



SARVAJANIK EDUCATION SOCIETY

# P. T. SARVAJANIK COLLEGE OF SCIENCE

NAAC ACCREDITED 'A' ( 3.03 CGPA )

COLLEGE WITH POTENTIAL FOR EXCELLENCE

No. :

Date :

The Institute's vision statement reads: *To promote experimental scientific pursuit and to provide conducive environment to students, to develop aptitude and to sharpen skills of students to meet the challenges of rapidly changing world and to instil a spirit of camaraderie amongst students and sensitize them regarding their role and duty towards nation building.*

In order to fulfil its vision statement in letter and spirit the Institute has applied for "Autonomous College Status" in 2018. The one area where the Institute has laid special emphasis on and has a distinctive feature is its teaching learning pedagogy which is vibrant and multifaceted.

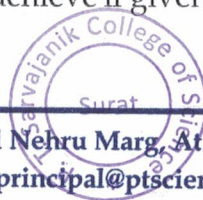
Thanks to the technological advancements, the wide spread availability of the internet has literally made information available on the fingertips. In this rapidly progressing world, it is indeed a herculean task to bridge the gap between the classroom teachings and the meta-morphing world outside. The Institute has adopted new and innovative pedagogical practises to improve the efficacy of the teaching learning process, in line with its vision statement.

The Institute has realised that the students need to be motivated towards developing a deep interest in core sciences. The earlier they are introduced to the exciting world of research and advanced technologies; the stronger will be their scientific aptitude and better will be the scientific workforce of the nation.

The Institute has been organizing invited talks and a unique lecture series entitled "Nobel Lecture Series" so that they can interact with the speakers from the eminent research institutes of the country. While the speakers explain the scientific discovery for which the Nobel Prize was awarded, the live one-to-one interaction with eminent scientists and professors has been a source of inspiration and morale booster.

The Institute has also been holding invited talks on various aspects of science and has continued this tradition even during the pandemic. The institute has organized more than 80 invited talks, talks by faculty and webinars during last five years.

The Institute has been organizing certificate courses which not only enhance students' foundational knowledge but also provide them much needed hands on training. The Institute's weather station (Air Quality Monitoring Station) project implemented by them is an apt example of what students can achieve if given the appropriate guidance and training.





To introduce ICT in teaching-learning all the classrooms are ICT enabled and the campus is Wi-Fi enabled. The institution has subscribed to the Google G-suite and also to the Microsoft 365. The use of these platforms has been a boon as the Institute could continue with online teaching and holding webinars during the pandemic lockdown.

The Institute is always ready to take up challenges and believes in catching the bull by its horn. A visually impaired student (blind) was admitted in the first year of B.Sc. during 2020-21. The Institute entered into MOU with XRCVC, Mumbai which trained the staff and volunteers for providing inclusive services for the visually impaired. The staff re-oriented their teaching methodology to enable the blind student to understand and grasp his subject easily. The laboratory instruments were modified to allow a tactile feel. The volunteer students prepared tactile charts of the diagrams and audio files of the text were recorded. The use of DESMOS for plotting graphs was also taught.

In order to provide a conducive environment for optimum harnessing of their creative pursuit, under the Student Startup & Innovation Policy (SSIP) of Government of Gujarat, a SSIP cell was established. The Institute has signed a MOU with the Gujarat Knowledge Society (GKS) on 22nd May, 2020. An annual grant of Rs. 5,00,000.00 was approved of which Rs. 1,25,000.00 was disbursed. Under this MOU, two projects that were put up for proof of concept were accomplished and were so unique that a detailed patent search process was initiated and two patents were filed.

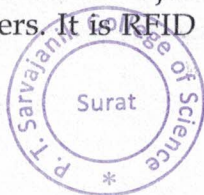
The Institute has signed MOU with Knowledge Consortium of Gujarat and has received funding of Rs. 2 crores under RUSA 2.0.

The Institute has signed MOUs with different Industries and academic institutions for nurturing the overall development of the students and create a mutually beneficial environment wherein fruitful exchange of ideas and intellectual resources could be shared.

One of the project was regarding the design of instruments as an inclusion aid for the visually impaired students. A digital Vernier calliper was interfaced with a specially devised circuit that converted the readings speech. The circuit was designed to speak in 3 languages. This is a big step towards providing inclusive support in STEM for visually impaired students in their native vernacular language.

It was found that the use of current insecticide in the form of Pyrethrin as a fogging agent was poisonous. A novel compound was synthesized by a mixture of herbal oils and bio diesel rendering the whole mixture to be environment friendly and bio degradable fogging mixture. Trials showed a fatality rate of more than 60% for mosquitoes and was found to be nontoxic.

Library plays a pivotal role in enhancing the efficacy of teaching learning process. The Institute boast of a large and separate library building which houses nearly 16900 books. It also subscribes to various science journals (around 20), a large number of magazines and leading newspapers. It is RFID enabled and uses SOUL 2.0 software





to maintain records. The library database has been shared across the country via DELNET and ADINET. The students have been given individual IDs for accessing plethora of e-books and e-material available through N-List. This facility has enhanced the subject knowledge of the students and is reflected in the medals / prizes won at the university examination, a large number students passing various national level examinations.

The students of the Institute are encouraged and motivated to participate in various competitions such as science quizzes, PPT presentations on Nobel prizes, essay writing etc.

The Institute has thus diligently been pursuing its vision statement and has left no stone unturned in grasping an opportunity to bring about academic, skill based, physical, moral and value based overall development of its students.



  
Principal  
P. T. Sarvajanik College of Science  
Surat