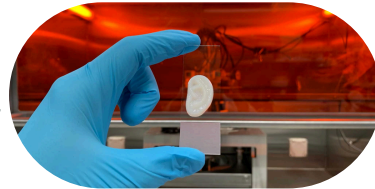




3D PRINTING IN HEALTHCARE- EDITION

Emerging Biomedical Innovation

- Researchers developed 3D-printed ear cartilage using human cells, which showed properties similar to natural cartilage.
- Researchers developed a new 3D printable bio-glass made from silica particles combined with calcium and phosphate ions that promote bone cell growth and can be hardened at a lower temperature than traditional glass materials.



Source: eurekaalert.org

HIGHLIGHTS



- Academic Excellence – Summer 2024 Results
- Technical Events Conducted
- Hospital Visit – Trisha Multispecialty Hospital
- Industrial Visit – Proactive Healthcare Inc.

OUR VISION

“To nurture engineers who can comprehend the ethical, social, and economic implications of their profession by imparting quality education through integration of engineering and medical sciences for the improvement of human health care.”

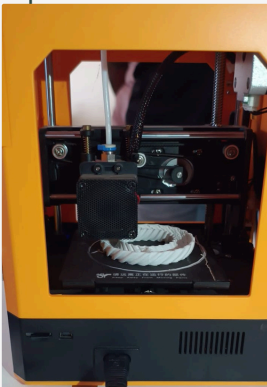
VOLUME 8 ISSUE 2

OUR MISSION

- To create a free and open learning environment that fosters the intellectual growth of students
- To provide skill based technical education
- To enable students to be sensitive towards the ethical issues of medical industry
- To prepare students for confronting medical challenges by applying engineering principles as well as through innovation

“One day visit Trisha Multispecialty Hospital Ahmedabad”

- A hospital visit to Trisha Multispecialty Hospital, Ahmedabad was organized on 13 March 2025 with 32 students under faculty guidance Ms. Meghana M. Patel and Ms. Neelam B. Modi.
- Students observed pathology, physiotherapy, and diagnostic instruments such as microscopes, ELISA/PCR systems, ECG machines, and multipara monitors.
- The visit provided valuable practical exposure to medical equipment and hospital operations.



Expert Talk on 3D Printing and Its Applications

- An expert talk on “3D Printing and Its Applications” was conducted on 18 February 2025 by Mr. Chirag Vyas from Lak Techne India Pvt. Ltd. at Government Polytechnic for Girls, Ahmedabad.
- A total of 95 students attended the session and learned about 3D surgical planning, bioprinting, patient-specific implants, and anatomical models used in healthcare.
- The session provided valuable insights into the growing role of 3D printing technology in modern medical applications.

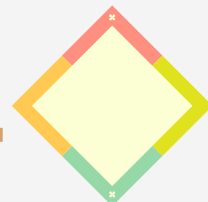


Industrial visit at Proactive Healthcare Inc., Santej, Ahmedabad

- An industrial visit to Proactive Healthcare Inc., Santej, Ahmedabad was organized with 22 students under the guidance of Mr. Rakesh D. Motka and Ms. Jimisha H. Suthar, with Ms. Shweta Panchal as the industry representative.
- Students learned about the manufacturing of medical devices such as glucometers, BP monitors, nebulizers, infrared thermometers, and oxygen concentrators.
- They observed injection molding, cleanroom assembly, and quality testing processes used in medical device production.



Academic Excellence SUMMER 2024



MOTIVATIONAL QUOTE

“ Great achievements begin with determination, discipline, and dedication.”

Student Achievement Highlights – Biomedical Engineering Department

Category	Event / Activity	Level	Students	Achievement
Academic / Technical	My Bharat	National	Patel Tanvi, Priyanka Panchal	Participation
Technical Competition	My Bharat Quiz	Institute	Priyanshi Nayak	Participation
Workshop / Seminar	3D Printing, Arduino Training, Additive Manufacturing	Institute	Thakor Diya, Priyanshi Nayak, Priyanka Panchal, Shilpa Valand, Princey Dubey	Participation
Innovation Workshop	Mahatma Mandir Innovation 2024	State	Priyanshi Nayak	Participation
Cultural Activity	Gopi Raas	Institute	Rutva Maniyar, Thakor Diya	Runner-up
Cultural / Dance	Garba & Dance Competition	Institute	Vrunda	Winner / Runner-up
Cultural Activity	Bharat Vikas Shapath / Vikas Bharat	State	Priyanka Panchal, Priyanshi Nayak	Participation
Social Activity	NSS & Event Volunteering	Institute	Vrunda, Priyanshi Nayak	Participation



The department congratulates all the semester toppers for their excellent academic performance in the Summer 2024 examination.

Semester	Position	Name of Student	SPI
II	1st	PANCHAL PRIYANKA DINESHKUMAR	9.2
II	2nd	CHURAKKAT VANSHIKA SUBHASH	8.4
II	3rd	NAYAK PRIYANSHI GAUTAMBHAI	8.1
IV	1st	SHAH KHUSHALI AJAYKUMAR	9.32
IV	2nd	PATEL MAHEFUJA MUSTAKBHAI	8.86
IV	3rd	CHAUDHARI MAHEK	8.86
VI	1st	DESAI AASIYA MAKSUDBHAI	9.25
VI	2nd	DOHARE PARMITA HARISH	9.25
VI	3rd	LAHERU HIR ANAND	9.25