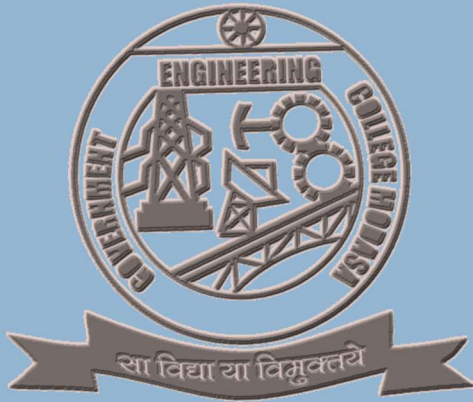


GOVERNMENT ENGINEERING COLLEGE, MODASA

Newsletter

July – December 2022

Vol. 2 – Issue 2



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GECM E-NEWS

FROM THE PRINCIPAL'S DESK



Dear Students, Faculty members and all stake holders

Warm greetings to all.

It gives me an immense pleasure to put forward the 2nd volume, 2nd edition of the Institute news letter to all stake holders.

As the country is celebrating the 75th year of Independence as Azadi ka Amrut Mahotsav, it is time to recall the contribution of our freedom fighters, visionary leaders, because of whom, we not only got independence but also shape the development of the nation. Throughout the year, many activities & programs are conducted under the banner of Azadi ka Amrut Mahotsav, to sensitize the citizens on various themes related to unity, prosperity and development of the nation.

Our Institute participated actively in the celebration of Azadi ka Amrut Mahotsav. Lot of activities and programs are conducted to inculcate the patriotic spirit in the students in addition to the environmental awareness, technology advancement, sports & cultural activities. Being a leading technical institution in the district, many programs are conducted to create awareness and to boost the Startup and Innovation activities in the district.

At the end it is important to acknowledge that the New Education Policy (NEP2020), a student centric policy is being implemented at state level. In NEP, lot of flexibility is offered to students in choosing the subjects of their liking. At the same time, emphasis is also given on the Indian Education system, vernacular education and multidisciplinary education. Thus it is anticipated that NEP2020 will certainly create a remarkable change in the present education system of the country and lead towards the stature of ancient India.

With this, I congratulate the editorial team for putting best of their efforts to publish this newsletter.

Thanking You & Best wishes for the future.

Principal

Dr. B. J. Shah

SSIP CELL

Students Startup and Innovation Policy (SSIP 2.0) sensitization at Institute level

SSIP CELL GEC Modasa had organized sensitization program for SSIP2.0 on 7th October 2022, wherein, success stories of SSIP 1.0 were narrated to encourage the students and faculty. Also the achievements including number of successful POCs, startups, patents filled, hackathon participation and noteworthy performance in the events was shared. Moreover Principal, GEC Modasa and Chief Guest of the function, owner of Awadh Gruh Udyogh, Modasa addressed the gathering to gear up for more such events and achievements.



Gymkhana activities for Azadi ka Amrut Mahotsav

The Government engineering College, observed the Azadi ka Amrut Mahotsav in the campus, wherein various programs have taken place across the campus. The events commenced from 1st August 2022 and extended to 15th August 2022 on the campus to show the commitment towards the Government of India initiative. The idea behind this program is to inculcate the feeling of nationalism among all the students.

Few key objectives were observed,

- 1) To fulfill commitment towards government initiatives.
- 2) To instill patriotism and increase love and affection for our country.
- 3) To strengthen the feeling of oneness and uniformity in campus.

Azadi ka Amrut Mahotsav Hackathon 2022

More than 90 students comprising 22 teams have participated in regional round of a state-level Azadi Ka Amrut Mahotsav Hackathon 2022 organized by Education Department (Higher & Technical) Government of Gujarat. They have performed extremely well.

Elocution competition under Azadi ka Amrut Mahotsav

An elocution competition was conducted with 28 selected participants on 1st August 2022 at QEEE hall.



COLLEGE SAGA

Dr. U K Khare , Dr. S B Jha and Dr. A J Patel judged the entire event.



Drawing & Rangoli competition under Azadi ka Amrut Mahotsav

A drawing and rangoli making competition was organized on 2nd August 2022 wherein more than 20 students eagerly participated in this event. It was held at CE/IT hall. It was judged by Dr. M. M. Goyani and Prof. S. G. Patel.



"Tiranga Yatra", a rally in Modasa city under Azadi ka Amrut Mahotsav

GECM organized the "Tiranga Yatra" in Modasa city area on 3rd August 2022 from 11:00 a.m. The route was from Mahalakshmi town hall cross road to Umiya Chowk, then towards Pawan City, Kartikeya Society, Kalyan Chowk, ITI cross roads. Few key highlights were

1. Students reported in large numbers to the venue.
2. Students were in white and black/blue dress code.

3. Large number of participants uploaded activities with #HarGharTiranga on social media.
4. The city of Modasa was thrilled and appreciated the enthusiasm of students.



Essay Writing competition under Azadi ka Amrut Mahotsav

An essay writing competition was planned on 4th August 2022, with 12 students. It was held at Mechanical hall. Prof. K. V. Vaghela and Prof. J. R. Bhavsar conducted and judged the entire event.



COLLEGE SAGA

Digital Blog Writing competition under Azadi ka Amrut Mahotsav

Digital blog writing competition was organized on 5th August 2022 where in 15 students participated with enthusiasm. It was held at Mechanical hall. Prof. K. V. Vaghela and Prof. S. L. Ghanchi judged the entire event.



Create Poster Explaining Importance of National Flag under Azadi ka Amrut Mahotsav

A poster making event was organized on 7th August 2022 where in 10 students contributed in this event. It was held at Electrical hall and Prof. S. V. Banker and Prof. T. A. Chaudhari judged the entire event.



Selfie with Tiranga under Azadi ka Amrut Mahotsav

GECM initiated the selfie with Tiranga campaign on 6th August 2022, wherein staff and students uploaded the selfie with Tiranga on "Har Ghar Tiranga" social media platforms. Faculties and students participated in large numbers and social media pages of college were buzzing with activity for couple of days.



Flag Hoisting under Azadi ka Amrut Mahotsav

When GECM hoisted the flag on the campus from 13th to 15th August 2022, it was a sight to behold. While celebrating the event with enthusiasm the flag code was followed with great dedication and reverence. Participants adhered to national flag code and maintained the dignity of national flag. All the participants also uploaded activities with #HarGharTiranga on social media platforms.

COLLEGE SAGA



Plantation Drive under Azadi ka Amrut Mahotsav

A plantation drive across the campus was initiated to show our commitment to ecofriendly campus by planting 75 big trees (Ashok , Neem , Pipal ,Banyan). The event began at 11:00 a.m. on 28th July 2022. After the formation of teams and distribution of plants, students took an oath to care and nurture the plants and live ecofriendly life to an extent possible. Participants followed the dress code and they were encouraged to take photos in groups, selfie, and keep updating the results at regular intervals of time on social media platforms.



Thalassemia test and blood donation

A Thalassemia test and blood donation camp was conducted on 23rd September 2022 at GECM with great enthusiasm and high spirit like every year. The Indian Red Cross Society, Paldi, Ahmedabad and Ramani blood Bank Modasa had contributed in the camp. Indian Red Cross Society conducted the thalassemia test in which total 649 students benefited. A total of 149 unit of blood were collected during this time.



COLLEGE SAGA



Badminton Tournament , SP office Arvalli

GECM team participated at district level badminton competition held at Modasa. The competition was organised by SP office Aravalli under the aegis of National Games on 24/25-09-2023. Around 30 shuttlers participated from college and gave their best. The achievements in this tournament was lauded:

- Badminton Doubles: Girls Team were winner



Body Building competition

Sanket Patel represented GECM at GTU inter zonal body building competition and secured Gold Medal in tournament on 24/08/2022.



Kabaddi

The boys' team from GEC Modasa participated in GTU annual kabaddi competition in August 2022. The team played exceptionally well and were runners up in finals of the Zone tournament. Couple of students were called for AIU selections.



COLLEGE SAGA

Javelin Throw

Goswami Paavangiri Pragneshgiri of 2nd semester EC secured 1st Rank in Javelin throw at GTU Interzonal tournament at Rajkot and Chavda Bharat secured 4th position in same event during August 2022.



Athletics Competition

GECM students have achieved laurels in GTU athletic events.

- 1) 5km - Chavda Hitesh 4th Position
- 2) 1500m - Solanki Prilkitsinh 3rd Position
- 3) 100m - Solanki Jayvirsinh 3rd Position
- 4) 4×100m relay - Solanki Jayvirsinh, Chavda Bharat, Patel Hardik, Kapoor Aakash 3rd Position
- 5) 4×400m relay - Solanki Prilkitsinh, Makwana Hiren, Bharti Nilesh, Suthar Ayusg 3rd Position
- 1) 1500M- Chauhan Aarti -1st position
- 2) 400m - Chauhan Aarti 1st Position
- 3) 800m - Chauhan Aarti 1st Position
- 4) 100m & 200m- Kavar Ami 1st Position
- 5) 100m - Dodiya Devanshi 2nd Position

Chaudhari Omsree represented GECM at AIU Level camp for Karate competition.



Cricket

The boys team regularly participates in GTU annual season ball cricket competition. The team played exceptionally well and went all the way to finals of the zone tournament and were runners up. From this cricket team couple of students were called for AIU selections.



COLLEGE SAGA

Chess

The chess team stood second in competition on 8th August 2022 held at GPERI, Mehsana in inter zonal of GTU zone 2.



The event began with traditional aarti and traditional costumes twirling in circle on the garba beat. The college was at their festive best wherein the students and faculties expressed their passion with equal fervor.



Thanganat 2022

Annual garba celebration was organized at college on 30th September 2022 and was celebrated with great joy.

COLLEGE SAGA

Special Mention

The GEC team has been regularly participating and securing ranks in tournaments organized by GTU, Khelmahakumbh and other competitions. The due credit along with college authorities should also go to numerous student volunteer who selflessly put forward best efforts in organizing selection trials, ground preparations, practice sessions and travelling arrangements. They are in a true sense heart and soul of our college and they are on the path to become future leader.



Hostel

Ganesh Chaturthi

The boys and girls hostel have been celebrating the Ganesh Chaturthi from past few years. Keeping up with the tradition the college also observed the celebration this year wherein the Ganesh Idols were worshiped in both hostels. The student team took care of all the necessary arrangements. During the Ganesh Visarjan procession students danced their heart out and made the entire campus vibrant and festive.

COLLEGE SAGA



Janmasthan

Boys hostel students also celebrated Janmasthan in campus. The entire event was managed by the students. The garbas and traditional pooja were also held on this occasion.



Climate Change Youth Outreach Program

As per the directions from the Climate Change Department, Government of Gujarat, under the 'Climate Change Youth Outreach Program', Government Engineering College, Modasa had organized various events in the campus. It was coordinated by Dr. N G Raval

1. Group Discussion in Electrical Dept. on 21/9/2022
1st winner - Gaurang Khaneja - Sem 5 (EC)
2nd winner - Mohammed Farzaan Faez - Sem 7 (Auto)
3rd winner - Sonali Gupta - Sem 5 - (Mech)
Jury members : Dr. V. J. Upadhyay, Prof. C. R. Parekh, Dr. A. J. Patel
2. Essay Competition in Mechanical Dept. on 22/9/2022
1st winner - Prachi Sharma - Sem 3 (Civil)
2nd winner - Shubham Barot - Sem 5 (Civil)
3rd winner - Kadam Raj Sanjay - Sem 7 (Auto)
Jury members : Dr. J. A. Vadher, Dr. S. S. Singh, Prof. B. A. Vyas
3. Elocution Competition in Civil Dept. on 23/9/2022
1st winner - Mohammed Farzaan Faez - Sem 7 (Auto)
2nd winner - Bhandari Shubhkumar - Sem 7 (Civil)
3rd winner - Rathod Dhruvam - Sem 7 (Civil)
Jury members : Dr. U. R. Khare, Dr. N. G. Raval, Dr. S. S. Singh
4. Slogan Competition in Sci. and Hum. Dept. on 27/9/2022
1st winner - Tomar Vansh S. - Sem 3 (Mech)
2nd winner - Patel Sadhana B. - Sem 3 (Civil)
3rd winner - Parikh Khushi S. - Sem 3 (Computer)
Jury members : Prof. G. N. Limbad, Prof. D. J. Bhayani

COLLEGE SAGA

5. Innovative Ideas for Combating Climate Change Competition in CE/IT dept. on 04/10/2022

1st winner - Jha Pushpanjali - Sem 3 (IT)

2nd winner - Valera Bhargav Sunilbhai - Sem 3 (Computer)

Jury members : Prof. M. B. Chaudhary, Dr. Mahesh Goyani, Dr. H. S. Pandya





GOVERNMENT ENGINEERING COLLEGE, MODASA
organize

GROUP DISCUSSION COMPETITION

AS A PART OF CLIMATE CHANGE YOUTH OUTREACH PROGRAMME,

Date:-20/09/2022
Time:-3.00 p.m. to 5.00 pm
Venue :7202,Seminar Hall
(Electrical Department)

Expected Topics for GD
Energy Storage
Battery Operated Vehicle
Water Recycling
Waste Management
Single Use Plastic

Registration Link:<http://tiny.cc/5oazuz>



Coordination:
Prof. D.U.Thakar EE (jayshreeramdarshan@gmail.com)
Prof. K.R.Patel EC (ketu@gecmodasa.org)

Note: Winners will be awarded by Govt. of Gujarat, Activity will be considered in 100 Points GTU.

DEPARTMENT SPOTLIGHT

Applied Mechanics & Civil Engineering Department

Opportunities for Civil Engineers

An expert talk was arranged on “Opportunities for Civil Engineers” by Mr.Kavan G. Modha, a research scholar pursuing his PhD at IIT Roorkee. The interactions between the students and expert were extremely interesting and proved to be an eye opener. About 100 students participated in the event. They felt motivated by the success story of the speaker as he narrated from struggle to achievement. The lecture was arranged on 29th July 2022 at civil engineering department.



Technical Visit of L&T Construction Skill Training Institute

A Technical visit of L&T Construction Skill Training Institute was arranged on 30th July 2022 for the students of B. E. Semester - VII along with Faculty members. Around 65 students participated in the visit. During the

visit, all students learnt reinforcement detailing of different structural elements. They were really enlightened by observing various original size models of different structure like components of bridge, prestress girder, brick masonry bonds. Also, small size models of various elements of different types of structures and workmanship quality were seen. This visit was coordinated by Dr. A.J.Patel. Assistant Professor of Applied Mechanics Department.



A Technical visit of Precast Building

Precast Technology subject is offered in 7th semester as elective. As a part of curriculum the visit was planned at Malabar county -3 near Nirma university, Ahmedabad. Display of various precast components like hollow slab, precast wall panels, beam, column and their connection have been witnessed by students. They have also observed methodology of precast slab positioning at site. This visit was coordinated by Dr.C.S.Sanghvi and Dr. A.J.Patel. of Applied Mechanics Department.

DEPARTMENT SPOTLIGHT



Expert talk on NBA

Prof. V. J. Chitaria from LDCE shared the tips and experience from NBA team visit in detailed manner with the faculty of Civil and Applied mechanics to give clarity about requirements of NBA team from government institutes. There was interaction and discussion about many small changes to be observed in the setup for NBA preparation.

Expert session was conducted by Unacademy

Expert session was conducted by Unacademy on how to prepare for GPSC exam on 26/8/2022. Students had valuable interaction.



Celebration of Teacher's Day

Teacher's day celebration for the students was well planned and executed on 5th September 2022. in Civil engineering department. There was an interactive session to discuss various technological advancement in construction industries by Dr.N.G.Raval and Dr.U.K.khare. Then students also participated in educational and fun games organized by Dr.A.J.Patel.



DEPARTMENT SPOTLIGHT

Electrical Engineering Department

Industrial Visit to 220KV SUB-STATION Faredi Substation, Modasa

Department had organized an industrial visit to 220KV SUB-STATION Faredi Substation, Modasa Gujarat. 65 students along with 3 faculty member visited the industry on 2nd September 2022. Main purpose for this visit was to be familiar with industrial environment and to get practical knowledge of electrical power transmission and distribution.



Industrial visit to L&T Electrical & Automation (E&A), Vadodara Gujarat

An industrial visit to L&T Electrical & Automation (E&A), Vadodara Gujarat was organized on 12th November 2022. The group of 21 students of 7th semester along with 2 faculty member visited the industry to fulfill the purpose to create awareness and be familiar with industrial environment and to get practical knowledge

about electrical automation. At final year level it was a great learning experience to have exposure about basic industrial functioning of automation. Student had an opportunity to get informed about the transformer maintenance, circuit breaker, transformer isolator, bus bar, protective relays, lightning arrestors, load break switches, SCADA system, current and voltage transformer and battery room.



Inauguration of Clubs

As part of Engineer's Day celebration, on 15th September three clubs were inaugurated for students

- 1) ISTE students chapter :Faculty coordinators: Prof. N.V.Upadhyay & Prof. D.U.Thakar
- 2) Student club of Electrical Department: Faculty coordinators: Prof. T.A.Chaudhari and Prof.H.S.Pandya
- 3) GATE club of electrical department Faculty coordinators: Prof. D.U.Thakar and Prof. H.S.Pandya

DEPARTMENT SPOTLIGHT



Expert Talk

Electric Propulsion System of Marine Vessels is one of the research topics for electrical engineering students. To create awareness about it, an expert talk for 7th-semester students was organized on 28th July 2022 from 12.00 to 1.30 pm. The key Speaker Prof. Priyesh Chauhan from IITRAM delivered an interesting talk to the 70 participants on "Introduction to Electric Propulsion System of Marine Vessels".



Placement Drive

Sun Light, Infra Energy, Torrent Power, Alphatech, Automation, Adani visited and total 7 students were placed from the department.



AI for ALL

This Program scheduled on 8th July 2022 from 10:30 AM onwards was attended by 36 students of 2nd semester and 11 faculty members. They participated in the event with great curiosity for future applications as AI For All is a self-learning online program designed to raise public awareness about Artificial Intelligence. It aims to demystify AI for people from all walks of life – a student, a stay-at-home parent, a professional in any field, a senior citizen – basically, anyone interested in getting acquainted with it and wanting to build a 'Digital First Mindset'.

DEPARTMENT SPOTLIGHT

Internship Expo

Department had organized an online event of Internship Expo for 7th-semester students on 15/07/2022 from 11.00 am to 1.00 pm. There were 116 participants in the webinar. They discussed the various activities performed during the 15 days internship and at the end of the internship expo students submitted 12 documents as proof of their internship. HOD and the faculty guide evaluated the performance of the students in internships.

Tree Plantation

Trees are of invaluable importance to our environment and to human well-being. They give us clean water to drink, air to breathe, shade, and food for humans, animals, and plants. They provide habitats for numerous species of fauna and flora, firewood for cooking and heat, and materials for buildings and places of spiritual, cultural, and recreational importance. Trees are so important for the global environment and the health of the species that live there, and they need our unconditional care and protection. To realize the importance of Tree Plantation a drive was initiated on 29th September 2022. The faculties and students who have jointly participated in this drive ,have planted one tree each in the department and taken an oath to take care of that tree for 1 year and then transfer the care it to their juniors when they leave.

Seminar on Effective Technical Writing for Documentation

A workshop on "Effective Technical Writing For Documentation", was organized on 12th September 2022 from 011.00 A.M. to 1.00 P.M in the department with 35 participants. The main focus of the seminar was how to write a technical report, and how to effectively represent work via PPT. The details regarding references, english grammar, and plagiarism were discussed. The Key Speakers were Dr. H.S.Pandya (PowerPoint Presentation) and Prof. D.U.Thakar (Word Documents). At the end of the session, certificates were distributed for active participation.



GOVERNMENT ENGINEERING COLLEGE, MODASA
ELECTRICAL ENGINEERING DEPARTMENT

ORGANIZE
A WORKSHOP ON
EFFECTIVE TECHNICAL WRITING FOR DOCUMENTATION

Date: 12/07/2022, Tuesday
Time: 11 a.m. Onwards
Place: Seminar Hall, Electrical Department, GECMEED
Key Speaker: 1. Dr. H.S.Pandya(PowerPoint Presentation)
2. Prof. D.U.Thakar(Word Documents)

Patron
Dr. B.J.Shah
Principal, Gec-Modasa

Convener
Dr. V.J.Upadhyay
HOD-GECM-EED

Faculty Co-ordinator
Prof. Darshan U. Thakar
Prof. H.S.Pandya
Asst.Prof.-GECM-EED

SSIP Awareness Programmes

With a view to inform and create awareness about significance of SSIP-CELL at the institute and its role in nurturing innovations/creativity in students, a SSIP awareness program was conducted .It imbibes curiosity

DEPARTMENT SPOTLIGHT

about the startup level in the students. This awareness program aimed to motivate students towards critical thinking using project based learning. The students were briefed regarding the significance of POC to cultivate hand-on skill, innovation and management skills which the senior project students had undergone under SSIP. The students were informed about the procedure, format of applying of the POC under SSIP in detail. Total 51 newly admitted students from semester 1st and diploma to degree entry (semester3) have participated and made the session interactive.



Celebration of Teacher's Day

On 5th Sept 2022, department celebrated a day filled with activities. It started with Maa Saraswati Vandana and was made interesting by students Dhruv Thakar,

Sachin zala, Tasnim Saiyad, Ansh Chaudhary, Nandkishor Bariya who acted as teachers and taught subjects like Ethics, Power Systems-2, Signal and systems, Switchgear and Protection. They also volunteered and conducted innovative games among faculty and students, that culminated with Garba at ground floor of Electrical Engineering Department.

Computer Engineering & Information Technology Department

World Heart Day by Technopreneur Group

Technopreneur group celebrated World heart day at CE/IT department on 28th September 2023 to create awareness about heart care. This event was conducted in offline mode so it really invigorated the participants.

World Heart Day

September, 29th



**"MAY YOUR HEART STAY HEALTHY AND
HAPPY EVERY WORLD HEART DAY"**



Heart Health
Awareness Seminar



Small quiz
competition

DATE: 28/09/2022
TIME: 2:00pm to 3:00pm

Registration:
<https://forms.gle/v25LwufiDRM7Kj9r6>

 @the_technopreneur

 technopreneur267@gmail.com

DEPARTMENT SPOTLIGHT

Garba Workshop by Technopreneur Group

CE/IT department was part of an enchanting event as the Technopreneur Group organized and celebrated Garba Workshop in the department on 28th September 2022..



Google Developer Student Clubs

Google Developer Student Clubs are university based community groups for students interested in Google developer technologies. Students from all undergraduate or graduate programs with an interest in growing as a developer are eligible to participate in GDSC. By joining a GDSC, students grow their knowledge in a peer-to-peer learning environment and build solutions for local businesses and their community.

Our Institute GEC, Modasa is running GDSC since last year.

As the club of a university, its motive is to encourage students and engage them to apply their knowledge to solve real world challenges. A core team of 4 members (Patel Jeel, Kavar Ami, Tiwari Kajal, Panchal moxiti) and the GDSC leader Hardik Makwana are working very hard under guidance of GDSC faculty advisor Prof. Prashant Modi to host multiple events for our 100+ club members which would help them experience real world challenges. Recently Google appreciated the efforts of GDSC club by issuing an appreciation certificate to the GDSC Faculty Advisor Prof. Prashant Modi.



DEPARTMENT SPOTLIGHT

Mechanical & Automobile Engineering

Department

Seminar On Together Towards Tomorrow

A unique seminar "On Together Towards Tomorrow" was organized on 22nd November 2022. More than 85 students have actively participated in this event where Mr. Sam from Australian Institute of Engineering, Australia, has delivered the expert session on Industry 4.0 and informed about foreign education too. The program was coordinated by Dr. P. M. Mistri .

A Seminar Campus to Corporate

A Seminar "Campus To Corporate " was organized on 14th October 2022. Mr. Bhavik Patel , Director of India TEQ Technologies and Confider Industries, delivered an enlightening session to more than 90 students who actively participated in the program and gained valuable insights. The program was coordinated by Dr. P. M. Mistri .

Teacher's Day Celebration

It was a grand celebration on "Teacher's Day" the 5th September 2022. The event was coordinated by department faculty members and student volunteers under the Guidance of Dr. J. A. Vadher and Dr. U. V. Shah, H.O.D., Mechanical and Automobile Engineering Department respectively.

A Seminar on Industrial Application of Refrigeration

A seminar on "Industrial Application Of Refrigeration " was organized on 26th August 2022. The program was coordinated by Dr. P. M. Mistri. More than 110 students have actively participated in this session on Industrial Air conditioning. It was an interesting and informative seminar by Mr. Trupal Patel , senior engineer at Blue star Ltd. commercial air conditioning .

Webinar on a Quick Look into 3D Printing

A Webinar on "A Quick Look into 3D Printing" was organized on 12th August 2022. The program was coordinated by Dr. P. M. Mistri. More than 100 students actively participated in the session by Mr. Nishad Joshi, Expert in additive manufacturing, University of Central Lancashire, England (U. K.) The session was based on practical demonstration and manufacturing of 3D was exhibited live. It was the futuristic vision delivered in interesting and informative webinar.

Industrial Visit at Wanakbori Thermal Power Plant

An Industrial visit at Wanakbori Thermal Power Plant was arranged on 9/10/2022 for the students of B. E. Semester - VII along with faculty members. Around 65 students participated in the visit. During the visit, students availed practical exposure about functioning of a Thermal power plant. This visit was coordinated by the faculty Dr. P. M. Mistry, Prof M.M.Madhikar, Prof R.B.Shah Assistant Professor of Mechanical Department.

DEPARTMENT SPOTLIGHT

Electronics & Communication Department

AI for All

The department faculties and students participated in 'AI for All' initiative by Government of Gujarat on 8th July 2022. After attending the event an interactive discussion was initiated among the attendees.



The poster for the 'AI FOR ALL' event features logos for Digital India, the Government of India, the Ministry of Education, and Intel. The text 'AI FOR ALL' is prominently displayed in blue, with the subtitle 'A unique program to raise public awareness about Artificial Intelligence' below it. It states the event is a virtual one organized by the Directorate of Technical Education, Government of Gujarat. The Guest of Honour is Shri Kuberbhai Dindor, Hon'ble Minister of State, Higher and Technical Education, Legislative and Parliamentary Affairs of Gujarat. The date and time are July 8, 2022, at 10:30 AM Onwards. A QR code and the URL <https://bit.ly/AIFORALLJUL8> are provided at the bottom. Two photographs show students interacting with a laptop and a presentation.

Tree Plantation

To keep up our commitment to society and institute a tree plantation drive around department was envisioned and implemented by faculties and students. They planted around 30 trees in the near vicinity even took responsibility to care for the plantations.



Expert session on SSIP 2.0

Prof. Nirav Patel conducted an awareness session about SSIP 2.0 in the department wherein the students were sensitized and detailed relevant information was passed on to them.



RESEARCH AND PUBLICATIONS

Applied Mechanics & Civil Engineering Department

Prof. C S Sanghvi has published a research paper on "Understanding building damages in seismic risk prone areas" during Residential Training program on Seismic Risk Assessment and Rehabilitation of School Buildings organized by Gujarat Institute of Disaster Management (GIDM), Gandhinagar on 05-08-2022

Prof. C S Sanghvi has published a research paper on "Structural and Non-Structural Mitigation Measures in School" during training program for Master Trainers on "School Safety and Security" organized by Gujarat Institute of Disaster Management (GIDM), Gandhinagar on 27-09-2022

Prof. C S Sanghvi has published a research paper on "Structural Safety in Building & Typologies of School Building and Issues with Regards to School Safety" during training program for Master Trainers on "School Safety and Security" organized by Gujarat Institute of Disaster Management (GIDM), Gandhinagar on 06-10-2022

Prof. C S Sanghvi has published a research paper on "Structural Safety in school building" during training program for Master Trainers on "School Safety and Security" organized by Gujarat Institute of Disaster Management (GIDM), Gandhinagar on 19-12-2022

Prof. V. R. Gor has published a research paper on "Benchmark the impact of micro watersheds of Sabarkantha and Arvali district of Gujarat, India" in the journal of Agricultural Science Digest, ARCC.

Electronics & Communication Department

Prof. N. D. Patel has published a research paper on "The Novel Approach to Spectral Efficiency Enhancement using Massive MIMO in LoS" in International Journal of Mobile Network Design and Innovation ISSN online 1744-2850 ISSN print 1744-2869.

Computer Engineering & Information Technology Department

Prof. M. M. Goyani has published a research paper on "Scene Level Image Classification: A Literature Review" in Neural Processing Letters, SPRINGER ISSN NO: 1573-773X, Nov., 2022.

Prof. A. B. Parmar has published a research paper on "A Novel Malware Detection Approach Using Performance Importance Weighted Random Forest (Peri-Wrf) Learning Model" in Indian Journal of Computer Science and Engineering (IJCSE), October, 2022.

Mechanical & Automobile Engineering Department

Prof. J. A. Vadher has published a research paper on "Micro Analysis on Energy Management in Context of SME Industries: A Review of Present Practices, Gaps and Needs and Scope of Implementation of RRFDTPM system" in Science, Technology and Development Journal, UGC care approved, ISSN: 0950-0707, July, 2022.

RESEARCH AND PUBLICATIONS

Prof. J. A. Vadher has published a research paper on "Investigation of Thermal and Wear Behaviour of 3D Printed PA-12 Nylon Polymer Spur Gears" in Science, in El-Cezerî Journal of Science and Engineering, ISSN: 2148-3736, July, 2022.

Prof. J. A. Vadher has published a research paper on "Investigation & Optimization of Process Parameters of Roll Bending machine in realizing Conical Shells in Aluminum 6063," in International Multidisciplinary Engineering Conference, August, 2022.

Prof. J. A. Vadher has published a research paper on "Review on Engineering to Order Operation with help of Cloud Computing" in International Multidisciplinary Engineering Conference, August, 2022.

Prof. J. A. Vadher has published a research paper on "Cloud Computing application for Design and Manufacturing in Indian Industries" in 2nd Multidisciplinary international conference GTU ICON, August, 2022.

Prof. P. R. Parekh has published a research paper on "CFRP Milling Machining - Using Solid Carbide Endmill - A Research Review" in IJARSET November, 2022.

Prof. K. V. Vaghela has published a research paper on "An experimental approach to produce and investigate the sustainability of algae biodiesel on the performance of the single-cylinder four-stroke CI engine" in International Journal of Engineering and Techniques, 2022.

Prof. P. K. Gajjar has published a research paper on "Sensitization and Desensitization (Healing) in Austenitic Stainless Steel: A Critical Review" in Transactions of the Indian Institute of Metals Springer, ISSN NO: 0975-1645. 2022.

Prof. K. V. Fadadu has published a research paper on "Modelling and analysis of Wheel rim in MUV vehicle using CAD/CAE tools" in Research and Reviews on Experimental and Applied Mechanics, 2022.

Prof. Samruddhi Patel has published a research paper on "Research progress on bearing fault diagnosis with localized defects and distributed defects for rolling element bearings, Noise & Vibration Worldwide" in SAGE Publisher, 2022.

Prof. Samruddhi Patel has published a research paper on "Review of Fault Diagnosis of Cylindrical Bearing with Defects" in International Journal of Advanced Research in Science, Engineering and Technology, ISSN: 2350-0328, 2022.

Prof. S. P. Patel has published a research paper on "Comprehensive review of biodiesel as an alternative fuel for diesel engines" in International Journal of Design Engineering, Inderscience Publisher, 2022.

Prof. S. P. Patel has published a research paper on "Effect of Bio Lubricant Using Jatropha Biodiesel on Engine Vital Parts Life Cycle" in International Journal of Advanced Research in Science, Engineering and Technology, ISSN: 2350-0328, November, 2022.

Science and Humanities Department

Prof. R. P. Khatri has published a research paper on "P-type Behaviour of Doped ZnO Thin Films Prepared by Chemical bath Deposition" in Bulgarian Journal of Physics ISSN NO: 1314-2666, 2022.

PARTICIPATION AND ACHIEVEMENTS

PARTICIPATIONS

Applied Mechanics & Civil Engineering Department

Prof. C. S. Sanghvi has participated in “NPTEL-AICTE faculty development programme on Modern Indian Architecture’ (Course duration 8 weeks: Aug-Octo 2022) & ‘Ground Improvement’ (Course duration 8 weeks: Jul-Octo 2022) organized by SWAYAM NPTEL.

Prof. M. M. Bhunga has participated in “NPTEL-AICTE faculty development programme on Geotechnical Engineering Laboratory” during 25/7/2023 to 19/8/2022 organized by SWAYAM NPTEL.

Prof. A. J. Patel has participated in “Disaster Management and Resilience Building” during 1/8/2022 to 5/8/2022 organized by LDCE & GEC modasa.

Prof. D. A. Sagar has participated in “Disaster Management and Resilience Building” during 1/8/2022 to 5/8/2022 organized by LDCE & GEC modasa.

Prof. M. A. Fareediwala has participated in “Disaster Management and Resilience Building” during 1/8/2022 to 5/8/2022 organized by LDCE & GEC modasa.

Prof. D. B. Sathavara has participated in “Disaster Management and Resilience Building” during 1/8/2022 to 5/8/2022 organized by LDCE & GEC modasa.

Electrical Engineering Department

Prof. H. S. Pandya has participated as a mentor during regional hackathon round. He accompanied 6 teams out of which two teams qualified for the final round on 7/10/2022.

Electronics & Communication Department

Prof. P. V. Patel has participated in “Induction Phase 2 (IP2)” during 12/9/2022 to 23/09/2022 organized by NITTTR, Bhopal.

Prof. N. D. Patel has participated in “Signal Processing for mm Wave communication for 5G and beyond” during 25/07/2022 to 14/10/2022 organized by SWAYAM NPTEL.

Prof. N. D. Patel has participated as Jury member for evaluating the team of participants in Regional Round of Azadi ka Amrit Mahostav Hackathon-2022 during 7th & 8th October, 2022 held at CHARUSAT under SSIP and GKS.

Computer Engineering & Information Technology Department

Prof. S. G. Patel has participated in “Induction Phase 2 (IP2)” during 12/9/2022 to 23/09/2022 organized by NITTTR, Bhopal.

Prof. A. K. Dodiya has participated in “Induction Phase 2 (IP2)” during 12/9/2022 to 23/09/2022 organized by NITTTR, Bhopal.

Prof. P. R. Gamit has participated in “Induction Phase 2 (IP2)” during 12/9/2022 to 23/09/2022 organized by NITTTR, Bhopal.

PARTICIPATION AND ACHIEVEMENTS

Mechanical & Automobile Engineering Department

Prof. J. C. Gamit has participated in NPTEL MOOC Course on " Energy Conservation And Waste Heat Recovery" during 25/07/2022 to 14/10/2022 organized by SWAYAM NPTEL.

Science and Humanities Department

Prof K. B. Naik has participated in "Making mathematics Interesting and understandable" organized by NITTTR, Bhopal during 18/07/2022 to 22/07/2022.

Prof G. H. Limbad has participated in "Management of Change and Innovation" organized by NITTTR, Bhopal during 18/07/2022 to 22/07/2022.

Prof D. J. Prajapati has participated in "Essential Mathematics for Machine Learning" during 25/07/2022 to 14/10/2022 organized by SWAYAM NPTEL.

"ChatGPT has demonstrated impressive capabilities for natural language understanding and generation, which is essential for the development of advanced AI applications."

Huma Abidi,

Senior Director of AI Software

Products, Intel.

PARTICIPATION AND ACHIEVEMENTS

ACHIEVEMENTS

Prof. C. S. Sanghvi from Applied Mechanics Department appointed as Member of "Special Technical Committee for Tall Structures" having height more than 100m by the Government of Gujarat. This committee will give approval to construct Tall Building in Gujarat.

Prof. C. S. Sanghvi from Applied Mechanics Department appointed as Member of "Course Committee for the approval of courses designed by experts" by Technical Education Board, Gandhinagar.

Prof. C. S. Sanghvi from Applied Mechanics Department appointed as Member of "Advisory Committee of National Service Scheme (NSS)" by Gujarat Technological University (GTU) for the year 2022-23.

Prof. C. S. Sanghvi from Applied Mechanics Department appointed as Member of "Advisory Board of Civil Engineering" at IPS Academy, Indore.

Prof. C. S. Sanghvi from Applied Mechanics Department appointed as Member of "Central Committee & Main Coordinator for all districts" for the 36th National Games 2022. It was organized in 6 districts of Gujarat. Total 36 games were planned in the 36th National Game. He has successfully coordinated Volunteer Management of more than 1800 volunteers across Gujarat in the district of Ahmedabad, Gandhinagar, Rajkot, Bhavnagar, Vadodara & Surat.

Prof. S. S. Singh from Civil Engineering Department chaired the session at International conference on "Innovation in Smart and Sustainable Infrastructure" (ISSI-2022) at Civil Engineering department, PDPU, Gandhinagar on 24/8/2022.

Prof. Nitin J. Bathani from Electronics and Communication Engineering Department has successfully qualified for the award of the Doctor of Philosophy (Ph.D.) for his research in Design and Analysis of Electromagnetic wave absorbers on frequency selective surfaces from Gujarat technological University under the guidance of Dr. J. M. Rathod, who is an Alumni of GEC, Modasa and currently professor at Birla Vishvakarma Mahavidyalaya, Anand.

Prof. Bhavik A. Brahmbhatt from Electronics and Communication Engineering Department has successfully qualified for the award of the Doctor of Philosophy (Ph.D.) in Current and voltage control of single-stage voltage source inverter for photovoltaic system from The Maharaja Sayajirao University of Baroda under the guidance of Dr. Heena Chandwani, Professor at Maharaja Sayajirao University of Baroda

Prof. Priyank Patel from Electronics and Communication Engineering Department stood second in badminton doubles in district level badminton competition held at Modasa . The competition was organised by SP office Aravalli under the aegis of National Games on 24/25-09-2023

Dr. Piyush M Mistry from Mechanical Engineering Department Completed his Ph.D. in Experimental investigations of the solar cooking system with parabolic dish and through collector from Indus University under the guidance of Dr. K. A. Pathak on 20th October 2022.

Thakkar Harsh Surendrakumar (210160106518) of Civil Engineering department participated and received silver medal in "Basic rock climbing course", organized by GTU , handled by Swami Vivekanand institute of mountaineering during 15/11/2022 to 24/11/2022.

PARTICIPATION AND ACHIEVEMENTS

Dubey Prabhat Prakash (190160106026) of Civil Engineering department secured 2nd rank in G3Q event held at District level from Aravalli on 19/10/2022.

Harshit Chaudhary, Kiran Suthar, Bhavin Ukani of Civil Engineering department have participated in GTU Techfest at GPERI, Mehsana on 11/10/2022. This team of three students have secured 3rd rank in the "Survey Gyan" event and have received certificate of winning and cash prize of 500 rupees.

Mitesh Variya, Shubham Barot, Harshin Joshi of Civil Engineering department have participated in GTU Techfest at GPERI, Mehsana on 11/10/2022. This team of three students have secured 2nd rank in the "Survey Gyan" event and have received certificate of winning and cash prize of 500 rupees.

Goswami Paavangiri Pragneshgiri (210160111003) of Electronics and Communication Engineering department has Secured 1st Rank in Javelin throw at GTU interzonal tournament at Rajkot on 24/09/2022.

Goswami Paavangiri Pragneshgiri (210160111003) of Electronics and Communication Engineering department Secured 2nd Rank in Kabbadi at GTU interzonal tournament at Rajkot.

"Reflect upon the extraordinary advance which machines have made during the last few hundred years, and note how slowly the animal and vegetable kingdoms are advancing. The more highly organized machines are creatures not so much of yesterday, as of the last five minutes, so to speak, in comparison with past time."

- Samuel Butler

FACULTY OUTREACH

Applied Mechanics & Civil Engineering Department

Prof. S. S. Singh delivered an expert lecture on "Membrane Technology for Waste water Treatment" at PDPU on 24/8/2022.

Prof. C. S. Sanghvi chaired the session for the theme of Structure and Structural Dynamics in three days International Conference on "Innovations in Smart and Sustainable Infrastructure" (ISSI – 2022) on 25th August 2022 at Pandit Dindayal Energy University (PDEU) Gandhinagar. Dr Sanghvi has also delivered an expert lecture on Challenges in Earthquake Resistant Design of Structures.

Electronics & Communication Department

Prof. P. V. Patel delivered an expert lecture on "Hunting jobs understanding the requirements" at GEC Modasa on 07/07/2022.

Computer Engineering & Information Technology Department

Prof. S. A. Vahora delivered an expert session on "Vision Transformers and Generative Adversarial Network" on 29th September 2022 at A.D. Patel Institute of Technology, V. V. Nagar in the DST and GUJCOST Sponsored One week FDP On "Trends, Perspectives and

Prospects in Machine Learning and its Applications" held during 29/09/2022 to 01/10/2022.

Prof. N. N. Maltare delivered an expert session on "Cloud Computing and IOT Data Analytics" during GUJCOST sponsored One Week online STTP on "Realization of IOT Architecture, Application Development and Challenges" from 07 November 2022 to 11 November 2022

Prof. M. M. Goyani delivered an expert talk on "અર્વાચીન ગુજરાતી સાહિત્ય ના ઉત્તુંગ શિખરો" at L D College of Engineering, Ahmedabad on 21/09/2022.

Science and Humanities Department

Prof. Dipak J Prajapati has delivered an expert talk on "Harmonic Analysis using Fourier Series" in webinar on Applications of Mathematics conducted on 02/07/2022, organized by Mathematics department, GEC Gandhinagar.

Prof. Ketan B Naik has delivered an expert talk on "How to make mathematics Interesting and Understandable" on 24th September 2022 organized by Parul University.

FORTHCOMING EVENTS

ENCOMAA- Government Engineering College, Modasa is organizing **Alumni Meet 2023** on 4th March 2023.



Dr. A. J. Patel from Civil department is organizing **Elective Awareness Meeting** on 21st January, 2023.

Dr. A. J. Patel from Civil department is organizing **Technical visit of commercial building** on 24th February, 2023.

Mechanical Engineering department is organizing **seminar on Industry 4.0 & Startup** on 23rd February, 2023.

Dr. C. S. Sanghvi from Civil department is organizing **Technical visit for disaster management and ISR** on 17th February, 2023.

Dr. A. J. Patel from Civil department is organizing **Internship Awareness Programme** on 16th January, 2023.

TRENDING TECH TALKS

Exploration of Life outside of the Solar System

Solar System:

The solar system is our home. Its central star, the sun, is a roaring ball of nuclear fire that illuminates nine planets that orbit it, one of which is the Earth where we live. Apart from that, there are several smaller dwarf planets, as well as millions of rocks, asteroids, and smaller chunks of ice, all in revolution around the sun. In our solar system, Mercury and Venus is rocky planet but too close to sun that their surface temperature is above 450°C. Saturn, Jupiter, Uranus and Neptune are gas giant planet and hence human life cannot be possible on any other planet of the solar system. Hence humans are always in search of other planets where human life can be possible and extend our search through Hubble and James Webb Telescope.

What is exoplanet?

An exoplanet or extrasolar planet is a planet outside the Solar System. The first possible evidence of an exoplanet was noted in 1917 but was not recognized as such. The first confirmation of detection occurred in 1992. A different planet, initially detected in 1988, was confirmed in 2003. As of 1 February 2023, there are 5,307 confirmed exoplanets in 3,910 planetary systems, with 853 systems having more than one planet. The James Webb Space Telescope (JWST) is expected to discover more exoplanets, and also much more about exoplanets, including composition, environmental conditions and potential for life.

What is the habitable zone?

The definition of “habitable zone” is the distance from a star at which liquid water could exist on orbiting planets’ surfaces. Habitable zones are also known as Goldilocks’ zones, where conditions might be just right – neither too hot nor too cold – for life. In our solar system, Mars and Earth are inhabitable zone of Sun.

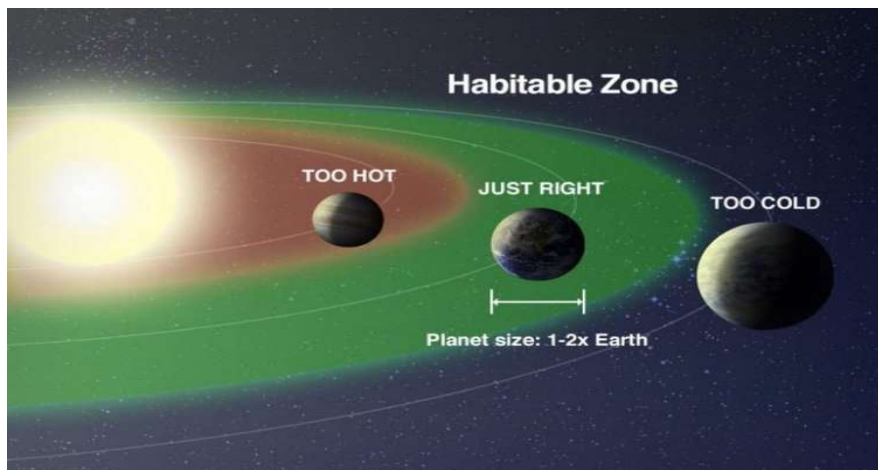
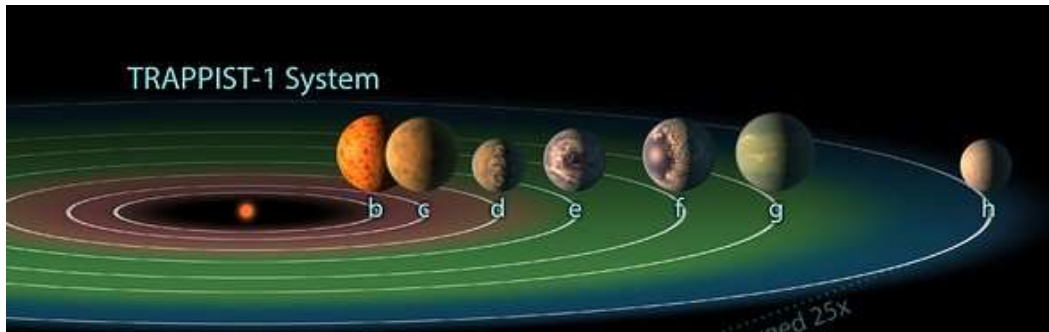


Image credit: NASA

TRAPPIST-1 system

TRAPPIST-1 is an ultra-cool red dwarf star in the constellation Aquarius with a planetary system of seven known planets. Its mass is about 9% of the Sun's mass, with a radius slightly larger than the planet Jupiter and a surface temperature of about 2,566 K (2,293 °C). The star is 40.7 light-years (12.5 pc) from the Sun and is estimated to be 7.6 billion years old, making it older than the Solar System.

TRENDING TECH TALKS



Credit: NASA/JPL-Caltech

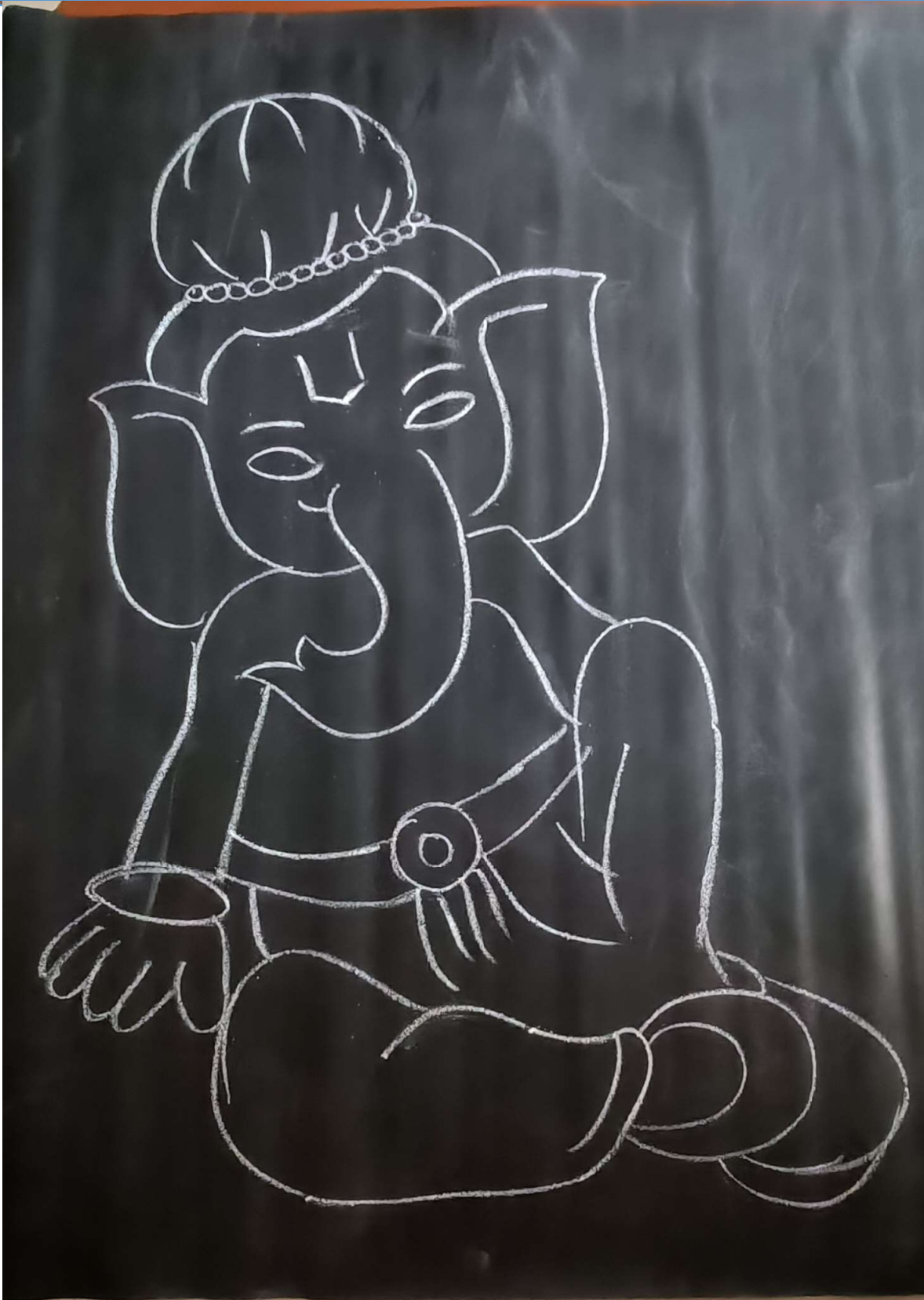
The TRAPPIST-1 system contains a total of seven known Earth-sized planets. Three of them — TRAPPIST-1e, f and g — are located in the habitable zone of the star (shown in green in this artist's impression), where temperatures are just right for liquid water to exist on the surface. While TRAPPIST-1b, c and d are too close to their parent star and TRAPPIST-1h is too far away, the remaining three planets could have the right conditions to harbour life. In the future Trappist-1 system will be in focus for study of more details through James Webb Telescope. However as of now we have one challenge that we do not have any space shuttle that can travel at speed of the light and even if we have it then also it will take approximate 40 years to reach on these planets.

Prof. Viral Patel, Computer Engineering Department.

CREATIVE CORNER



CREATIVE CORNER



Dhairya Hirenbhai Patel, Student, Electrical Engineering Department

GECM E-News

Newsletter | July – December 2022

Government Engineering College, Modasa.

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