Uka Tarsadia University

Department of Physics

Educational Visit to Gujarat Science City (Ahmedabad Science Centre)

Date: 6th February 2025

Venue: Gujarat Science City (Ahmedabad Science Centre)

Time: 09:30 -07:30 pm

Total No. of Participants: 38

Significant Insights:

Established in 2001 and opened to the public in 2002, Science City is overseen by the Gujarat Council of Science City—a society registered under the state's Department of Science & Technology. The complex spans 107 hectares, and in 2021, Phase-II added the state's largest Aquatic Gallery, a Robotics Gallery, and a Nature Park

Event Coordinator: Dr Bhumika K Sharma

Program Objective: The primary objective of this educational visit was to:

- Enhance student exposure to practical science and technology.
- Promote curiosity and interest in emerging scientific fields such as robotics, space science, and renewable energy.
- Support academic concepts through experiential and visual learning.
- Encourage innovation and interdisciplinary thinking.
- Offer insights into the role of science in solving real-world problems.

Program outline:

1. Departure from college campus

2. Arrival at Gujarat Science City, Ahmedabad

3. Registration and Orientation, Visit to Robotics Gallery, Visit to Aquatic Gallery, Lunch Break, Visit to Hall of Science & Hall of Space, Nature Park and Butterfly Garden Tour, laser show.

4. Departure from Science City

5. Arrival at college campus

Dept. of Physics, UTU

Program outcome and Key highlights:

The educational visit to the **Aquatic Gallery** at Gujarat Science City enabled students to:

1. **Understand Marine Biodiversity:**
   Gain exposure to diverse aquatic species (over 11,000 animals from 188 species), including coral reefs, jellyfish, reef sharks, gar fish, and penguins, enhancing knowledge of marine ecosystems and their ecological balance.

2. **Appreciate Conservation Efforts:**
   Learn about the importance of marine conservation, the effects of pollution and climate change on oceans, and global efforts to protect endangered species.

3. **Bridge Theory with Reality:**
   Visualize and relate biological concepts from academic curriculum (such as food chains, adaptation, aquatic physiology) to real-world specimens and their behaviors.
4. **Enhance Observational Skills:**
   Develop attention to detail through careful observation of aquatic animals' movement, interaction, and habitat simulation within the gallery (e.g., walk-through shark tunnel, large tanks, simulated reef environments).
5. **Inspire Curiosity in Marine Science:**
   Motivate students toward interdisciplinary fields such as marine biology, oceanography, environmental engineering, and sustainable water ecosystems.
6. **Encourage Responsible Citizenship:**
   Instill awareness of sustainable living practices and the role of individuals in protecting water resources and biodiversity.

Interactive Learning through Real-Life Science Exhibits

Students explored science and technology beyond textbooks, experiencing hands-on learning in robotics, marine biology, space science, and environmental sustainability.

Robotics Gallery – India's Largest

Showcased 79 types of robots, including humanoid robots, robotic arms, and AI applications.

Students interacted with robots, explored virtual reality zones, and learned about automation and future tech.

Aquatic Gallery – One of Asia's Biggest

Over 11,000 marine animals across 188 species.

Included a 28-metre-long walk-through shark tunnel, reef tanks, jellyfish, penguins, and deep-sea habitats.

Planet Earth Pavilion

Simulations of natural disasters (earthquake, volcano, tsunami).

Demonstrations on global warming, soil erosion, and conservation.

IMAX 3D Theatre

Watched an immersive science-themed documentary in India's first IMAX 3D theatre, enhancing visual understanding of complex scientific topics.

Nature Park & Butterfly Garden

Explored oxygen zones, medicinal plants, and a butterfly enclosure—emphasizing biodiversity and ecological balance.

Energy Education Park

Real-world models of solar, wind, and hydro power systems. Promoted awareness of renewable energy and sustainability.

Expert Guidance & Faculty Interaction Faculty coordinators provided context to each exhibit, linking it to academic learning and career relevance.

Student Engagement & Documentation

Active student participation through Q&A, discussions, and photography of exhibits for

post- visit reflections.

Positive Student Feedback

Students described the visit as "inspiring," "fun and educational," and expressed interest in more such field-based learning experiences.

EDUCATIONAL VISIT TO

GUJARAT SCIENCE CITY (AHMEDABAD SCIENCE CENTRE).

ORGANIZED BY

DEPARTMENT OF PHYSICS , UKA TARSADIA UNIVERSITY

Event coordinator

Dr Bhumika K Sharma

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Department of Physics
UkaTarsadia
University

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Report prepared by Dr Bhumika K Sharma
Department of Physics