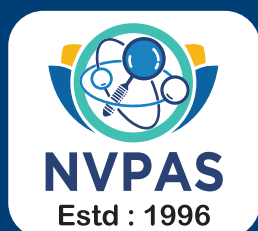




Abhivryakti

2022-23



**NATUBHAI V. PATEL COLLEGE OF
PURE AND APPLIED SCIENCES**

(A Constituent College of The CVM University)

Accredited "A" GRADE BY NAAC in 2009 and 2016,
Recognized under 2(f) and 12 (B) Act of UGC





राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the
Charutar Vidya Mandal's
Natubhai V. Patel College of Pure and Applied Sciences
Vallabh Vidyanagar, Dist. Anand, affiliated to Sardar Patel University,
Gujarat as
Accredited
with *CSPA* of 3.01 on four point scale
at **A** grade
valid up to March 16, 2021

Date : March 17, 2016



Director

BC/SC/13/A&A/34.2



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान
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Charutar Vidya Mandal's
Natubhai V. Patel College of Pure
and Applied Sciences
Vallabh Vidyanagar, Kola Bazaar, Dist. Anand, affiliated to
Sardar Patel University, Gujarat as
Accredited
with *CSPA* of 3.10 on four point scale
at **A** grade
valid up to March 07, 2014

Date : March 08, 2009



Director



GUJARAT STATE INSTITUTIONAL
RATING FRAMEWORK (GSIRF)
Government of Gujarat



NATUBHAI V. PATEL COLLEGE
OF PURE & APPLIED SCIENCE,
VALLABH VIDHYANAGAR

Apeotocm16012010



Date:16-1-10

MESSAGE

I am very much happy to note that Natubhai V. Patel College of Pure and Applied Science ranked second among fifty two Colleges in the country, and entered the list of accredited Institutes by NAAC. Efforts towards quality – consciousness for pure and applied science have also been reflected for creating and sustaining quality standards and scientific research. To share the success and enjoy such sharing will bring sustaining happiness from such efforts.

I appreciate the achievement and congratulate all of you.

(Narendra Modi)

To,
Dr. Basudeb Bakshi - Principal,
Natubhai V. Patel College of Pure and Applied Science,
Vallbh Vidhyanagar – 388 120.
Email:nvpascollege@yahoo.co.in



Narendra Modi
Chief Minister, Gujarat State



MESSAGE FROM PRESIDENT, CVMU

“When learning is purposeful, creativity blossoms. When creativity blossoms, thinking emanates. When thinking emanates, knowledge is fully lit. When knowledge is lit, economy flourishes.”

- A.P.J. Abdul Kalam

It is fact that education is a dynamic process in which new fangled thoughts are supplemented persistently to construct education in a progressive approach. The purpose of education is not simply to acquire degrees but it is also to mould the impressionable minds of our young generation in the right direction.

Since its inception in 1996, Natubhai V. Patel College of Pure & Applied Sciences has been showing remarkable progress by focusing on the student-centric approach, be it in academics or their overall development emphasizing content, processes, and social services. The academicians make all the efforts so that the students remain at the forefront of world racing.

It gives me immense pleasure to proclaim that the college is publishing its annual magazine "Abhivyakti" which is grounded in sharing views, displaying the creative side, and expressing thoughts, ideas, hopes, feelings, aspirations, and convictions in a creative way through the arts, literary and otherwise of both the academicians as well as the students.

I congratulate the academicians and non-teaching staff, editorial board, and students for contribution to in publishing their annual magazine.

Er. Bhikhubhai B. Patel

Hon'ble President,
Charutar Vidya Mandal University

MESSAGE FROM DONOR



As we come together to celebrate NVPAS's rich history and vibrant present, I am proud to share with you the story of my family's involvement in the establishment of this prestigious institution.

Helping to establish a premium college with the aim of imparting quality education in the emerging areas of Science and Applied Science was a dream my father cherished for a long time.

In 1996 with the initiatives by Shri H. M. Patel and Dr. C. L. Patel, this dream became a reality. Natubhai V. Patel College of Pure & Applied Sciences was founded in 1996 with the goal of providing quality education to young individuals. Over the years, my family has continued to support the college by offering mentorship to students and their recognition in terms of awards for their achievements. Today NVPAS has become one of the leading institutions of Gujarat with an "A" grade bestowed upon it by NAAC.

As we reflect on NVPAS's past, present, and future, I am honoured to be a part of a community that values education and is dedicated to making a positive impact on the world. To the new batch of students who will graduate from the college in 2023, I offer my best wishes and blessings for a bright future. I am sure in the time to come, they will excel in their professions and careers and make NVPAS proud. I wish them all the best.

Mr. Mayurbhai Patel
2/1, Arunodaya Society,
Alkapuri, Race Course Road,
Vadodara -390 005

Date: February 13, 2023



FROM THE PRINCIPAL'S DESK

Education is much more than learning. It's a soul-enriching exercise towards excellence. NVPAS under the umbrella of Charutar Vidya Mandal University as a constituent college encompasses skill and knowledge with the best in technology and values. The college has completed 26 glorious years since its inception. The college was accredited "A" Grade by NAAC in 2009 and 2016 and has a GSIRF ranking.

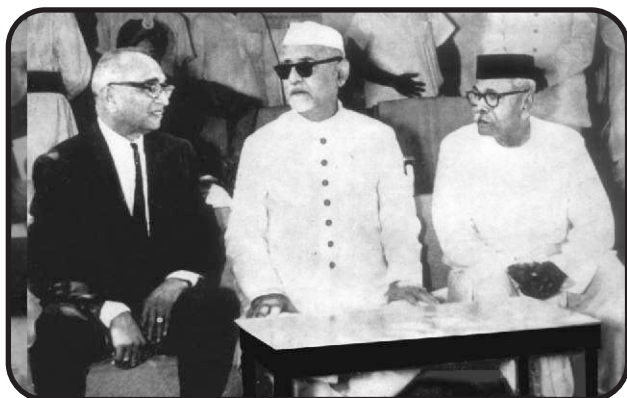
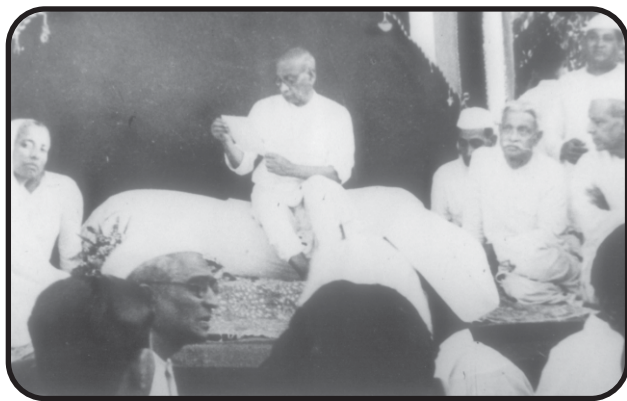
It is a matter of immense pride and happiness as we bring out the annual magazine "Abhivyakti". The magazine gives a platform to exhibit the creative, literary, and artistic talents of the students. I congratulate all the students who excel not only in academics but also in co-curricular and extracurricular activities such as literary, cultural, and sports activities and the college faculty to continue towards excellent academic performance through the incorporation of the latest teaching approaches.

I would like to appreciate the college magazine editorial team for their efforts to publish the college annual magazine. My best wishes to all.

"Lighted to Lighten"

Dr. Basudeb Bakshi
Principal

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Rich History of Charutar Vidya Mandal that spans 75 Years

The inception of Charutar Vidya Mandal (CVM) took place on the eve of Independence when the illuminating vision of the great Sardar Patel was received with incredible enthusiasm by Shri Bhaikaka and Shri Bhikhabhai Saheb. They dedicated their lives to the cause of rural regeneration by establishing Gramodyog and by bringing higher education to the doorstep of the village community. On March 03, 1945, they sat down to draw up a plan for an educational township – Vidyanagar and later christened Vallabh Vidyanagar as mark of tribute to the great son of the soil, Sardar Vallabhbhai Patel. It was the first planned university township of independent India that provided a comprehensive hub of higher education opportunities with schools and colleges in all major academic disciplines, hostels, faculty quarters, play ground sand parks. It was a dream project implemented in the real sense of the term.

The town is the synthesis of varied cultures, which enables it to evolve and expand the quality life as well as to foster the environment of creativity amongst the student citizens. Those who stay here always cherish the golden moments of campus life.



INCEPTION:

NVPAS was established in the year 1996 by Dr. C. L. Patel, Ex-Chairman, Charutar Vidya Mandal (CVM) with the aim of imparting quality education in the emerging areas of Science and Applied Sciences. Natubhai V. Patel College of Pure and Applied Sciences (NVPAS) has gone on to become one of the top-notch premier institutes across the nation in a short span since its inception.

OUR VISION

We are determined to constantly strive towards excellence in science education and research by promoting academic freedom, experimentation with new paradigms, and creativity in complete alignment with the principles of human well-being and social welfare.

OUR MISSION

The college aims to impart quality education and cultivate a community of enlightened minds with an insatiable thirst for knowledge who acquire and apply scientific knowledge within the compass of ethical, ecological, and economic values for the sustained and inclusive growth of society and nation.

UNIQUE FEATURES

- * Excellent educational facilities and optimal atmosphere for studies and research in biological, chemical, physical, and computational sciences.
- * Continuous evaluation of students through weekly Unit Tests conducted throughout the semester.
- * Unique Mentoring Service and counselling system for Individual attention and care by teacher mentors.
- * Open House: Parents - Teachers Interaction at the end of each semester.
- * Teaching by Experienced and Qualified Staff.
- * Visits to industrial units/organizations to enhance understanding of principles learned in the classroom.
- * Variety of extra-curricular & co-curricular activities.
- * On-Campus Interview for Job Placement.
- * Entrance Exam Preparation Cell (EEPC) for P.G. courses.
- * University has also introduced add on courses like Creativity, Problem - solving and Innovation (CPI) and Liberal Arts for holistic development of students.

B.Sc. (Bachelor of Science)

Honours Degree course directly after XII Science

Biotechnology | Genetics | Microbiology | Environmental Science
 Bioinformatics | Chemistry | Industrial Chemistry
 Instrumentation | Mathematics | Physics

**B.Sc. Food Technology**

Degree course directly after XII Science A & B Group

**Computer Sciene****B.C.A.****(Bachelor of Computer Applications)**

Degree course directly after XII
 (Science / Commerce / Arts Stream; with
 English as one of the subjects)


**B.Sc. Computer Application & Information Technology
 (CA & IT)**

Degree course directly after XII
 (Science / Commerce)

**M.Sc. (CA & IT)**

Post Graduate Course directly after Graduation

**Post Graduate Diploma**

One Year Course after Graduation

Bioinformatics | Industrial Automation
 Remote Sensing GIS | Analytical Chemistry

* GUJCET/IIT JEE/NEET is not required for the admission in
 any course offered by the college.

Admission Coordinators : 98794 60459, 94270 62753
www.nvpas.edu.in



CLASSROOMS –Spacious classrooms aided with ICT projectors to enable the audio-visual teaching mode.

Computer Labs – 6 well-equipped Computer labs and a GSBTM-sponsored Bioinformatics laboratory for students to carry out their innovative and scientific experiments. The entire college campus is Wi-Fi enabled.

Conference Room- Well-furnished tech-enabled conference room ideally suited for brainstorming sessions, meetings, training, webinars, and more.

SS Patel library - Established in 2001 with a reading hall of 100 seating capacity and a wi-fi facility. It has 17740 books, more than 20 periodicals, and journals on various subjects. All the books are computerized and managed by SOUL 2.0 library software. OPAC (online public access catalogue) facility of SOUL assists users with the availability of books in the library, keeps record of previous years' exam papers and syllabi. The e-zone corner is where students can use computers for their projects.

Auditorium: Well-furnished tech-enabled fully air-conditioned with a seating capacity of 180 guests on the second floor of the library building for conducting seminars, workshops, and conferences.

Laboratory: Well-furnished and equipped with state-of-the-art equipment required for practical.

Open stage – The college has an open stage facility for cultural activities.

Hostel: Separate hostels for Girls and Boys in the campus. The hostel has spacious and airy building with well-furnished AC and non-AC rooms and well-organized dining hall.



Dr. Basudeb Bakshi
(Principal) (M. Sc., Ph.D.) Physics

BIOLOGICAL SCIENCES



Dr. Rita N. Kumar (HOD)
M. Sc., Ph.D.
(Botany & Envi. Sci.)



Dr. Yachana Jha (HOD)
M.Sc., NET, Ph.D.
(Biotechnology)



DR. Urvish D. Chhaya (HOD)
M.Sc., NET, Ph.D.
(Microbiology)



Dr. Kundan K Mishra
M.Sc., NET, Ph.D.
(Biotechnology)



Dr. Amit Ballani
M.Sc., NET, GATE, Ph.D
(Plant Biotechnology)



Dr. Anjali Kulkarni
MVSc., NET, Ph.D.
(Animal Genetics and Breeding)



Dr. Pratibha Parihar
M.Tech, NET, GATE, Ph.D.
(Bioinformatics & Biotechnology)



Dr. Susmita Sahoo
MSc., Ph.D.
(Botany and Env. Science)



Ms. Shreya Mehta
M.Sc.
(Microbiology)



Dr. Anu Ram Kailash Mishra
Subject Coordinator
M.Sc., Ph.D. (Foods and Nutrition)

FOOD TECHNOLOGY



Mr. Jay Hiteshbhai Patel
M.Tech.
(Food Technology)

CHEMICAL SCIENCES



Dr. Shveta Joshi (HOD)
M.Sc., Ph.D.
(Chemistry)



Dr. Archana Shah (HOD)
M.Sc., Ph.D.
(Industrial Chemistry)



Dr. Smita shirish Srivastava
M.Sc., B.Ed., Ph.D.
(Chemistry)



Dr. Bhavin Patel
M.Sc., Ph.D.
(Chemistry)



Dr. Ketul Patel
M.Sc., Ph.D.
(Chemistry)



Mr. Bhavik Joshi
M.Sc.
(Industrial Chemistry)



Dr. Shital Patel
M.Sc., Ph.D.
(Chemistry)

COMPUTER SCIENCES



Mr. Mayur Patel (HOD)
MCA, Ph. D. (Pursuing)



Dr. Shreya Shah
MCA, Ph.D.



Dr. Tejas Thakkar
MCA, Ph.D.



Dr. Hasamukh Patel
MCA, Ph.D.



Dr. Ghanshyam Parmar
MCA, Ph.D.



Dr. Monika Patel
MCA, Ph.D.



Salady Lakshmi RadhaMayuri
MCA, B.Ed. (Pursuing)



Ms. Manta Megha
MCA, Ph. D. (Pursuing)



Ms. Pooja Dave
MCA



Ms. Mitali Ramchandra Patel
MCA

PHYSICAL SCIENCES



Dr. H. J. Trivedi (HOD)
M.Sc., M.Phil., Ph.D.
(Remote Sensing)



Dr. Mehul Dave
MSc., Ph.D.
(Condenser Matter Physics)



Dr. Dhananjay Kanjibhai Dhruv
MSc., Ph.D.
(Electronics)



Dr. Naveen Agrawal
M.Sc., M.Phil, Ph.D.
(Material Science)

MATHEMATICAL SCIENCES



Dr. Shrikant Pathak (HOD)
M.Sc., Ph.D.
(Mathematics)



Mr. Tejas Kumar Sharma
M.Sc. Ph.D. (Pursuing)
(Mathematics)



Mr. Harsh Pareeshbhai Kothari
M.Sc.
(Mathematics)

ENGLISH



Mr. Kartikkumar A. Jagtap (HOD)
M.A., M.Phil.
(ELT - English Language
Teaching, English Literature)



MS. Hinabahen N. Patel
M.A., B.Ed., M.Phil., Ph.D. (Pursuing)
(ELT - English Language Teaching,
English Literature)

PHYSICAL INSTRUCTOR



Mr. Ankit Patel
M.P.E.D.

LIBRARY STAFF



Mrs. Dharti Patel
B.Sc., M.Lib. & Inf. Sc.



Mrs. Alpita Patel
Library

LABORATORY ASSISTANT



Ms. Shejal Prakash bhai Patel
B.Sc. DMLT
(Biosciences Dept.)



Ms. Jigna H Soni
M. Sc. Biotechnology
(Biosciences Dept.)



Mr. Manish Dodani
Jr. Clerk cum Computer
Programmer
(Computer Dept.)



Mr. Ankit Patel
Lab Technician
(Computer Dept.)



Mr. Dhruval Patel
Lab Technician
(Computer Dept.)



Mr. Nilesh Patel,
B.Sc. Lab Assistant
(Chemistry Dept.)



Mr. Sudhir Patel
B.Sc. Store Keeper
(Chemistry Dept.)



Girish Kumar Tailor
B.Sc
(Physics Dept.)

OFFICE STAFF



Mr. Naresh K. Sharma



Mr. Kamlesh V. Parmar



Mr. Kalpesh K. Patel



Mr. Hiren V. Patel



Ms. Javanika V. Patel



Mr. Darpan G. Patel



Mr. Hasmukh N. Raval

SEVAK BHAI



First Row: From Left: 1. Mr. Ramesh Parmar 2. Mr. Shamal Solanki 3. Mr. Chetan Rabari 4. Mr. Jayanti Harijan 5. Mr. Vitthal Chauhan 6. Mr. Navin Parmar 7. Mr. Kamlesh Rathod 8. Mr. Nagji Rabari 9. Mr. Jayanti Macchi 10. Mr. Suresh Parmar (driver On Deputation) 11. Mr. Vinubhai Parmar 12. Mr. Suresh Parmar 13. Mr. Vikram Koli 14. Mr. Ambalal Purabiya

Second Row: From Left: 1. Vasant Makwana 2. Mr. Nimesh Patel 3. Mr. Pravin Mahida 4. Mr. Suresh Bharthari 5. Mr. Bhavin Patel

Third Row: From Left: 1. Mr. Girish Parmar 2. Mr. Vishnu Rabari 3. Mr. Vinubhai K. Parmar 4. Mr. Jayendra Parmar



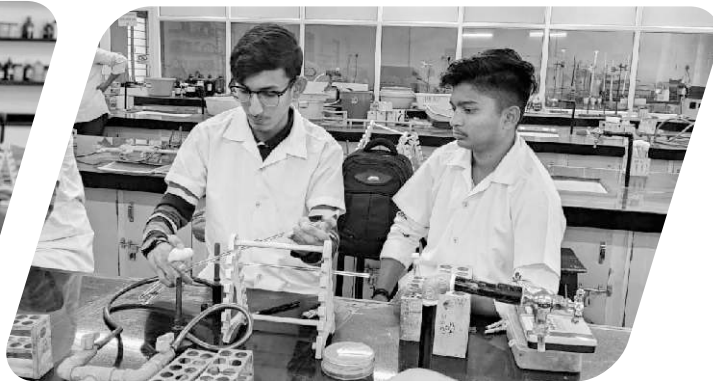
Department was established in the year 1996. All the faculty members of the department are NET qualified, doctorate and have more than twenty years of teaching experience. Faculty members are specialized in various domain areas of the subject and involved in continuous nurturing of the students for their future endeavors. The faculty members have good number of publications in National and International journals with high impact factor and continuously deliver lectures in GSBTM crash workshop to prepare students for national level competitive exams. Faculties of department received research and other grants from Government agencies like UGC, GSBTM. Department in 2017 got a grant from GSBTM for the establishment of bioinformatics laboratory in the college. Department also runs PG diploma in Bioinformatics to bridge the knowledge and credit gap required for students for foreign university admission. Department has at present five PhD students working with different fellowship programs in India including Shodh Fellowship and Prime Minister Fellowship. Every year several students from the department are competing in national level entrance exam and get admitted in premier institute or university for their higher studies. Nearly forty percent of final year students go abroad for higher study every year. Department is also recognized as the Nodal center for Network of capacity building cell for national level competitive exams and Entrepreneur capacity building cell of Anand Vadodara region.

Department of Biological & Environmental Science



The department offers degree program in Environmental Science. The Department has well qualified two senior staff members Dr R N Kumar and Dr Susmita Sahoo who are actively engaged in teaching and research. They are university recognized Ph D guides in the subject of Environmental Science and Botany. They have produced 14 Ph.Ds till now and presently 10 Ph.D. students are working in this department for Ph D. program. Organizing study trips and visits, celebration of Environment related days, career guidance, invited talks, student centric events are regular activities of department. Our students are well placed in India and abroad in diversified jobs such as academics, industry, consultancy etc. The department has completed many research projects funded by UGC and GUJCOST in past. The department has also organized more than 10 state level and national level seminar/ conferences till now. Department of Biological and Env. Science has well established research infrastructure and facilities equipped with sophisticated equipments. Instruments housed in lab are Digital flame photometer, Fluoride assembly, Turbidity meter, Mechanical shakers, High Volume Air Sampler (HVAS), Incubator, Double glass distillation unit, Cascade impactor and Spectrophotometer which are used for various analysis.

Environment Science has scope in academics, research, Forestry, Biodiversity, Industrial Waste Water Management, Pollution control Board, Wildlife, etc...



Microbiology is one of the most popular courses and as a prominent branch of biology which involves the study of bacteria, fungi, viruses, and other microscopic organisms that cannot be seen with the naked eye. Microorganisms are also considered as nanofactories which produce many important commercially viable products like enzymes, proteins, hormones, antibiotics, vaccines etc. After successful completion of undergraduate/post graduate degree student can join Food, Pharma and Dairy Industry in various departments like Manufacturing, Quality Control and Quality Assurance (QA & QC), Research and Development, Process development and Wastewater treatment plant. In the Government sector also, microbiologist is eligible for Food safety officer, Environmental auditor, Epidemiologist, Clinical Microbiologist etc at Food and Drug Laboratories, Pollution Control Board, Forensic Science Laboratories, Hospitals and Primary health centres etc. Since the subject takes into account many frontiers of biology, the candidate will also be in great demand abroad after completion of UG/PG program. The laboratory facility in the department include BOD incubator, Bio hit Biofilter, Brooks Viscometer, Lyophilizer, Incubator, Electrophoretic unit, and Gel rocker, Gilson and Milipore, peristaltic pump, Kubota Hybrid Centrifuge, Microfuge, Nanodrop, Refrigerator, Remi Orbital Shaker, Environmental shaker, Temperature controlled water bath, Hot Air Oven, Spectrophotometer, Sonicator.

Department of Chemistry



Invited talk on "Gas-Chromatography" by Mr. Sachin Choksi, Senior Manager, ADL, Sun Pharma-Baroda

Chemistry is often referred to as the central science because it joins together physics and mathematics, biology and medicine, the earth and environmental sciences. Knowledge of the nature of chemicals and chemical processes therefore provides insights into a variety of physical and biological phenomena. The Department has highly qualified, dedicated and enthusiastic faculty. It aims to impart high quality education by inspiring students to compete globally in order to develop scientific outlook, overall, with analytical mind giving due importance to Basic Science and its Application in Engineering Science. To inculcate students to learn in achieving something substantial for developing their career and contemplate by solving Environmental problems of mankind. The Department is provided with well-equipped lab and individual attention is given to the students. The Department produces very high percentage of results every year. To motivate the faculty of the department undertake research in addition to teaching undergraduates, they are encouraged to participate in various National and International conferences in India and abroad to enhance their knowledge base. The Department is actively engaged in research areas of Organic chemistry, Inorganic chemistry, Polymer Chemistry.



Dr. Rohit Dave Head Industrial Chemistry Department was invited for a talk “HOW TO GET READY FOR JOB”.

Industrial Chemistry is a combination of chemical engineering and chemistry. The knowledge of subjects like unit operations, unit processes, plastics, polymers, drugs, management, safety and hygiene, instrumentation, pollution and organic chemistry infuses confidence in students to work as an entrepreneur, research scientist, plant in charge, lab chemist and many more. Industrial Visits and Trainings are the flavors of Industrial Chemistry. This Year the department has organized industrial visits in Makevale Industries Ltd, Sankarda, Baroda. Amul Chocolate Plant, Mogar and SICART, Vallabh Vidyanagar.

Department of Industrial Chemistry

Department Of Food Technology [2022]



Department Of Food Science and Quality Control [2020]

B.Sc. Food Technology (2022) has commenced from the present year and B.Sc. Food Science and Quality Control (2020) both are advancing fields and offering greater career opportunities. Food Technology and FSQC is a science branch that deals with the techniques involved in production, processing, preservation, packaging, labeling, quality management, and distribution of food products. The field also involves techniques and processes that are used to transform raw materials into food. Extensive research goes behind making food items edible as well as nutritious for the community.



10 days Professional certificate program on “Robotics”

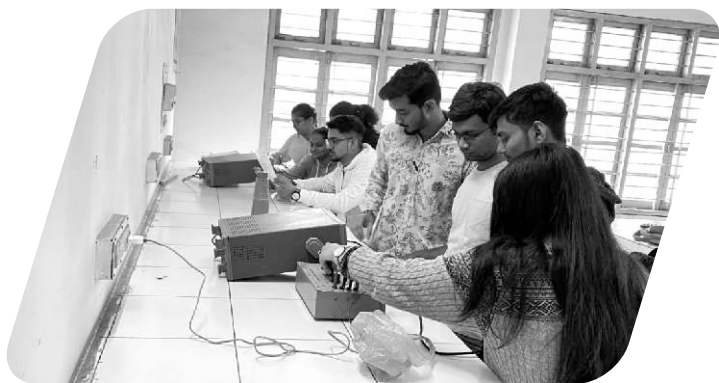
The department is running two courses Bachelor of Computer Applications (BCA) and B. Sc. Computer Application & Information Technology. BCA is an undergraduate three years program after 12th Science / Commerce. The objective of this programme is to prepare the competent IT managers, who can contribute to the upliftment of their organization by their excellent skill of Information Technology. This programme aims at developing IT professional with analytical skill, reporting skill, programming skill, networking and troubleshooting skill so that they can contribute in management decisions, development of websites, maintain / upgrade the software applications and networking and work as a good team member. After successful completion of the course, one can be employed as Systems Analyst, Software Engineer, Project Leader, System Programmer etc. at a higher grade. B.Sc. CA& IT is an undergraduate three years program where students are introduced to various areas of Computer Science, Programming, Database Design, Software Engineering, Networking and Information Systems. The course is aimed at developing the computer professionals in the wide range of application such as Business Sectors, Government Sectors, Scientific Research, Medical Science, Social Sciences, Management, and Communication etc.

Department of Mathematics



Department of Mathematical Sciences was established from the beginning of Natubhai V. Patel College of Pure and Applied Sciences in 1996 by Dr. C. L. Patel, ex-Chairman of Charutar Vidya Mandal (CVM) with the aim of imparting quality education in the emerging areas of Science and Applied Science.

From the beginning, the department offers 3 year B.Sc. degree with Mathematics as a principle subject and from 2020 under the affiliation of The CVM University, the department offers 3 year B.Sc. (Hons) degree with Mathematics as a principle subject. The Department is well equipped with lab facility and departmental library. The three full-time resourceful faculty members actively engage in research. Core areas of the research are fluid flow through porous media, fluid Mechanics, Approximation Theory, Computational Techniques, Partial differential equations, Mathematical modelling. The students of the department actively participate in the various academic and co-curricular activities and scientific excursion. The department encourages students to actively participate in different National/State level examination (e.g. Prof. A.R. RAO Mathematics Competition, Madhva mathematics Competition, IIIT JAM Exam for the Master degree program admission). Also Department arranges educational trip in higher institute to motivate students in the subject of mathematics.



Department of Physics

The Physical Sciences Department of NVPAS was established in 1996 with an aim to impart education in the Pure and Applied areas of Physics, Electronics and Instrumentation. The Department is offering BSc Physics (Hons) Program along with the other Courses like PG Diploma in Industrial Automation and PG Diploma in Remote Sensing and GIS. Also, the department offers Ph. D. Programme in Physics and Electronics. The Department is having a long-standing Research Collaboration with Space Applications Centre (SAC), ISRO, Ahmedabad since 2008 and it is still ongoing. ISRO has funded various Research Projects to the Department worth more than Rs. 1.25 Crore since 2008 and a dedicated Remote Sensing Lab has been developed under these projects. All the Faculty Members are Ph.D. Degree holders and are involved in active Research Work. All faculty members are guiding research students. At present 09 students are pursuing PhD Programme in Physics/Electronics. The Department is equipped with five dedicated laboratories for conducting practical in Physics, Electronics and Instrumentation. The Department is also having a dedicated Dark Room for conducting experiments related to Optics.

Department of English



The subject 'Communication Skills in English' is taught in the initial four semesters of B.Sc., B.Sc. (Food Technology), B.Sc. (CA & IT) and BCA. Ever since the CBCS has been implemented, this course is taught in the form of practical. NVPAS College has got two language laboratories to conduct the practicals. Both the labs are very well furnished and equipped with LCD projectors, sound system and internet connectivity to facilitate teaching using audio-visual aids.



Divyata Desai
Drug effects on
Caenorhabditis elegans
Alzheimer's disease model



Aquino Macwan
Analysis of PGPR effects on
tomato plant under
biotic stress



Nisarg Vandra
Comparative analysis of
Plantago cultivars



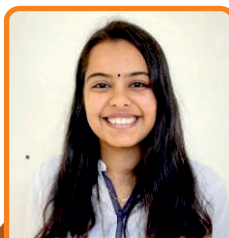
Kirti Anand Yadav
Biochemical and Molecular
Analysis of phytophthora blight
disease in pigeon pea



Upti F. Aayer
In-silico Non Invasive
Prenatal Diagnosis



Dhruvi Patel
Biological, Chemical and
Enzymatic Treatment Study
of Waste Water



Roshni G. Lalwani
Fabrication of Nanoparticles



Dhara Desai
Mangroves in Gulf of
Khambhat Region



Neel Talati
Conservation on Marsh
Crocodiles in Central Gujarat



Himalay Bhakar
Studies on air pollution & climate
change in urban cities of Gujarat



Riya Shah
Dye decoloration & waste water
treatment using NP



Nirali Y. Goswami
Nutraceutical Properties of
Seaweed from Alang and
Gopnath



Richa Dodia
Useful plants in diabetes of
families Cucurbitaceae,
Fabaceae and Rutaceae



Jagruti Patel
Industrial Waste water
treatment



Jaimin Bhabhor
Water Quality assessment with
reference to Phytoplankton and
Macrophytes



Ashish Bhatt
Production, Purification, and
Characterization of Nitrilase



Bushrabanu Shaikh
Chitinolysis for the Biocontrol of
Fungus *Fusarium oxysporum*



Shreya Pandya
Isolation, Production and
Characterization of
Transaminase



Apurva Kadia
Bacterial Aerobic Granulation
for the treatment of Phenolic
Wastewater

RESEARCH SCHOLARS

BIOLOGICAL SCIENCES

COMPUTER SCIENCE



Mr. Dhavalkumar U. Patel
Artificial Intelligence and
Machine Learning



Mr. Mayur Madhubhai Patel
Cloud Computing



Ms. Ami Trivedi
Data Mining



Ms. Palak Patel
Data Mining

PHYSICS



Hasmukh K. Varchand
Remote Sensing and Radiative
Transfer modelling



Shweta Dhurmanbhai Dhruv
Semiconductor thin film and
thin film electronic devices



Jalpesh A. Dave
Remote Sensing and Radiative
Transfer modelling



Parthkumar N. Parmar
Remote Sensing and Radiative
Transfer modelling



Manoj Singh
Remote Sensing and Radiative
Transfer modelling



Shivani Rajeshkumar Bharucha
Condensed Matter Physics –
Nanotechnology and
nanomaterials

MATHS



Prakhar Nagar
Dilute Magnetic Semiconductors



Priyanshkumar N. Brahmhatt
Condensed Matter Physics –
Nanotechnology and
nanomaterials



Mr. Tejaskumar Sharma
Applications of Numerical
methods In Fluid flow through
porous Media

FACULTY OF MUSIC, DANCE AND THEATRE

Faculty of Music, Dance and Theatre organises variety of activities to provide students showcase their talent in the relevant field. Students can perform dance, singing and skit in addition to playing musical organs. Besides, talent evening, this faculty organizes celebration of Janmashtami, Independence Day, Teachers' Day, Navaratri in the college. Students also availed guidance for participation in Inter-collegiate Youth Festival.

NAME OF EXOFFICIOs:

Mr. Kartik Jagtap, Dr. Tejas Thakkar, Dr. Dhananjay Dhruv, Dr. Monika Patel

NAME OF STUDENT SECRETARIES:

Ms. Prachi Thakkar, Mr. Maharshi Mayavanshi

NAME OF STUDENT ACTIVE MEMBERS:

Ms. Aastha Patel

Ms. Vrunda H. K. Patel



MADHYASTHA SAMITI

Teacher's Day Celebration



Talent Evening



MADHYASTHA SAMITI

FACULTY OF SPORTS



NVPAS 2021-22 Runner Up Football (Boys) CVMU



NVPAS 2021-22 Runner Up Chess (Girls) CVMU



Sports Day



MADHYASTHA SAMITI

FACULTY OF CREATIVE EXPRESSION

EX-OFFICIO ADVISORS (FACULTY MEMBERS)

Dr. Himanshu Trivedi (C)

Dr. Hasmukh Patel

Dr. Shreekant Pathak

STUDENT SECRETARIES (STUDENTS)

Vyom Limbachiya

Keyuri Bhojani

ACTIVE MEMBERS (STUDENTS)

Nirav Vaghela

Yashvi Shah

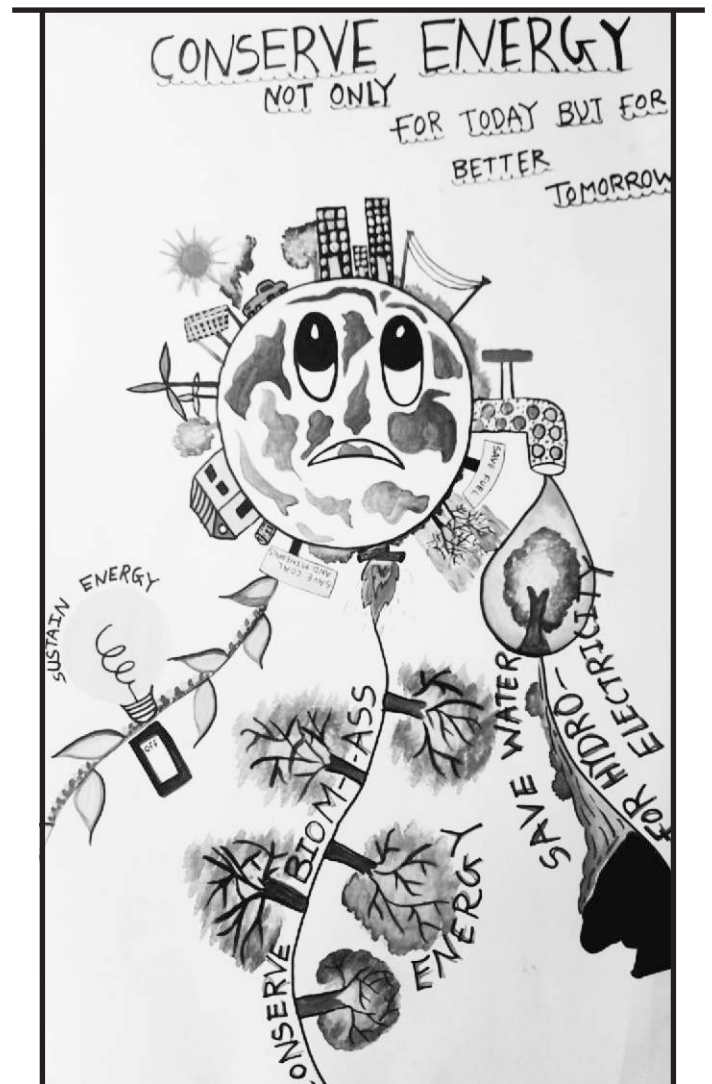
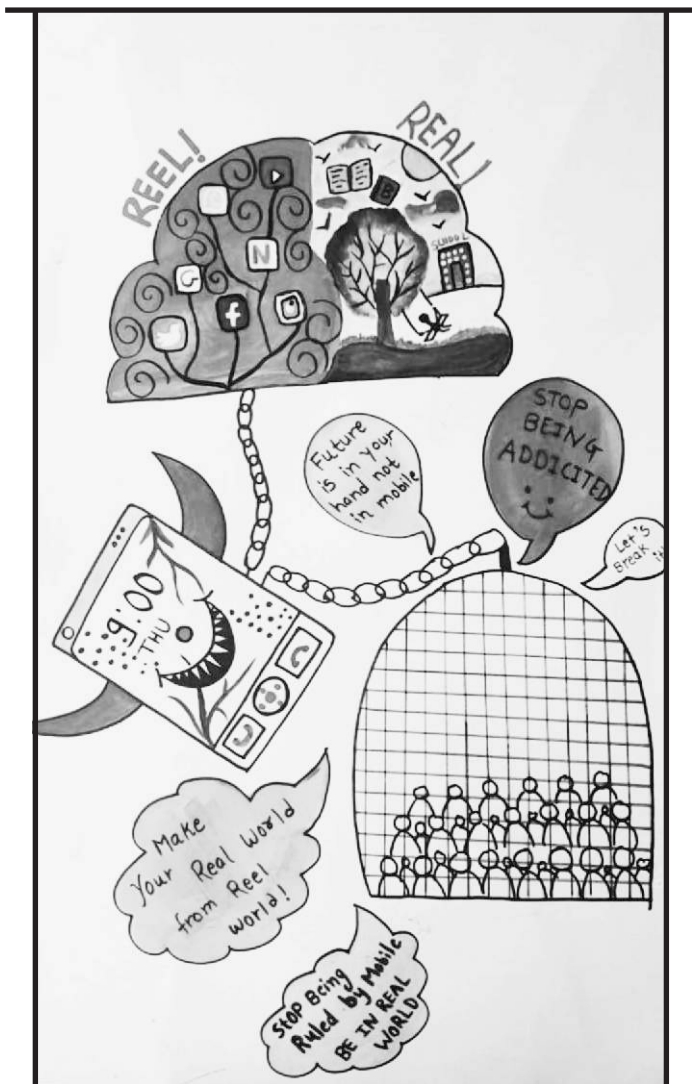
Dev Patel

About the Creative Expression Portfolio

The Creative Expression portfolio provides a platform to the students to bring out their hidden Creative and/or Literary talents by organising various activities and competitions in the College. The major activities carried out are Poster making, Cartoon making, Collage making, Rangoli making, On-the-spot Painting making, Quiz Competitions, Poetry recitation competition, Essay writing competition, Debate and Elocution Competitions, etc.



POSTER COMPETITION



NATURE CLUB

FACULTY MEMBERS:

Dr. Susmita Sahoo and Dr. Anjali Kulkarni

SECRETARY:

Shrey P. Patel

ACTIVE MEMBERS:

Nisarg B. Jariwala and Dhruv A. Suthar

The objective of Nature Club is to inculcate indebtedness of nature among society and students and encouraging them to participate in a variety of conservation initiatives. Nature club portfolio organised a poster competition on the topic Current environmental issues on 20th December 2022. Around 50 participants of various departments participated in the competition.

A workshop on Best out of waste was also done. The science communicator from Community science centre, Vallabh Vidyanagar trained the students on various methods to make use of waste to make utility products.

Students participated in the events in an enthusiastic way.



EQUAL OPPORTUNITY CELL

EX-OFFICIO ADVISORS (FACULTY MEMBERS)

Dr. Shveta Joshi (C)
Dr. Yachna Jha
Dr. Pratibha Parihar
Dr. Mehul Dave
Dr. Naveen Agrawal
Dr. Anu Mishra

STUDENT SECRETARY (STUDENT)

1. SHAKSHI DESAI - TY GENETICS

Aims and Objectives of Equal Opportunity Cell is to see the effective implementation of policies and programmes for disadvantaged groups, to provide guidance and counselling with respect to academic, financial, social and other matters and to enhance the diversity within the campus.

Under the umbrella of equal opportunity cell, following cells are functional.

1. GENDER SENSITIZATION CELL

The cell sensitizes the students of college against various social issues arising in the society in pretext of gender.

2. ANTI SEXUAL HARASSMENT CELL

The cell tries to provide knowledge to students about various laws and policies which have been designed by the government body to ensure the protection of every individual in an organization by talks of various authorised dignitaries.

3. WOMEN CELL

The cell works to empower the girl students of the college by organizing various competitions, lecture talks and motivates them to spread their wings wide and fly high to achieve their dreams.

Anti-sexual Harassment cell organized an awareness program on “POCSO (The Protection of Children from Sexual Offences) Act” by Shri A.G. Sheikh



NATIONAL SERVICE SCHEME (NSS)

PROGRAM OFFICERS (PO):

Dr. Tejas H. Thakkar and Dr. Dhananjay Dhruv.

SECRETARY:

Sharvi V. Pijwala and Tanmay Dalwadi

National Service Scheme (NSS) is a community service-oriented unit of NVPAS with 150 student volunteers from different departments.

The Unit Organise and takes part in various local, state, and central government social programs like Cleanliness, Tree Plantation, Voters Awareness, Swachh Bharat campaign, Traffic awareness, Cyber security awareness, Blood Donation Camp, Thalassemia check-up camp, Fit India Run, India Flag run, shahid divas and so on. NSS organizes various awareness rallies against the ill effects of Drugs, Alcohol among youngsters, etc. The unit also works by adopting slums and a few local communities to bring awareness to social issues. Volunteers of NSS assist government agencies by taking part and providing services in their various programs and immersing in rural India.

Academic Year 2022-23 NSS units performed different activities are



1) International Yoga Day :

2) India Flag Run :



3) NSS orientation program :

4) Blood Donation camp :



5) Voter awareness program :



6) Traffic Awareness Program :



7) Cyber Security Awareness program.



NATIONAL CADET CORPS (NCC)

CARE TAKER OFFICERS:

Dr. Amit Ballani and Dr. Monika Patel.

SECRETARY:

Avani U. Barot and Deepkumar S. Patel

NCC inculcate the spirit of unity & discipline and nourish youth for a better tomorrow.

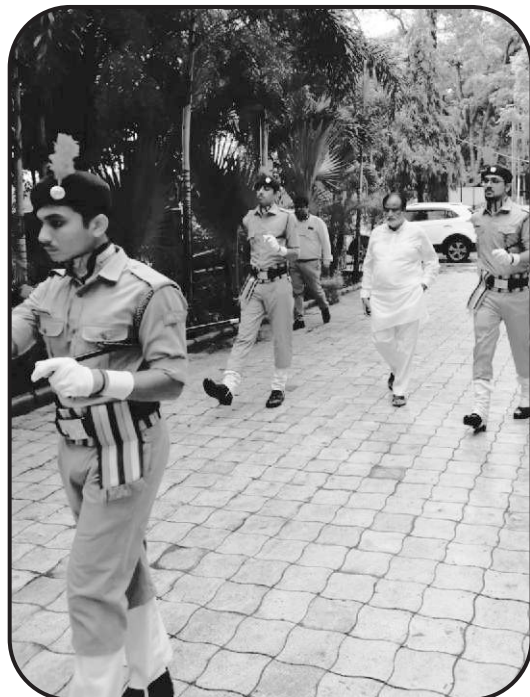
Certain basic features of NCC at NVPAS are:

- ◆ Both boys and girls can get admission in NCC.
- ◆ Students of NVPAS gets admission/Enrolled with 2 CTC unit of NCC
- ◆ From second year there are SPECIAL 7-10 day camps. In second and third year one camp is mandatory for cadets to appear for B and C certificates.

NCC Provides better career opportunities to cadets including Special recruitment drive for 'C' certificate holders in Army and nationalized banks. There is exemption of interview in SSB. Additionally, many corporate houses prefer NCC cadets in their recruitment.

NCC organizes various programs such as

- Personality development programs & lectures
- Community development program cum social service activities
- Youth exchange Programme with foreign countries.
- Adventure training & sports
- Firing- shooting (Simulation and field)



The Inter-collegiate Youth Festival 'Yugantar – 2022' was organized on 8th, 9th and 10th September 2022. 28 students of the college participated in 12 competitions in this youth festival. The college won second prize in Folk Dance, Quiz and On the Spot Painting Competition. Besides, the college won third prize in Classical Dance, Rangoli and Poster Making Competition.



YOUTH FESTIVAL



Visit at Vegetable research station, Apiculture and Plant tissue culture unit Anand Agricultural University, AAU Anand



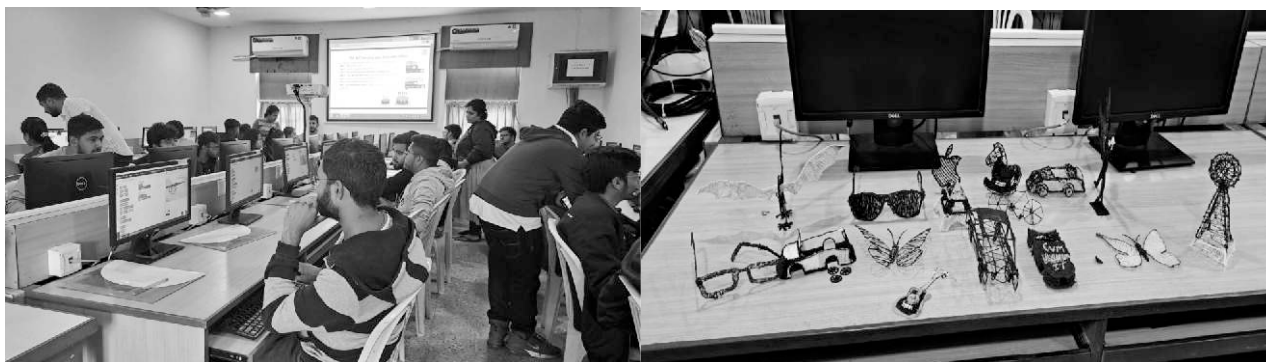
Makevale Industries Ltd, Sankarda, Baroda



Amul Chocolate Plant, Mogar



National Conference HSAI, Kerala



Visit to Science City at Gandhinagar on 6th August 2022.



Visit to Concetto Labs Software Services Pvt. Ltd on 22nd July 2022.





Imperial Oilfield Chemicals Pvt. Ltd., Halol



Imperial Oilfield Chemicals Pvt. Ltd., Halol



Lingada fish seed center, directorate of fisheries, dist Anand.



Visit at Sun pharma Pvt. Ltd.-Baroda



TOPPERS



Shakshi H. Desai
(Genetics)
CGPA- 9.96



Hemangi M. Savani
(Microbiology)
CGPA-9.65



Manali Patel
(Biotechnology)
CGPA- 9.64



Chinmay P. Joshi
(Environmental Sciences)
CGPA- 9.38



Mukti Zala
(Bioinformatics)
CGPA-9.33



Nishant Singh Rawat
(Food Science and Quality Control)
CGPA--9.79



Sanjanaben P. Gandhi
(Chemistry)
CGPA-8.93



Jimit Patel
(Instrumentation)
CGPA-9.79



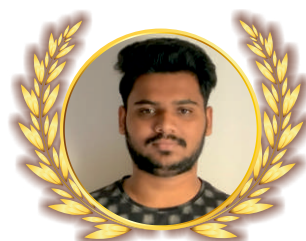
Nilkanth shantibhai sutariya
(Industrial chemistry)
CGPA-9.71



Patel Jainil Prakashbhai
(PHYSICS)
CGPA- 9.67



Patel Meet Hiteshbhai
(BCA)
CGPA – 9.90



Kundan Lamse
(B.Sc. CA&IT)
CGPA - 9.86



Jain Darshan Jitendra
(B.Sc. CA&IT)
CGPA - 9.86



Krishnaben Patel
(Maths)
CGPA - 9.40

SHINING STARS

ACHIEVEMENT

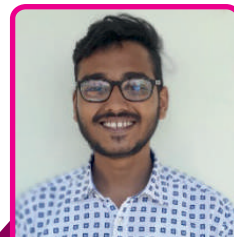
National level achievement



Ms. Upti Aeyer
Received Prime minister
Fellowship from DST
Guide: Dr. Pratibha Parihar



Mr. Jay H Patel
Biennial National Conference of
Home Science Association of India
First Prize in Poster Presentation



Sankalp Chowdhury
Winner in 36th West zone
quiz competition



Ms. Shivani R. Bharucha
Got Best Paper Presentation Award
International Conference on 'Science,
Engineering & Technological Innovations'



Pandya Jaydev Harshadbhai
Winner in Westzone kabaddi
tournament
(national kabaddi tournament)

West Zone Kabaddi Tournament, Jabalpur



Snehal Nikulbhai Patel



Variya Mitali kiritbhai



Patel Riddhiben S.



Shweta Dhrumanbhai Dhruv
First Prize for Oral Presentation in
13th National Science Symposium-2023



"Best College" award at Tech Arena -2023 a 3rd National IT fest organized by CHRIST COLLEGE Rajkot.
 Fenil Vekeriya have secured 1st rank in Blind Coding.
 Vansh Arora and Vyom limbachiya have secured 2nd rank in IT quiz.
 Dhruv Patel, Riya Dhimmar, Divyesh Padhiyar have secured 3rd rank in Hackathon.

Inter University Achievement



Prachi Pankajkumar Thakkar
 first price in Advertising Acuity
 second position in Scavenger
 Hunt Meghdhanush event



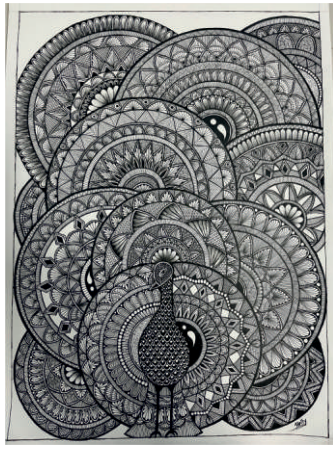
Purva Charola
 Poster making
 At SPRERI,
 on renewable energy.



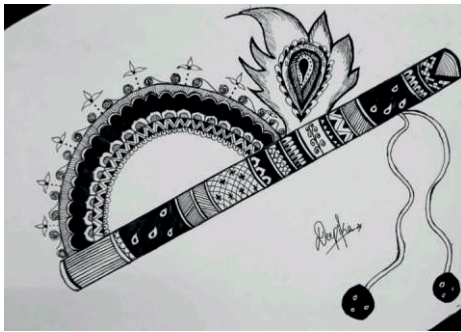
Mr. Ananthu Nair, Ms. Nidhi Vaghela and Shrusti Patel
 2nd prize in poster presentation
 ADIT Vallabh Vidyanagar



Helly Patel TY B Sc Micro



Deepika Lalwani TY BT



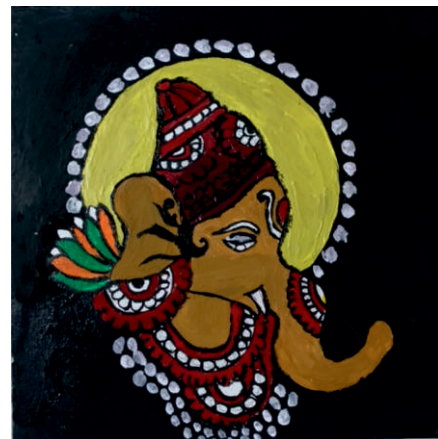
Deepika Lalwani TY BT



Sakshi Desai - TYGT



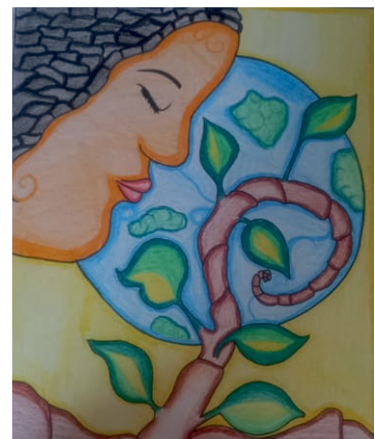
Hiteshri Solanki - TY ES



Prachi Thakkar - TYGT



Deepika Lalwani TY BT



Shivangini - SY ES



Dr. Sumit G. Gandhi (Batch-2000)
Principal Scientist / HOD of ID Division
Infectious Diseases Division
CSIR – Indian Institute of Integrative Medicine,
Canal Road, Jammu – 180001

Priyank Patel (Batch - 2004)

Lead Software Engineer
NASA Langley Research Centre, Virginia
Presently working as Software Engineering Manager
at CoStar Group, Norfolk,
Virginia, United States



Mr. Bignesh Thakur

Batch: 2006-2009
Assistant Professor
LJ University



NVPAS was more than a college to me. It's a privilege to be connected to this institution. A place where I gained knowledge, best needed for the survival in outer world and confidence. Right from day one energy and enthusiasm is what I experienced, be it faculty or students. I am what I am this day because of the curriculum, the teaching methodology adopted by the professors. The Lab was our innovation center/lab and the problems solved there were the most complicated problems solved till date. An Amazing institution which teaches you self-discipline, confidence and problem solving an essential trait to start your journey

Abhinav Mehta

Batch: 2006-2009
Founder CEO-TGIS



The conveyance from a 12th standard guy to an entrepreneur was not that easy. But NVPAS nourished me to attain the acceleration to reach the terminal destination. A group of distinguished faculty members in field of Environmental Science guided and escorted me by all means to strengthen my technical skills as well as personality. Thanks to almighty and my faculties for whom I have got an opportunity to see the world, start my own business, and work for will.



Dr. Bhupesh Bhatt, Assistant Professor,
S. P. University, V. V. Nagar
invited talk on Organic Spectroscopy



Maulik Patel
Postdoctoral Research Associate at
Washington University School of Medicine,
located in St. Louis
invited talk on Bioinformatics

About Us

Established in 2003, Natubhai V. Patel College of pure and Applied Sciences Alumni Association (NVPASAA) creates and maintains a life-long connection between NVPAS and its alumni.

Aims and Objectives

1. To enhance a sense of devotion and love for the Alma Mater.
2. To act as a bridge between the past and present students of the college.
3. To prepare and maintain an updated register of its members and their attainments.
4. To render all possible advisory help to its members in scientific matters.
5. To render all possible help in seeking the employment of its members.

Alumni Association conducts various activities like Alumni Talks, Annual Alumni Get-together, Career Quantum, Farewell for final year students.

ALUMNI Get-Together Held On 14th December 2022



Ninad Mehta, B Sc. Microbiology, 2006



Upti Aayer, B Sc. Bioinformatics, 2011



Charmi Panchal, B Sc. Biotechnology, 2018



Mohak Bhatngar, B Sc. Envi. Sci., 2022



Dr. Khushboo Bhavsar, B Sc. Envi. Sci., 2004



ALUMNI Get-together

A Unique and Amazing Connection with N.V.P.A.S (Natubhai V. Patel College of Pure & Applied Sciences)

By: M. Venugopal Nair

Parents are those who have the biggest responsibility to make their children educated and independent in their life. They always wish to see their children achieving their goals and moving ahead in their life. They are the ones who feel very happy and proud when their children cross every stage of life in a great way. I, the father of T.K. Shruti V. Nair (Student of Batch 2020, B.Sc. Chemistry), felt the same feeling when my daughter got graduated from N.V.P.A.S. After completing her 12th class when she entered this college, we have seen a great improvement in her confidence that built up during her 1st semester. All the faculty members were so supportive and used to recognise the strength of the students and support them in that direction. I remember one faculty member named Dr. Isha Suresh Krishnan, - faculty in the Department of Biology. She used to motivate my child and always be there for her in any situation. During 1st year of B.Sc., there is a common syllabus pattern which helps the children to know their interest and strength in each subject according to which they can select their specialization in the next year. My daughter completed her B.Sc. in Chemistry which brought a great change in her confidence to achieve something in her life. During last two years of her graduation, I noticed that she was involved in variety of activities including sports, curricular activities and also performing better in studies. This college used to organise Parents-Teachers Interaction which impressed me a lot. This interaction clarifies about the children's strength and weakness and generates a bond between parents and teachers which helps parents to know how to further guide and support their children. In entrance we were welcomed by respective devoted faculty members and their guidance to reach the concerned destination which is highly appreciated. When I met Dr. Shveta P. Joshi, Dr. Nirav Sapariya and Dr. Bhavin V. Patel (Faculty of Chemistry) during this interaction, I remember that everyone suggested few options that were suitable for Shruti's great future according to her interest and strengths. Moreover, after the meeting we were offered refreshments by the college. As we are coming from a long distance it would be highly admirable and had a little comfort. We also got the opportunity to interact with the Principal Dr. Basudeb Bakshi on that day. He also conveyed his best wishes to my child. The whole experience of this interaction was very friendly and helpful to us. I love to share the growth of my daughter in every activity of the college which she used to participate in. The surprising part that I observed was during last 2 years, she became involved in Volleyball, cricket and Running (sports), Dancing and still scoring good in her semester exams. The support of her Head of Dept (Dr. Shveta P. Joshi) was great which gave the children a chance to achieve something in every field. She also took care of mental and physical health with bookish learning. My daughter was shy and less confident but when I saw her doing anchoring in farewell party, I felt very proud to see her growing confidence and observed that this is the best platform that she got to learn and enhance her strengths. The second best part of this college is its location. The college and hostel situated are near to each other which saves the valuable time of children. I love the location of the Hostel Ranak which is very student-friendly and with full of safety measures. Parents should always have a trust and feel satisfied that their children are safe and learning something new whenever they send their children away from home for further studies and this, I felt during my daughter's graduation in N.V.P.A.S. A big Thanks to N.V.P.A.S family for flourishing the career of students.

Name: M. Venugopal Nair

Designation: P.A. of Dean of KMCRI, Bharuch
:Retired from Hindalco industries Ltd (Birla Copper), Dahej

Signature: 



My daughter Ms Isha Naik, was a student of Natubhai V. Patel College of Pure and Applied Sciences. She completed her graduation with Environment Science as her principle subject. During my visits to institution at times of Open House/Parent meeting, I found the faculty as highly motivating and well versed in their subject knowledge. I would like to thank all the faculty members who have taught my daughter during three years. Dr. Rita Kumar, the Head of Department had been very supportive and encouraging. I would like to especially appreciate Dr. Susmita Sahoo, Mr. Neel Talati, Mrs. Dhara Desai, and Mr. Darshit Shah for their continued guidance and support to my daughter. The teaching learning process is highly commendable as it provided my daughter with ample practical experience and improved her understanding of the subject. It is with their guidance that my daughter was able to secure two gold medals at University level. I wish to convey my sincerest gratitude to Principal and all faculty members of NVPAS.

Mrs. Hiral Naik
Campus Director
Sir C. J. New High School Trust, Gandevi
Principal
The Jamshed and Shirin Guzder English Medium School
Gandevi, Navsari

❀ NVPAS કોલેજ વિશે મારા અનુભવો ❀

હું ઉપાધ્યાય ભાવેશ કુમાર રતિલાલ વર્ષ ૨૦૧૫ થી આ કોલેજ સાથે જાણે પરિવાર ના સભ્ય તરીકે જોડાયો તેનું મુખ્ય માધ્યમ મારી બે દીકરીઓ (૧) દિપ્તી ઉપાધ્યાય અને (૨) પુજા ઉપાધ્યાય નું બીએસસી માં પ્રવેશ. ત્યાર પછી તો આ કોલેજ તથા તેના સ્ટાફ સાથે વધારે નજીક અવાતું ગયું તેનું મુખ્ય કારણ હૃદય સ્પર્શી અનુભવો જેવા કે વિદ્યાર્થીઓના અભ્યાસ તથા તેમની પ્રગતિ, તેમના પરિણામો ની જાણ સમયાંતરે પત્ર દ્વારા દરેક વાલીઓને કરવી ત્યાર પછી વર્ષમાં બે વખત ઓપન હાઉસ ના માધ્યમ થી વાલીઓને રૂબરૂ બોલાવી સારી મહેમાન ગતિ સાથે કોલેજ તથા વિદ્યાર્થીઓના કાર્યનું દર્પણ જેવું સુધ્ધ પ્રદર્શન કરવું, દરેક વિષયના પ્રોફેસર સાથે વાલીઓની સ્વતંત્ર રીતે મુલાકાત કરવાનો મોકો આપવો છતાં પણ નાના બની વાલીઓ પાસે સારા સૂચનોની માંગણી કરવી તથા કોલેજના કાર્ય ની કોઈ ક્ષતિઓ હોય તો ખુલ્લી કરવા આહવાન કરવું અને હોશિયાર વિદ્યાર્થીઓને સાડું પ્રોત્સાહન આપી આગળ લાવવા તેમજ જરૂર પડે વિશેષ સમય આપી એક વાલી ની જેમ વિદ્યાર્થીઓની સાથે રેહવાનું તેમજ નબળા વિદ્યાર્થીઓને સાથે રાખી વાલીઓ સાથે તેમના નબળા પાસાઓ ની ચર્ચા કરી એવા વિદ્યાર્થીઓને પણ યોગ્ય માર્ગદર્શન દ્વારા સારા પરિણામ તરફ લઈ આવવા. આ ઉપરાંત મનોરંજન ને લગતા પણ કાર્યક્રમો કોલેજ દ્વારા કરાવી વિદ્યાર્થીઓને અભ્યાસ સાથે સારી રીતે જોડી રાખવા આવા અનેક અનુભવોના લીધે દૂર રહીને પણ આ કોલેજ સાથે હૃદય થી જોડાયેલ છું

ઉપાધ્યાય ભાવેશ કુમાર રતિલાલ

❧ “કેળવણીમાં માતૃભાષાનું મહત્વ” ❧

આજે શિક્ષણમાં માતૃભાષાનું અભૂતપૂર્વ, મહત્વનું સ્થાન પ્રાપ્ત થયું છે. મનોવૈજ્ઞાનિકો પણ બાળકના પ્રસન્ન, તંદુરસ્ત ઘડતરમાં માતૃભાષાને ચાવીરૂપ ગણે છે. બાળકના ઘડતર અને ઉછેરમાં વિચારની પ્રક્રિયામાં, સ્પષ્ટ રીતે વિચારવામાં, ઊર્મિ-લાગણીના આવિષ્કારમાં, કલ્પના શક્તિના વિચારમાં તમામ સ્તરે ભાષા અનિવાર્ય બની રહે છે. સામાજિક વ્યવહારના વિકાસમાં પણ ભાષા એટલી જ જરૂરી છે. કેળવણીનો એક હેતુ વિદ્યાર્થીની સામાજિક ક્ષમતા ખિલવવાનો છે. અને તેની સફળતા માટે માતૃભાષા અનિવાર્ય છે.

ભાષાની મીઠાશ, જરૂરીયાત મુજબ યોગ્ય શબ્દોની પસંદગી, પ્રસન્નતા, આત્મીયતા, ભાષા દ્વારા મનોરંજન-સમાજિક સંબંધો સ્થાપવામાં અને તેને યોગ્ય સ્વરૂપમાં ટકાવી રાખવા માટે ભાષાની કુશળતા એટલી જ જરૂરી છે. માતૃભાષાની અભિવ્યક્તિ, અર્થગ્રહણ, શ્રવણ, શક્તિઓની ખિલવણી એ વિદ્યાર્થીની કેળવણીનો પાયો છે. પ્રાથમિક, માધ્યમિક કક્ષાએ જ નહીં પણ યુનિવર્સિટી કક્ષાએ ભાષાશિક્ષણ બોધભાષા બની રહે છે. સમાજ સાથે સંપર્ક વધારવા ગુજરાત સરકાર બધી કક્ષાએ ત્રીજા સાથેનો વ્યવહાર ગુજરાતીમાં જ કરશે એવો નિર્ણય લીધો છે. માતૃભાષાના શિક્ષણમાં ભાષાએ કુશળતા (Skill) છે. તેના બે દ્યેય છે. (૧) અભિવ્યક્તિ અને (૨) ગ્રહણ

માતૃભાષાના શિક્ષણમાં બે દ્યેય સ્પષ્ટ થાય છે.

(૧) વિદ્યાર્થીની શ્રવણશક્તિ ખીલવવાનું

(૨) વાંચનની શ્રવણકુશળતા ખીલવવાનું

પ્રોજેક્ટ કાર્યને પરિણામે બાળકો પુસ્તકાલયના પુસ્તકો વાંચતા થયા છે. જૂથમાં કાર્ય કરવાની ભાવના જાગૃત થઈ, સ્વપ્રયત્ને અભ્યાસ કરવાની ટેવ વિકસી, શ્રવણ, મનન અને વાંચન દ્વારા બાળકોની કલ્પનાશક્તિ કરવાનો અભિગમ વિકસ્યો. દરેક બાળકમાં કોઈ ને કોઈ શક્તિ ગુંથાયેલી હોય છે. તે શક્તિનો સહુઉપયોગ કરી જીવન ઉજ્જવત બનાવે તે મહત્વની વાત છે.

"Speech grainning makes a man expet, writing makes a man perfect :

શુભેચ્છા - સંદેશ

એન.વી.પટેલ કોલેજ ઓફ પ્યોર એન્ડ એપ્લાઈડ સાયન્સીસ કોલેજ ને શરૂ થયાને ૨૫ વર્ષ પૂર્ણ થતાં રજતજયંતિ ઉજવાઈ રહી છે ત્યારે ગર્વ, આનંદ અને ઉત્સાહની લાગણી અનુભવી શુભેચ્છા પ્રદાન કરું છું.

વિદ્યાદાન એ સર્વક્ષેષ્ઠ દાન છે. અને આણંદ જિલ્લાની અગ્રગણ્ય સંસ્થાઓમાં આ કોલેજે પોતાનું સ્થાન પ્રાપ્ત કર્યું છે. આ કોલેજમાંથી દર વર્ષે ગોલ્ડ મેડલ પ્રાપ્ત કરી સંસ્થાની સિદ્ધિમાં ચાર ચાંદ લગાવે છે. આ સિદ્ધિ સંસ્થાના પ્રિન્સિપાલ, પ્રાધ્યપકમિત્રો ની શિક્ષણસુઝ અને ઘગશને આભારી છે. “બાળક જન્મે જનનીને ખોરડે પણ શિક્ષણ પામે છે શાળાને ઓરડે” ઉક્તિ સાર્થક કરનાર શરીર, મન, બુદ્ધિ અને આત્માના ચતુષ્કોણનું શક્તિ અને ચેતના સમર્પિત કરનાર શૈક્ષણિક તીર્થધામ એટલે **NVPAS**.

અથાગ પરિશ્રમ દ્વારા બીજ માંથી મહાકાય વટવૃક્ષ સુધી લઈ જનાર એજ્યુકેશન ટ્રસ્ટ, સૌ **NVPAS** કોલેજ પરિવારને ખૂબ ખૂબ અભિનંદન સહ હાર્દિક શુભકામનાઓ.

ડૉ.એચ.એ. જોષી
આસિ. પ્રાધ્યાપક
મહિસાગર એમ. એડ્. કોલેજ
ભુણાવાડા

❧ મારું શહેર... ❧

અજાણું છે?
ના...પરિચિત જ છે.
તોય! ક્યાંક તો...
ખોવાઈ ગયેલું છે.
ઘબકે છે, મારા માં
પણ! થોડું ઘણું...
જડ થઈ ગયેલું છે.
નામ એજ છે, સ્થળ પણ એ જ.
પણ... જો ને!! અજાણ્યા સરનામાં,
વસાવી રહ્યું છે.
જૂની જાણીતી જ છે,
એ ગલીઓ...
પણ - મારા જેવા ને
ક્યાંક તો, અટવાવી રહ્યું છે.
અરે...
મારું જ શહેર છે આ તો?!
તો પણ કેમ??
સાવ જ અજાણું લાગી રહ્યું છે?

Dharti Patel
Asst. Librarian

❧ ચામોશી ❧

હમ એસે થે નહીં જૈસે હો ગઈ હૈ
એસે હર બાત પર સવાલ કરના કબી હમે આયા હી નહીં
હર બાત પર આંસૂ બહાના માં ને સિચાયા હી નહીં,
હર કિસ્સા યાદ રચતે હૈ
ચુશી ભરી હૈ આંચોં મેં પર થોડા ગમ દિલ મેં સાથ રચતે હૈ
બાહર સે ચામોશ ઓર અંદર સે ચિલ્લા રહે હૈ
શામ ઢલ ચુકી હૈ હાથ મેં ગિટાર હૈ
ઓર હમ અપને લિચે ગીત ગા રહે હૈ,
ચુદ પે હર પલ સવાલ ભી બહુત કિઈ હૈ
હમ જિંદગી હર વકત ઓકાત કે બહુત કી જિઈ હૈ,
નજાને કિતને ચ્વાબ જાગતે હુઈ દેચે ઓર
કિતને રાતોં કો ચ્ચો ગઈ હૈ
સપને ભી અભી અંગઝાઈ લેકર સો ગઈ હૈ
બહુત લોગ આઈ જિંદગી મેં ઓર બહુત લોગ ગઈ હૈ
હમ એસે થે નહીં પહેલે જૈસે અબ હો ગઈ હૈ।

Maharshi Mayavanshi
T.Y. (Envi. Science)

❧ એક પત્ર મમ્મીને... ❧

મમ્મી....
તું કેમ છે? તારી તબિયત કેવી છે? તારે કશું જોઈએ છે?
તને કોઈ તકલીફ તો નથી ને??
કેટલાય સમય થી મારે આ પૂછવાનું જ રહી જતું હતું....
- તારા ખોળે માથું રાખીને સુઈ જવાનું જ રહી ગયું.....
- મારાં ગુસ્સામાં ને મારાં તણાવ મા તારી
લાગણીઓ ને સમજવા નું રહી ગયું..
- મારાં દુઃખ મા તારા પાલવ થી મારાં
આંસુ લૂછીને તારા આંસુ લુછવાનું ભૂલી
ગયો...
- પારકા ને સાથે સમય વિતાવતા, તારા
માટે સમય કાઢવાનું રહી જ ગયું....
- ગીતો સાંભળતા ને ફિલ્મો જોતા, તારું
હાલરડું સાંભળવાનું રહી જ ગયું..
- ઓહહ માँ : મારી કઈ ભૂલ હોઈ તો
માફ કરજે!!!
- ખુદ ને નવી ઓળખ આપવામાં ને આપવામાં મારાથી...
તારું થવાનું રહી ગયું....

Kush Atara
S.Y. (Chemistry)

❧ *The Three Golden Years of Graduation* ❧

It is rightly said, - "A journey of a thousand miles begins with a single step." I was fortunate enough to have got an opportunity to make a choice of picking up the best institution for carving the path towards my journey of excellence.

The three golden years of graduation at Natubhai V. Patel College of Pure and Applied Sciences have been the foundational years of my life and even today I keep reminiscing them with fond memories.

On 4th July 2017- the day, I first walked into the campus of NVPAS with the only hope of receiving admission in the college. Little did I know, that this was going to be the best decision of my life.

The first person I met in the college was -Principal Sir- Dr. Basudeb Bakshi.

Me:- "Good Afternoon Sir! I am Prachi Bhatt. I am looking forward to seeking admission at your college but I have a doubt.

Sir:- "Yes, Good Afternoon! Well, that's good to hear, but what is your doubt?

Me:- " Sir I am an ex-NCC Cadet, and I have attended National camps during my school days and I look forward to being selected for the National Camp in the 2nd year of my college and I am not sure if the college will give me permission to attend the same, as I'd be missing out on the lectures while I go about representing my college, state and country as well. So, would I be given the permission for the same?"

Sir:- " I see, you've got goals to achieve. Let me assure you that we, at NVPAS always support our students for each and every activity that shapes their bright future and so, you will be supported too.

Me:- "Thank you so much Sir! I assure you that I'd balance both co-curricular activities and academics and make sure to raise the threshold of growth for NVPAS".

This very conversation was the foundation of my stepping stone at NVPAS and being an NVite I have not only broadened my horizons but have constantly fostered for growth and excellence in both academics and co-curricular activities.

I was the student of BSc- Chemistry from 2017-2020 batch of NVPAS. I call them the three golden years of graduation. Right from the beginning of the First year I was an active participant of all the college activities; you name it, and I was there! I remember inspiring my fellow friends to participate in all events as well just by saying- "Yeh Din Vapas Nahi Aayenge, let's make the best out of it! And, largely they used to get convinced and after participating they used to feel happier.

I was part of the National Cadet Corps (NCC), National Service Scheme (NSS), Sports, Secretary of the Equal Opportunity Cell, and also equally good at academics.

The secret to my success in all these fields are my excellent Professors, and my dearest friends without whom I would have not been able to achieve such feats which were unimaginable and tough.

The challenges I faced during my college days wouldn't have been overcome without the constant support, guidance and motivation of my Professors. And here's why I appreciate the motto of NSS – "NOT ME, BUT YOU". The Professors at NVPAS imbibe in you the great values of how to profoundly contribute not just to yourself but to the community at large. They teach you how to become a better human and most importantly, how to become independent and shoulder the responsibilities of your life.

They prepared me for all the challenges of life and trained me to constantly keep raising my capabilities to the level where I keep accomplishing one goal after the other.

It has been a beautiful journey of the three golden years of my life, where opportunities were galore and recognition was motivational.

I have built a very good rapport with my Professors and I will continue to foster the same throughout my life. I am forever grateful, and indebted to NVPAS- an institution of opportunities and excellence,

for playing a pivotal role in shaping my future.

I am sure my juniors must be reading this, and for them I just want to say that,

You may have the capability to run only a 100 km today, but when you get an opportunity and you are asked, "Can you run 200 kms?"

Then, without a doubt in your mind, you should just say "Yes, I can and I will!"

Because, trust me, you actually will.

And, that's how you will grow yourself and truly know your latent talents.

All the very best to my juniors for their future endeavors!

Prachi Bhatt

B Sc. (Chemistry)

❧ जिंदगी एक रंगमंच ❧

जिंदगी ना एक रंगमंच सी है । पता नहीं कब कहा क्या हो जाए ? लेकिन जिंदगी कि इस भागा दौड़ी मैं कही खो से गए हैं हम; भटक से गए हैं हम । इस भाग दौड़ में खुद से मील ना ही भूल गए हैं हम ।

The nights during November I was thinking about how I was and what I have become.

आओ, बैठो, कुछ बातें करते हैं। कैसे हो? खुश हो? क्या हुआ है? सब ठीक है ना?

As I was thinking about my life I realised whatever I do is not enough.

Then what is enough? Let me be very honest. Sometimes, I do feel like that I am in a trap. I have so much in my head that even my own words hit me with the hammer full of unending thoughts and it feels like a burden.

This is going to happen someday. Our minds and hearts have become so vulnerable that even a single tickle of dark heat could lead to killing ourselves, or worse - our emotions. This time, this century, we witnessed the darkest and the most horrific themes of humans and we are coming down to become even worse than animals.

"Negative thoughts" - we all believe that we are heroes in everyone's story and if not then definitely in ours. The belief of not having boxes of ego, makes us egoistic at the end of the day. We do not live for ourselves, but against ourselves giving priorities to others' opinions.

We laugh, we share smiles and wear that mask of happiness to showcase the luxury of a lifestyle that we know is a disguise.

We don't have to do that. Honestly, we all know that we are dark inside. At the end of the day when we back to sleep, we give rise to so many depressing thoughts or would have killed so many people in our dreams. But then, the next morning it is all about the masks. Is it healthy? well, not because if it would have been, sunshine wouldn't have an aura flaunting daily through our windows telling us that it is not important to slave yourself to darkness.

Our mind is strong enough to understand things in life. What is wrong and what is right but then we all need a corner to overthink and eat in the paces of black lines going our way. We need to love, we need to care, we need to smile, the real one. We need to throw that mask and absorb only the positive because then, at the end of the day it is life and we need to prioritize this and not what people have for us or what we have for them.

Smile, the real one. It gives hope to you.

Aniket Panchal

TY (Chemistry)

❧ Vedic era: the eternal order of science ❧

The word Veda means knowledge and are the most sacred scriptures of Hinduism. The Vedas are also called 'Sruti' meaning that was heard and revealed to the Sages and ascetics. Vedas teach science not as something special for people with higher knowledge and thinking but as part and parcel of their day to day affairs. We as Indians have failed to understand the deep and real meaning of Holy Vedas and Hindu Cultured texts.

What are some Vedic Science facts?

The Vedas contain accurate data pertaining to all fields of science. Here are just few examples:

- The date of the "Big Bang."
- The date of universal annihilation or the death of our universe.
- The developmental stages of a human fetus within the womb.
- The origin of our solar system as well as its destruction.
- The destination of the soul at the time of death.

Today, we all are in a state of mind state that every inventions is from the western world but thousands of years ago, during golden era of India, Indian sage had the knowledge, thoughts and inventions that the modern era can't catch up with Today modern day scientist present their technology as invention but it's just the re-invention or innovation based on our ancestors' philosophy.

Almost all of us don't know that **Bhaskaracharya** was the first person to discover the Gravity. We are taught that the first law of motion was discovered by **Sir Issac Newton** in 16th century but actually it was described by **Bhaskaracharya** in one of his book called "**Surya Siddhanta**" in 11th century. He also discovered by the calculation that when any of the planet is farthest or closest to the sun, the difference between a planet's actual position according to the equation of the central vanishes.

The **Vyamaanika Shaastra**, a 4th Century BC text written by Sage **Bharadwaj** contains 3000 shlokas. The book greatly deals with the operation of ancient vimanas and included information on steering, precautions for long flights, protection of the airships from storms and lightning and how to switch the drive of solar energy or some other form of energy.

Acharya Aryabhata was the first mathematician astronomer from the classical age of Indian mathematics and Indian astronomy. He correctly stated that the earth rotates about its axis daily. He also explained that the motion of the stars are being observed just because the earth is rotating. He also succeeded in explaining the geocentric model of the Solar System.

Acharya Sushruta was a great Indian Physician and was known to be as the Father of Surgery or Father of Plastic Surgery. He was the world's first surgeon who performed complicated surgeries, 2600 years ago. The Sushruta Samhita has 184 chapters containing descriptions of 1,120 illnesses, 700 medicinal plants, 64 preparations from mineral sources and 57 preparation based on animal sources.

Nagarjuna was a great Indian metallurgist and alchemist. He distinguished between the metals and the sub metals and also between solvents and soluble. He stated that Mercury could dissolve all the metals. He also invented the processes of "Distillation" and "Calcinations". He was the first person to use Mercury as medicine.

Rishi Agastya explained various theories to generate clean energy thereby providing electricity with natural resources. This same principle was applied in the modern battery which we use today.

Baudhayana was the first person on this planet who discovered the several concepts in mathematics which were later rediscovered by the other scientist in the western world. The value of the pie was discovered by him. He also discovered Pythagoras Theorem in Sulba Sutra.

The **Acharya Kanad** was the first person on this globe who talks about atoms and molecules. It was Kanad who said that atom is an indivisible particle. He wrote a book on his research of atom and became famous as Father of Atomic Theory.

These were few great scientists of Vedic era. Our sages put this great knowledge not only on paper but at that time with great skill and design many concepts were practically implemented on the ground.

At last I want to say that, Vedas stand for self realization and cosmic realization joining towards the reality of truth.

Shivani Narang
(SY Chemistry)

❧ The Secret Behind Success ❧

Today, a new era has begun in which trade and commerce have been given a different direction. The coming generations have a lot of enthusiasm for business whether it is in the business field or in the technology field and many people are attracted towards business careers and the government has also woken up, motivating people to do a lot of business.

School and colleges are also motivating students to make career in business, along side successful businesses are also investing in new start-ups, making it easier for new born entrepreneurs to grow. However, today I will tell you how to get started so that you can survive well and long in this market for a long time.

You have to start in such a way that you can achieve great success and get your name out there in business. First of all I think everyone should get a prior experience, let me explain benefit for it. At first one should learn and gain experience by working for other business where you work as if it's your own business. By doing this you will be one step closer to run a successful business. During this hands-on experience you'll learn the importance of each and every penny, you'll also learn how to think clearly and keep calm under pressure to make best possible decision. You should also learn how to work with people involved and working with you, also being a helping hand for person in need is important too. This way you'll be able to grow with them as a result growth in your business.

Lots of people think that why should we do such hard work instead of we can do business very easily by getting funds and investors. One can do by using their connections and commitment also. All this things you can find it very easily in market but without any primary practical knowledge or experience the business will not be very effective nor it will stay so long in market.

everyone wants to do business but one must take care of small things to make their business successful and to stay in market for long term. At last, I would like to say that if every successful entrepreneur has take care so precisely and delicately of all the things and gain all primary knowledge and experience which is needed and take step by step decision and sufficient experience in their life then no any businessman will be stop by anything to make them successful in market. "Success is a result of preparation, hard work and learning from failure"

Thank You

Maniyar Prashil Jaybhai
TY (GT)

❧ કોણ છે તું મારી માટે ❧

નાના પારણાં રમતું એ સ્મિત છે તું,
ભાઈજંઘોની મહેફીલમાં રહેલું એ ગીત છે તું.

થિયાળાની કડકડતી ઠંડીમાં સૂર્યનું કિરણ છે તું,
ઉનાળામાં ઠંડા વાયરાનું એક ઝાપટું છે તું.

પ્રેમમાં ઊગવા માટેનું કારણ છે તું,
હેયે રહેલા પ્રસ્નપત્રનું પ્રેમભર્યું તારણ છે તું.

વ્યક્તિત્વથી નહિ પણ અસ્તિત્વ થી યાદવાવાળ
પ્રેમી પંખીડાઓ માટેની એક ઝલક છે તું.

કોઈ ને પામવા માટે પોતાને વેચી નાખવા માટેની ઈચ્છા છે તું,
લાલ પરણેતર અને લીલા ઘૂંઘટમાં ચોરીમાં આવતા નવવધૂના ચહેરાની એ શરમ છે તું.

નવજાત શિશુને પ્રથમ વખત જોઈને,
માં ની આંખોમાંથી નીકળેલું પ્રેમભર્યું ઝરણું છે તું.

કૃષ્ણને પામવા માટે ગોપીઓમાં રહેલી યાદ છે તું,
સબરીની આંખોમાં રામ માટે રહેલી રાહ છે તું.

તું એજ છે, જેને લખવા માટે શબ્દો નહિ સંવેદનાઓ જડે છે,
હૃદયથી લખાણો નહિ લાગણીઓ મળે છે.

પ્રજ્ઞમાં કોણ છે તું મારી માટે,

જવાબમાં તો પ્રેમજ છે તું મારી માટે.

Abhishek Pal -T Y (BCA)



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EDITORIAL

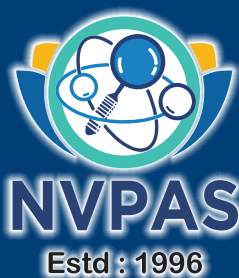
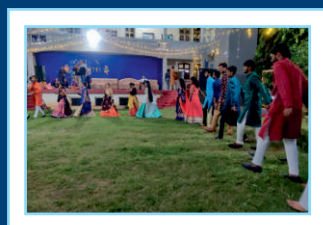
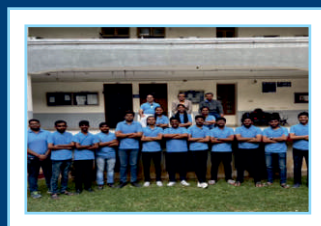
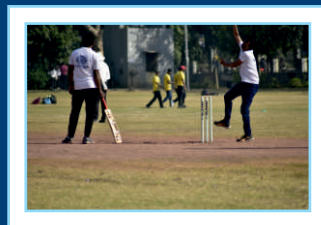
A warm greeting to all the readers of the first annual magazine, Abhivyakti from N.V. Patel College of Pure and Applied Sciences, CVM University which provides a platform for faculty members and students to unleash their expression of ideas, inner creativity, and talent with words, action, or art. The magazine reflects the vibrant and progressive year (2022–2023) for the institute through the plethora of co-curricular and extracurricular activities.

My heartfelt thanks to our principal, Dr. Basudeb Bakshi, for giving me the opportunity to act as editor of this annual magazine. I am thankful to the whole editorial team for their constant support, without which it would not have been possible to bring out this valuable magazine within the time frame. I extend my warm gratitude to everyone who contributed to the successful release of this magazine.

"There are no limits to what you can accomplish, only those of your own thinking"

- Brian Tracy

Dr. Pratibha Parihar
Executive Editor



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