya

M Sc (Agri.)

Field Supervisor

### Mr. Hemal U. Padhiyar

MA, M. Phil (Economics)

Field Supervisor

### Mr. Hitesh P. Makwana

MA, M. Phil (Economics)

Field Supervisor

### Mr. Vishal C. Chudasama

MA, M. Phil (Economics)

Field Supervisor

### Mr. Atishesh B. Chaudhari

MA (Economics)

Field Supervisor





# Community Radio Station

## A) Specific Activities

- » Daily program schedule covers Lectures, Debates, Panel discussions, Traditional Songs, University News, Cultural Programs, Health related Programs, Institutional Profiles, Admission related information,
- » Part time certificate program for students as well as for local community on "Radio Announcer and Art of Presentation"
- » During pandemic of COVID-19 station has run two major campaigns as a part of activities carried out by most of the community radio station in the country. Station has also successfully managed two campaign on Common YOGA Protocol, a venture of Ministry of AAYUSH

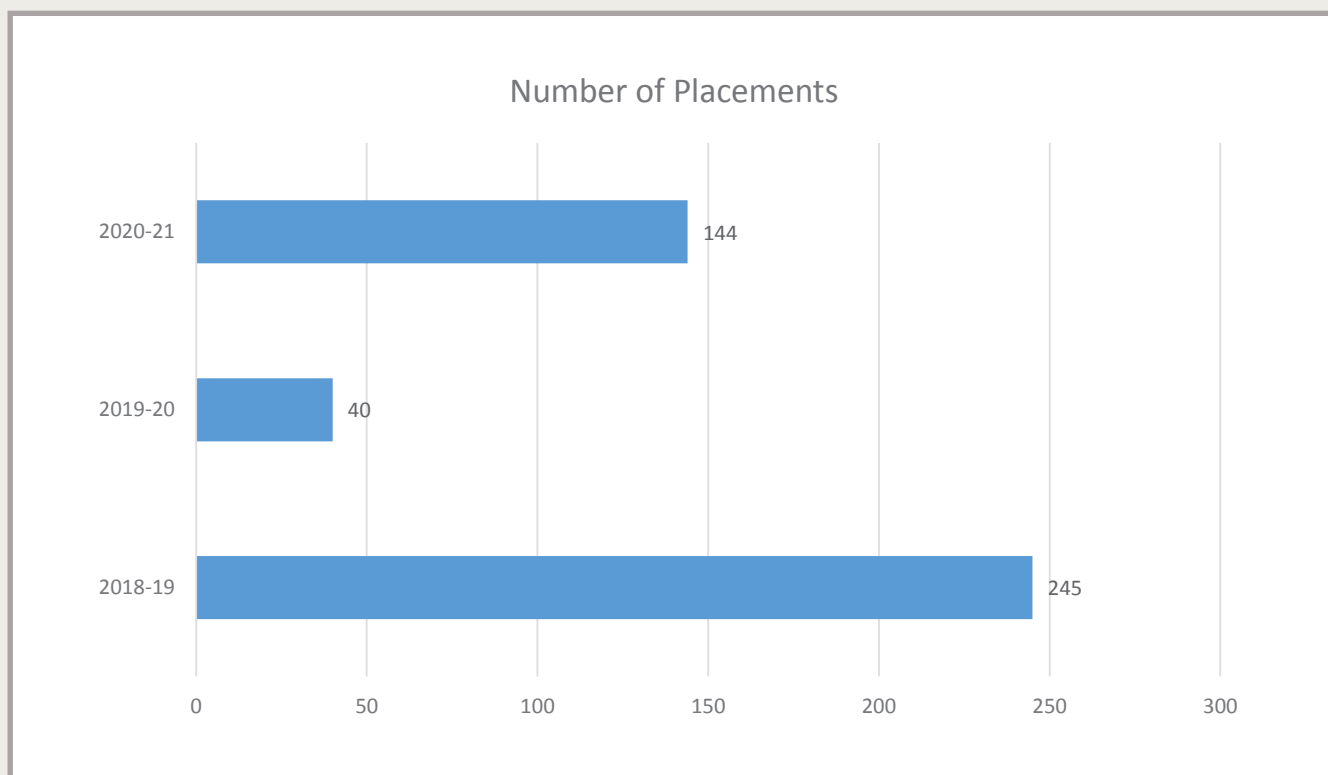


University song, Lectures, Debates, Panel Discussions, Traditional songs, University News, Cultural and Health related programmes, Talks for Stress Management, Institutional profile and admission related programmes, announcements.



- » **Radio Campus 90.4 FM**
- » **A non-commercial venture, established by University's own resources in 2004**
- » **The first of its kind in Gujarat State**
- » **Broadcasting power: 50W, Coverage: 15 Km**
- » **Programs are broadcast 5 hrs x 5 days a week**

# University for Placements



## Employers

A S Patel Arts College, Boriavi

Acadecraft Pvt.ltd

Accord Management

Accutest research laboratory pvt LTD

ADANI

Alembic Glasses

Allen career Institute

Anganwadi Training Centrer Near Rank Hospital

Anju Corporation, Akota, Baroda.

Anupam industries LTD

Apex heart institute

APIDEL, Vadodara

APOLLO MUNICH

Ashita consultancy

Astral Pipes

Atlanta, V. U. Nagar

Authentic Staffing Agency

B.Ed. Colleges Self-finance

Banco gaskets india ltd. Ankhi near jambusar

Bank of Baroda

Baroda Citizens Council

Baroque Pharmaceutical Pvt. Ltd.

Sokhda-388620, Ta-Khambhat, Dist-Anand.

Beacon Insurance

BEIL(Bharuch Enviro Infrastructure Limited) Ankleshwar

Bharat parenteral Ltd jarod

Bharuch Enviro infrastructure limited

Birla Grasim Ltd

BOB Swarojgar Vikas Sanstha

BOSCH Ltd

Botree Technologies Pvt Ltd.

Byju's

Code/caste Pvt. Ltd., Ahmedabad

Collabera

Concept Medical Researc Pvt Ltd, Surat.

DCB INDIA

Decathlon Sports Baroda Gotri Sevasi

Department of Computer Science

DETOX corp pvt ltd

Dhavat Infotech Private Limited

Dipak Foundation

D'Mart

Don Bosco Snehalaya, Vadodara

Durga group of companies

Dynamic Industry, Jambusar

Evision IT Solution

EVOSYS

Father agnel institute of Technical Training

Geetanjali Vidhyalay,padra,Vadodara

Glenmark Life Sciences

Global job placement - morbi

Government of Gujarat

Govt. of Gujarat (Assistant Professor/ Lecturer Through GPSC)

Gujarat security service ,center point





alkapuri, Vadodara

Gujarat State Trasport nigram Gandhinagar

HDFC BANK

HDFC LTD

HFFC, Mumbai

ICICI BANK Ltd

ICICI Prudential

ICICI SECURITIES

IDBI Bank

IITE, GANDHINAGAR

INDUS IND BANK

infotech management consultancy

IRMA

Itechnotion pvt Ltd

IWMI-Tata Water policy program

"Jal Tarang" near smruti  
apartment, Anand, Gujarat

J K Paper

Jvs technology Pvt Ltd

K K Chokshi Associates, , Vadodara

Kisd Brain Power

Knovos India Pvt Ltd

Labour Office, Bharuch

Learning Links Foundation

Lenden Club (Mumbai)

Leo Consultancy

Logilite Technologies

Lotus Hospitals for Childern & Women

Lupin Ltd. Ankleshwar

Mahavir Trauma/Cardica Hospital, Surat

Mamlatdar Kacheri, Jetpur, Rajkot

Matushree Monghiba Mahila Arts College-  
Amreli

MCN corporation Surat

MD India Health Care

Motherhood Hospital

MRF Ltd. Dahej

Nano Teach Department AAU

Narola infotech solutions LLP



National Cooperative Dairy Federation of India Limited  
 National sample survey office Vadodara  
 Ncoresoft Technology  
 Neelkanth Placement Services, Vadodara  
 Nielsen (India) Private Limited  
 Nutech jetting equipment india pvt ltd  
 Nutrition, Mitram Enterprise  
 O2h Discovery Pvt.Ltd  
 Odyssey solution  
 Olakh  
 Parul Univeristy  
 PCIBL

Pehalwan Gym & Fitness  
 Piramal  
 Prakash Chemicals  
 Prakash Software Solutions Pvt. Ltd  
 Primary School Gujarat Government  
 QuestInfosoft Pvt Ltd  
 Ratu Agro Bhumi  
 Recruitment Bazar  
 Rigel Network  
 Rojgari Placements Pvt Ltd  
 S & P GLOBAL  
 Saksham Resources  
 Sarmount laboratories Pvt LTD.

Ankleshwar  
 SARTHI CONSULTANTS  
 Shree Krishna hospital Karamsad  
 Skynet outsourcing services, , Vadodara  
 Social Keen Youth  
 Spandan Multispeciality Hospital Manjalpur, Vadodara  
 ST,GCR,GoG  
 Stellar Formulations industry pvt.ltd  
 SUN PHARMA  
 Sunshine Globle Hospital, Majalpur, Vadodara  
 Swiss Glasscoat Equipment Ltd



Synzeal Research Pvt.Ltd.

Talent Corner HR Service pvt. Ltd.

TARKESH & NIRANJANA SURESHBHAI  
PATEL COMMERCE COLLEGE , BORIAVI

TCS

Tha Maharaja Sayajirao Univerisy, Baroda

Thakorji Farmer producer co.op society,  
kurchan

Torrent Cables

Trust TAGS

Varahaa steelworks Pvt Ltd

Vijay tanks and vessels private limited

VIRAJ PROFILES LIMITED

Vodafone-idea Ltd, Ahmedabad

Vrindi India Pvt. Ltd

Way to Web Pvt. Ltd

Wockhardt Hospitals, Nasik

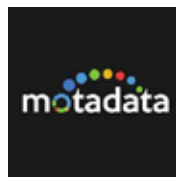
WovV Tech

Zydus Healthcare Limited, Ahmedabad

Zydus Hospital

Zydus Research Centre

Zyduscadila Healthcare Ltd,Dabhasa







## Consultancy Projects

Name of the Department	Name of consultancy project	Consulting/Sponsoring agency with contact details	Year	Revenue generated (INR in Lakhs)
Department of Applied and Interdisciplinary Sciences	Quantification of Immunosuppressive drugs in blood samples	Muljibhai Patel Urological Hospital, Nadiad Phone: 0268 252 0323	2019-20	5.40
	Quantification of Immunosuppressive drugs in blood samples	Muljibhai Patel Urological Hospital, Nadiad Phone: 0268 252 0323	2020-21	3.71
Department of Physics, Sardar Patel University	Experimental Investigation of transient Heat Inleaks in Liquid nitrogen Criostat	GCET Engineering College, V. V. Nagar. Phone: +91-02692-231651 EXT:203	2016-17	0.01
	Hall Measurement Setup	GMM Pfaudler, Karamsad. Phone: +91 2692 661700	2018-19	0.1
	Fabrication of Laboratory Setup to measure Thermoelectric Power at Variable Temperature Range	Department of Physics, M.S. University of Baroda, Vadodara. Phone: +91 265 2795339	2019-20	0.15
	Measurement of Scientific Parameters for Pulse Electro Magnetic Field	Parth electronics Pvt. Ltd., V. U. Nagar. Phone: +91 9408125311	2019-20	0.04
	Thermoelectric Power Measuring Unit	Department of Physics, M.S. University of Baroda, Vadodara. Phone: +91 265 2795339	2020-21	0.15

Department of Biosciences	Production and R&D activities of the Tissue Culture Laboratory of Kutch Crop Services Ltd.	Tissue Culture Laboratory, Kutch Crop Services Ltd., Mundra-370421 Ph. 02832 223258 E-mail: indiadata@gmail.com	2017-18	1.25
	Production and R&D activities of the Tissue Culture Laboratory of Kutch Crop Services Ltd.	Tissue Culture Laboratory, Kutch Crop Services Ltd., Mundra-370421 Ph. 02832 223258 E-mail: indiadata@gmail.com	2018-19	6.00
	Production and R&D activities of the Tissue Culture Laboratory of Kutch Crop Services Ltd.	Tissue Culture Laboratory, Kutch Crop Services Ltd., Mundra-370421 Ph. 02832 223258 E-mail: indiadata@gmail.com	2019-20	0.43
Department of Social Work	Baseline survey on Solar Farming at Mujkva	International Water Management Institute, Colombo, Sri Lanka T: +94112880000 E-mail: iwmi@cgiar.org	2017-18	2.00
	Skill based Tourism Training Course	Skill Guru Academy, 5th Floor, Lokmanya College Campus, Behind HP Petrol Pump, Near Shivrangani cross road, Satellite, Ahmedabad - 380015 Phone: +91 7698121122 E-mail: info@skillguru.com	2019-20	11.1
Department of Economics	Report on Dhundi Saur Urja Utpadak Sahkari Mandali Ltd.	International Water Management Institute, Colombo, Sri Lanka T: +94112880000 E-mail: iwmi@cgiar.org	2018-19	1.00

# MoUs of Sardar Patel University

Sr. No.	Name of the Company	Purpose of MoU
1	Institute of Rural Management (IRMA), Anand	Development of Academic Orientation, Guidance to identify research area, Interdisciplinary orientation, etc
2	Atmiya University, Rajkot	Sharing the facility with each other, Joint visit of research institute and industries
3	CHARUSAT, Changa	Academic, Research and Scientific cooperation, Sharing HR facility, Joint program, Research activity
4	Gujarat Institute of disaster management, Government of Gujarat, Gandhinagar	Academic and professional activities, Student exchange, Scientific research, Consultancy, Training programs on Disaster Risk Management
5	Saurashtra University, Rajkot	Faculty training, Seminars and workshops, Refresher courses, Collaborative projects, internships
6	Uka Tarsadiya University, Bardoli	Faculty training, Seminars and workshops, Refresher courses, Collaborative projects, internships
7	Kadi Sarva Vishva vidyalay, Gandhinagar	Faculty training, Seminars and workshops, Refresher courses, Collaborative projects, internships
8	Maharaja Krishnakumarsinhji Bhavnagar University	Faculty training, Seminars and workshops, Refresher courses, Collaborative projects, internships
9	O2h discovery, Changodar	Course curriculum development activity as per the need of industry, Students training, Students Internship, Institutional-Industry facility sharing
10	Hemchandracharya North Gujarat University, Patan	Faculty training, Seminars and workshops, Refresher courses, Collaborative projects, internships
11	SynZeal Research Pvt Ltd., Ahmedabad	Course curriculum development activity as per the need of industry, Students training, Students Internship, Institutional-Industry facility sharing
12	Yog board, Gandhinagar	Training and various activities related to Yoga education
13	State Modeller, Vadodara	Collaborative research projects, student internship and training, Data analysis, Joint consultancy, Job work
14	Sri Swaminarayan Research Centre, Vadtal	Students training, Multidisciplinary projects, Skill development workshops
15	BAPS Swaminarayan Sansthan	To carry out IPDC Course
16	Bhaikaka University, Gokalnagar, Karamsad	Students training, Multidisciplinary projects, Skill development workshops, Mental health related drives
17	Sameer Laundry Care Pvt. Ltd., Pune	Laundry services to students and in-house linen in the hostel, Washing cloths and drying
18	Students For Development, Anand	Tree Plantation Drive and Environment Awareness



## Department MoUs

Sr. No.	Department	Name of the Company	Purpose of MoU
1	Pharmaceutical Sciences	PNP Analytical Solution GIDC Vadodara	Training of students, sharing of library resources, Project/Programs collaboration, Guidance for licensing approval for laboratories, Analytical process development
2	Pharmaceutical Sciences	M/s Purple Inc. Ahmedabad	Vocational Training of students, Campus placement activity, Lectures arrangement, Joint seminar/conferences
3	Pharmaceutical Sciences	M/s Iconnector Pharma, Vadodara	Research consultancy, Students internship, Vocational training, Campus placement activity, Lectures arrangement, Joint seminar/conferences
4	Pharmaceutical Sciences	Amanta Healthcare Ltd, Ahmedabad	Research consultancy, Students internship, Vocational training, Campus placement activity, Lectures arrangement, Joint seminar/conferences
5	Computer Science and Technology	VI Infotech, Anand	Institution, Industry visit programs, Training of students
6	Social Work	Kunariya Village, Bhuj, Kutch	Promotion of Extension activities during Rural Camp, Research Programs, Field projects, Virtual Learning
7	Social Work	Yashwant Rao Chawan School of Social Work, Jakatnaka, Satara College	Collaboration, Co-operation & Interaction, Research Development programs, Study tour, Student Exchange Programs
8	Social Work	Score Livelihood Foundation	Student's Internship, Field Action Project, Extension Activities, Research Development, Campus Placement
9	Social Work	Faith Foundation	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
10	Social Work	Kripa Foundation	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
11	Social Work	Bhavesh Vyas and Associates	Field Work Internship, Research Development, Implication of Certificate Course for students, Field Action Project, Campus Placement
12	Social Work	Nivedita Foundation	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
13	Social Work	HelpAge India	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
14	Social Work	72 East Production	Add-on Course cum training program for students, Research Development, Curriculum Designing in Life skill course
15	Social Work	Ravipura Village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.
16	Social Work	Vaghasi Village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.
17	Social Work	Gana village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.
18	Social Work	Ajarpura Village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.
19	Social Work	Morad Village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.
20	Social Work	Ardi Village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.
21	Social Work	Porda Village	Student's Internship, Field Action Project, Extension Activities Research Development, Life Skill Education.

22	Social Work	Udaipur School of Social Work	Collaboration, Co-operation & Interaction, Research Development programs, Study tour, Student Exchange Programs
23	Social Work	Don Bosco Snehalaya	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
24	Social Work	Madhuvan Foundation	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
25	Social Work	Vidya Wires Pvt. Ltd.	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
26	Social Work	LEAAD	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
27	Social Work	Tilak Maharashtra Vidyapeeth	Collaboration, Co-operation & Interaction, Research Development programs, Study tour, Student Exchange Programs
28	Social Work	CMR University	Collaboration, Co-operation & Interaction, Research Development programs, Student Exchange Programs
29	Social Work	Blind People's Association	Student's Internship, Field Action Project, Extension Activities Research Development, Campus Placement
30	Electronics	Sardar Patel college of Education (SPEC)	Industrial training and visit, Guest lectures, Placement camps, Collaborative academic activity
31	Humanities	Bhaikaka University, Karamsad	Collaborative Research and Development activities, Education Training, Joint Projects
32	Computer Science and Technology	K & M Technoguide Infosoft Pvt. Ltd., Anand	Guest lectures, Visits, Training programs
33	Computer Science and Technology	Dhavat Infotech Pvt. Ltd., Anand	Guest Lectures, Placement drive, Industrial Training and Visit
34	Computer Science and Technology	Webient IT Solutions, Ahmedabad	Guest Lectures, Placement drive, Industrial Training and Visit

## MoUs under NEP - 2020

Sr. No.	Department	Name of the Company	Purpose of MoU
1	Business Studies	Vitthal Udyognagar, Vallabh Vidyanaagar	Curriculum Design, Industrial training and Visit, Skill development program, Guest Lecture
2	Sociology	Department of Sociology, Saurashtra University, Rajkot	Collaborative research and publications, Participation of Seminars and academic activities, Short term programs, Joint conferences
3	Business Studies	RFRF Nagpur	Nurturing Research, Innovation and Creativity among students
4	Sociology	Kapadwanj Don Bosco Society managed Don Bosco Rural Integral Social Training Institute (DRISTI), Kapadwanj	Curriculum design, Social training and visit

## Accreditation, Ranking and Rating

<b>NAAC</b> Cycle – I (2001-2006) <b>Four Star</b> Cycle – II (2006-2011) <b>B (2.86 CGPA)</b> Cycle – III (2017-2021) <b>A (3.25 CGPA)</b>	<b>QS Asia</b> Year 2023 <b>451-500</b> Year 2022 <b>451-500</b> Year 2021 <b>401-450</b>	<b>GSIRF</b> Year 2019-20 <b>Four Star</b> Year 2020-21 <b>Four Star</b> Year 2021-22 <b>Four Star</b>	<b>QS India</b> Year 2019 <b>55</b> Year 2020 <b>62</b>
<b>QS Southern Asia</b> Year 2023 <b>115</b>	<b>QS Southern Asia</b> Year 2023 <b>115</b>	<b>QS BRICS</b> Year 2019 <b>231-240</b>	<b>Outlook</b> Year 2022 <b>69</b> Year 2021 <b>69</b>

## Participation in NIRF, GSIRF and SRA



**Rank (101-150)**  
**2017-18 & 2018-19**



**Rank (4 Star)**  
**2019-20 & 2020-21**

**Other quality audit recognized by state, national or international agencies**

» **All India Council for Technical Education (MBA & MCA)**

2016-17, 2017-18, 2018-19, 2019-20, 2020-21

» **Pharmacy Council of India (Pharmaceutical Science)**

2017-18, 2018-19, 2019-20, 2020-21



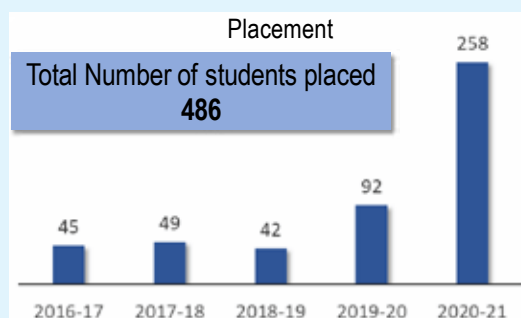
# Innovation Ecosystem

## Student Startup and Innovation [SSIP-SPU Navadhara]

- » Total projects sanctioned (PG and PhD) **10**
- » Total Funds Sanctioned for PoCs/ Prototypes **Rs. 9 Lakhs**
- » SECTION - 8 COMPANY (SP-SEC)



## Student Progression



- » % of students progressing to higher education (2020-21) **39.9**
- » Average % of students clearing competitive exams **20.84**

Few Prominent recruiters



# Major Research Sponsors



विज्ञान एवं  
प्रौद्योगिकी मंत्रालय  
MINISTRY OF  
SCIENCE AND  
TECHNOLOGY



उच्च प्रौद्योगिकी विभाग  
Department of Biotechnology  
Ministry of Science & Technology  
Government of India



GUJARAT COUNCIL ON  
SCIENCE & TECHNOLOGY

Department of Science & Technology  
Government of Gujarat



भारतीय इतिहास अनुसंधान परिषद  
INDIAN COUNCIL OF HISTORICAL RESEARCH  
(An Autonomous Body under the Ministry of Education, Government of India)



ग्रामीण विकास मंत्रालय  
भारत सरकार  
MINISTRY OF RURAL  
DEVELOPMENT  
GOVERNMENT OF INDIA



Equity  
Efficiency  
Sustainability  
WRD



CIPT  
Centers for International  
Projects Trust



Government of  
Maharashtra



माननीय प्रधान मंत्री श्री नरेंद्र मोदी जी ने हाल ही में सरदार पटेल विश्वविद्यालय में ग्रामीण विकास पर किए गए कार्यों का उल्लेख और सराहना की है।

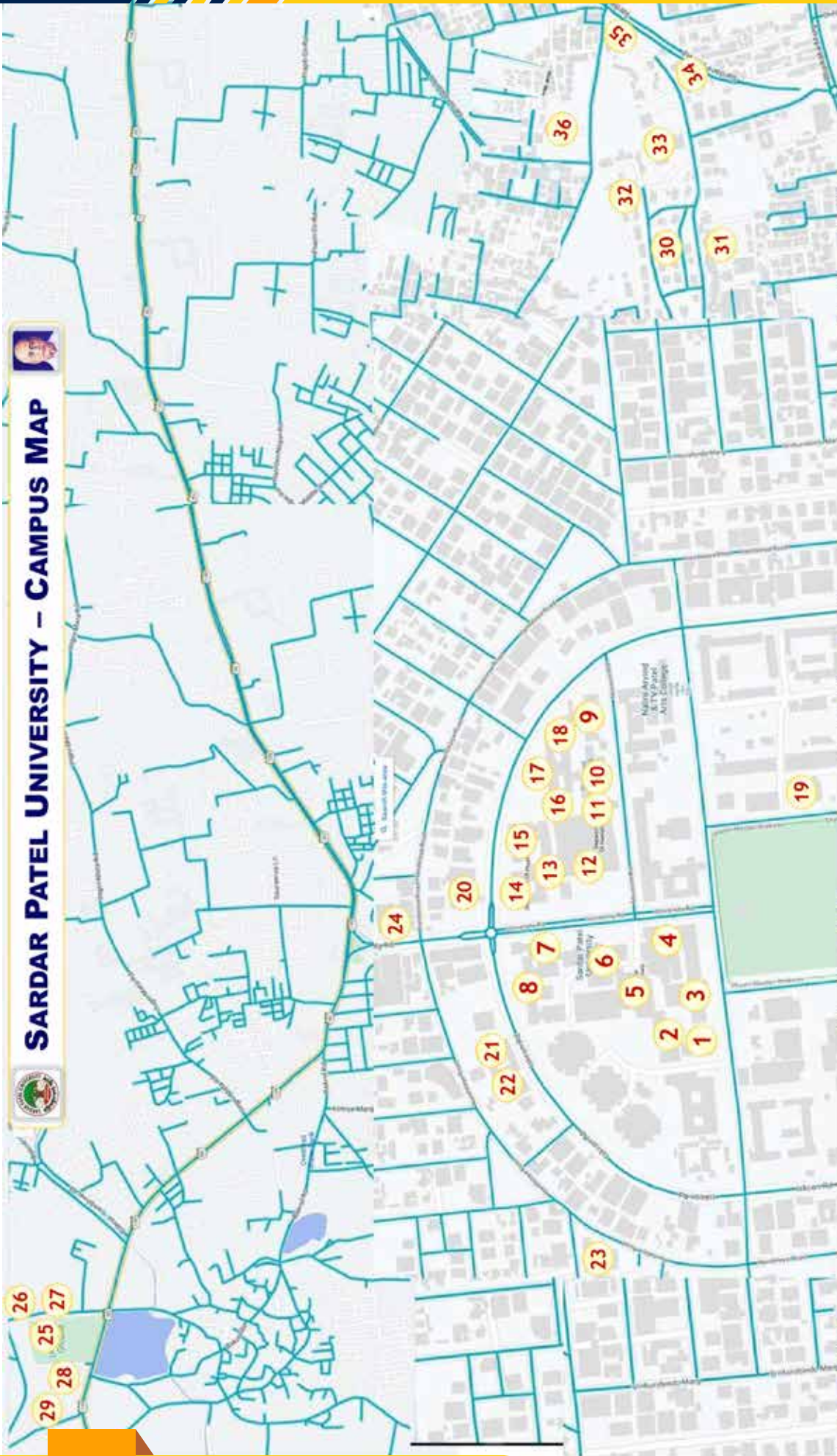
७ - ९ जुलाई २०२२ वाराणसी, उत्तरप्रदेश में UGC द्वारा आयोजित NEP - 2020 के सन्दर्भ में देश के विभिन्न युनिवर्सिटी के वाइस चान्सेलर का सम्मेलन।

मुझे याद है मैं गुजरात में था , तो एक बार सरदार पटेल युनिवर्सिटी में मेरा कार्यक्रम था सरदार पटेल युनिवर्सिटी के लोगोंने रूरल डेवेलोपमेंट में काफी रिसर्च करके कुछ किताबें तैयार की थी। उस दिन उन्होंने मुझे गिफ्ट की। मैंने जरा बड़ी बारीकी से उनको देखा मुझे बड़ा इंटरेस्ट लगा। मैंने डिपार्टमेंट को काम दिया। मैंने कहा की भाई ये जो स्टूडेंसने जो काम किया हैं आप जरा देखिये सरकार जहाँ जा रही है और बच्चे जो कह रहे है इसमें कितना अंतर है और आप हैरान हो जाएंगे उसमें से बहुत सी चीज़ें मुझे रूरल डेवेलोपमेंट के मेरे काम में इतनी मदद आई। विध्यार्थीओने, टीचर्सने किया हुआ काम था जो सरकार में एयर कंडीशन कमरों में बैठकर निर्णय करना मुश्किल होता है जी। जो फील्ड में हमारी पीढ़ी जाती है उसका बहुत ही अच्छा अर्क निकाल के ले आती है और कुछ चीजों का कल्पना बाहर का लाभ हुआ हो येभी ध्यानमें आता है।





# **SARDAR PATEL UNIVERSITY – CAMPUS MAP**



No.	Name of Unit
1	Home Science
2	University Press
3	Bhaikaka Library
4	Business Studies, Mathematics , Statistics
5	MSW, Pharmaceutical
6	University Office
7	Materials Science
8	Chemistry
9	Health Centre

No.	Name of Unit
10	Museum
11	Hindi
12	Humanities
13	Computer Centre
14	Physics
15	Education and MBPCE
16	USIC
17	University Ladies Hostel
18	University Guest House

No.	Name of Unit
19	CISST, SSIP
20	VC Bungalow
21	Electronics Science
22	Radio Station
23	Economics/AERC/CCC
24	CC Patel Community Science Centre
25	S P University Swimming Pool
26	Gymnasium
27	RTPCR Test Lab

No.	Name of Unit
28	Biosciences
29	UV Sports Complex
30	University Staff Colony
31	Hostels
32	Botanical Garden
33	Staff Quarters
34	Business Management (MBA)
35	Conference Hall
36	Computer Science & Technology

# National Education Policy

## 2020



is presented to

**SARDAR PATEL UNIVERSITY**

Vallabh Vidyanagar, Anand, Gujarat

for

ACCEPTING RESPONSIBILITY TO THE PUPIL AND PLANET

This award is presented virtually at

**5<sup>th</sup> GREEN SCHOOL  
CONFERENCE 2021**

Fri-Sat, September 24, 2021, New York, USA







## SARDAR PATEL UNIVERSITY Vallabh Vidyanagar

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