











Institution's Innovation Council Saurashtra University Rajkot

Celebration of National Science Day

"National Conference on Contribution of Indian Scientist"

28th February 2024

At Senate Hall, Main Building, Saurashtra University Rajkot

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Saurashtra University – IIC

The university is dedicated to instruction, research, and extending knowledge to the public (public service). Ministry of Education (MoE), Govt. of India has established 'MoE's Innovation Cell (MIC)' to systematically foster the culture of Innovation among all Higher Education Institutions (HEIs). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. Saurashtra University is one the Organization that have constituted the IIC to foster the vision of MoE and be a part for the promotion and development of innovation ecosystem.

Event Schedule



Event Registration Link

bit.ly/SUSEC-SCI

Brief about Event

The SU Startup and Entrepreneurship Council & IIC, Saurashtra University in collaboration with the Science Departments, Saurashtra University hosted a Conference for National Science Day on 28th February 2024. Hon'ble Vice-chancellor Ma'am give information about this year theme for National Science Day to students. As Union Minister Dr. Jitendra Singh launched the theme for National Science Day for this year's celebration reflects a strategic focus on promoting public appreciation for Science, Technology and Innovation. The National Science Day is celebrated every year on 28 February to commemorate the discovery of the 'Raman Effect'. All these advancements are happening because we are making our Science and Technology stronger in the country. We are focusing on areas like Artificial Intelligence, Astronomy, Solar and Wind Energy, Semiconductors, Climate Research, Space Research, and Biotechnology.

Afterwards Sir explained about many scientists in ancient India. Varahamihira was an astronomer, mathematician, and astrologer who lived around the 6th century CE. He made significant contributions to astronomy. His major work, the "Pancha Siddhantika" and "Brihat Samhita". He wrote the "Brihat Jataka," that also includes mathematical concepts related to horoscopy. Aryabhata was a mathematician and astronomer during. Aryabhata made significant contributions to trigonometry. He introduced the concept of sine, inverse sine. Aryabhata provided an approximation of the value of π (pi) as 3.1416 in his work. He also wrote the "Aryabhatiya," and the "Arya-Siddhanta." Kanada is the founder of the Vaisesika school, Kanada's work, known as the " Vaisesika Sutra" or "Aphorisms of the Vaisesika,". The Vaisesika Sutra discusses the concept of atoms (paramanu) as the fundamental building blocks of matter.

Susruta was an ancient Indian physician and is often referred to as the "Father of Surgery." His work for surgical practices in significantly influenced the development of Ayurveda. He described various surgical techniques, instruments, and procedures in the "Susruta Samhita." Susruta's descriptions in the "Susruta Samhita" include techniques for reconstructing a nose through plastic surgery. Bhaskara II was a mathematician and astronomer. Bhaskara II is best known for his two major mathematical works: "Lilavati" "Bijaganita". Bhaskara II also made significant contributions to astronomy. His work "Siddhanta Shiromani".

Sir C. V. Raman, was an eminent Indian physicist who made significant contributions to the field of optics and won the Nobel Prize in Physics in 1930. He was the first Asian and the first non-white individual to receive a Nobel Prize. The Raman Effect demonstrated the inelastic scattering of a photon, revealing changes in energy and wavelength when light interacts with molecules. Homi Jehangir Bhabha was an influential Indian nuclear physicist. His research focused on understanding cosmic rays and the behavior of electrons in the Earth's atmosphere. He is particularly known for his discovery of a scattering process in quantum physics, which became known as "Bhabha Scattering." Recognizing the importance of nuclear energy for India's development. He was appointed as the first Chairman of the Atomic Energy Commission of India. Sir M. Visvesvaraya, was an engineer, statesman, and scholar. He contributed significantly to the planning and implementation of several infrastructure projects, including the construction of dams, bridges, and water supply systems. His expertise in water management and irrigation projects earned him recognition and accolades. He received various honors and awards, including the Bharat Ratna, India's highest civilian award, in 1955.

Venkatraman Radhakrishnan is an Indian space scientist and former chairman of the Indian Space Research Organization (ISRO). He made significant contributions to India's space program, particularly in the areas of satellite launch vehicle systems and project management. he held several key positions at ISRO and contributed to the development of propulsion systems for launch vehicles. He received several honors and awards for his contributions including the Padma Bhushan. Satyendra Nath Bose was a physicist & mathematician. Satyendra Nath Bose's contributions to theoretical physics. Bose made his most notable contribution is when he collaborated with Albert Einstein on the Bose-Einstein statistics. He was awarded the Padma Vibhushan, India's second-highest civilian award. Bose's work has had a profound impact on the field of physics. The class of particles that obey Bose-Einstein statistics is named "bosons" in his honor. Srinivasa Ramanujan who made significant contributions to number theory, mathematical analysis, and infinite series. He displayed an early aptitude for mathematics and, without any formal training, developed his own theorems and mathematical ideas. His talent came to the attention of British mathematician G. H. Hardy in 1913 when he received a letter from Ramanujan containing numerous original results. Impressed by his work, Hardy invited him to Cambridge University. He produced novel results related to modular forms, mock theta functions, and highly composite numbers.

Sir Jagadish Chandra Bose was a scientist and polymath who made significant contributions to physics and biology. He made contributions in the area of radio waves and microwave optics. He invented the "mercury coherer." his research extended to millimeter-wave optics. In addition to his work in physics, Bose was deeply interested in plant physiology. He conducted research on the response of plants to various stimuli and demonstrated that plants exhibit similar responses to animals. Jagadish Chandra Bose was knighted by the British Crown in 1917, becoming Sir Jagadish Chandra Bose. Dr. Vikram Sarabhai was a scientist, visionary, and pioneer in space research. Dr. Sarabhai played a pivotal role in establishing the ISRO. Under Sarabhai's leadership, India's first satellite, Aryabhata, was launched. He played a key role in establishing the IIM Ahmedabad. Vikram Sarabhai received numerous awards for his contributions, including the Padma Bhushan in 1966 posthumously. Dr. A. P. J. Abdul Kalam, was a scientist, aerospace engineer, and politician who served as the 11th President of India. He played a crucial role in India's space and military programs. He authored an autobiography titled "Wings of Fire," which narrates his life journey. He is remembered as the "People's President" and the "Missile Man of India." Dr. A. P. J. Abdul Kalam received several awards and honors, including the Bharat Ratna, India's highest civilian award, in 1997.

Key Points

During the session, below mentioned points were discussed:

- > Technological innovation
- ➤ Appreciation for science, technology
- > Ancient Indian scientists
- ➤ Government support
- Contributions of eminent Indian scientists
- > Focus on promoting for innovation.
- > Rationale for advancements
- > Educational significance
- > FAQs related to Contribution of Indian Scientist?

Outcome

According to the event this year's National Science Day theme, focusing on promoting public appreciation for Science, Technology, and Innovation. Celebrated annually on February 28 to honor the discovery of the 'Raman Effect,' the day underscores India's commitment to strengthening Science and Technology in areas such as Artificial Intelligence, Astronomy, Solar and Wind Energy, Semiconductors, Climate Research, Space Research, and Biotechnology. The session also delved into ancient Indian scientists like Varahamihira and Aryabhata, highlighting their astronomical and mathematical contributions. The discussion extended to modern scientists, including C. V. Raman, Homi J. Bhabha, Dr. A. P. J. Abdul Kalam, showcasing their significant impacts on physics, engineering, and space science, contributing to India's scientific prowess.

About the Speaker/Chief Guest



Dr. Rupesh Ramani

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