

1. Introduction:

Rayat Science and Innovation Activity Centre:

Rayat Science and Innovation Activity Center, inaugurated on February 14, 2020 in grace presence of a President of Rayat Shikshan Sanstha, **Hon'ble Sharad Pawar** and the renowned scientist, **Hon'ble Dr. Anil Kakodkar**, is a unique, non-formal science learning centre in the township of Satara. It aims to inculcate **scientific temper among the students** and popularize science in rural part of Satara district. The centre has been started with a robust support from the Rajiv Gandhi Science and Technology Commission (RGSTC) and the Nehru Science Centre (NSCM) for encouraging and motivating the students to undertake innovative activities in science. Rayat Science and Innovation Activity Center, Satara is spread over an area of approximately 550 square meters which consists an innovation activity hall, fun science hall, temporary exhibition space, an exhibition on Nobel Prizes 2019 and Mental Health, rolling ball sculpture and an open door science park.

2. Existing Galleries

The centre has three galleries- Exhibition Hall, Fun Science Hall, Innovation Hub and one Science Park.

Exhibition Hall:

In Exhibition Hall of the centre, photos as well as information about many renowned Indian physicists, scientists and their contribution are showcased for the visitors. The hall is being used for the demonstrations of science experiments. This is the place wherein students perform science activities.

Fun Science Gallery:

The concept of fun science exhibition is based on the mantra "I hear, I forget; I see, I remember; I do, I understand." The exhibits in fun science gallery will attract and encourage the visitors, especially students, to touch and experiment with these exhibits and learn about many basic scientific principles from our day to day life and also to learn to observe and form hypothesis. All exhibits of fun science gallery demonstrate the scientific principles behind many phenomena in lucid interactive manner thereby impacting impressionable minds of young children to believe

that science can be fun , which otherwise is dealt with lot of seriousness and bookish approach in classrooms.

This gallery facilitates learning science while playing. These activities invite visitors to learn and deepen their knowledge on specific topic such as light and color, optical illusions, mechanics, electricity, magnetism and many more.

Innovation Hub:

The innovation Centre provides facilities for the young minds to nurture new ideas and help develop inquisitive perspective among students. The innovation hall has fairly well equipped labs to do innovative experiments and model making in physics, chemistry, biology thereby creating excitement about science through experimentation and for understanding the underlying principles in science. This helps children to be logical thinkers. The section **TOD- FOD- JOD**(deconstruct and reconstruct) motivates students to learn to do things with their own hands , dismantle , reassemble and remake devices / gadgets and another section **KABAD SE JUGAD**(build from scraps) helps the students learn to make things from day to day scrap. We demonstrate and informed about innovation activity, biology, chemistry, Tod-Fod- Jod, Robotics, and Electronics giving all these relevant information to the students and they are shown. Innovation activity and Tod -Fod-Jod conducted by student also.

Science Park:

A science park in a science center is exposition without wall in open air; Science Park is an innovative concept of teaching science in an informal ambience. The basic idea of Science Park lies on the tendency of the children to play more than read. The small science park in Centre facilitates the children to mingle with science while playing. 10 simple sturdy exhibits installed here, encourage students to touch, experiment and play by way of interactivity and immersion to discover the reason and scientific facts about some nature phenomena. A few concepts about energy, gravity, how lever works, principle of camera, propagation of sound waves and vibration in objects etc. are explained in a playful manner in the science park.

Galleries picture at Rayat Science and Innovation Activity Center, Satara.

Innovation Hub



Exhibition Gallery



Fun Science Gallery



Science Park



Main objectives of the science center are to:

1. Promote scientific culture and inculcate scientific temper for nurturing talent in science and technology and undertake research in scientific disciplines for conversion of science into technology as a vehicle of change in overall development.
2. Develop, own and operate world-class science centre which includes exhibitions, museums and edutainment and acts as a premier institute propagating science and harness the potential of modern communication technologies for welfare of the society.
3. To popularize science and technology in cities, urban and rural areas for the benefit of students and for the common man by organizing exhibitions, seminars, popular lectures, science camps and various other programs.
4. To organize training programs for science teachers/students/young entrepreneurs/technicians/handicapped/housewives and others on specific subjects of science, technology and industry. To establish centers for development of science exhibits and demonstration aids.
5. To supplement Science education given in schools and colleges to foster the spirit of scientific enquiry and creativity among the students.

Science Education Activities:

The science center organizes the Science Demonstration Lectures / Science Shows as follows.

- Fun with Physics
- Properties of Air
- Matter at Low Temperature
- Chemistry Show
- Chemistry in daily life
- Science vs. Miracles
- Colorful Chemistry
- Fun Science
- Electricity and Magnetism
- Liquid Nitrogen show

Activities at Science Centre :

The science center organizes the Science Activities/Workshop/ Science Shows as follows.

- Science Demonstration
- STEM Workshop
- Teachers/ Students Training
- Teachers / Students Workshop
- Liquid Nitrogen Gas Show
- Sky Observation
- Bird Watching/ Nature Exploration