



# **ASPIRE**

## **BI-ANNUAL NEWSLETTER**



**January 2020 to June 2020**  
**Issue— 5**



# GOVERNMENT ENGINEERING COLLEGE SEC –28, GANDHINGAR

## FROM DESK OF PRINCIPAL

I am delighted to present one more issue of *Aspire*, a newsletter of the Government Engineering College, Gandhinagar. It is important to have an active thread of communication that keeps the students and teachers connected. This newsletter aims at having such a thread that not only connects these two entities, but also lets the outside world know what is happening at this institution.

The students of engineering and technology need to be prepared for the high demanding and challenging work that lies ahead on their ways. By spreading the positive vibes through *Aspire*, our college intends to create an environment of true learning and growth for the students.

Present issue of the newsletter features the updates from COVID-19 world. During the tough times, our teachers and students did not wait for the good times, but continued to work and innovate. The students were not left alone even during this worse phase of the world, but they were nurtured by their teachers so that as the world comes back to the new normal, they can move on at their own pace.

I am sure that this newsletter will continue to be a connecting channel between the college and its stakeholders for the spread of knowledge and hard work.

**Dr. S. P. Dave**

**Principal, GEC–Gandhinagar**



## **IN THIS ISSUE**

- ♦ **FACULTY ACHIEVEMENTS**
- ♦ **FACULTY PUBLICATIONS**
- ♦ **PARTICIPATION IN STTP/SEMINAR/WORKSHOP**
- ♦ **STUDENT ACHIEVEMENTS**
- ♦ **DEPARTMENTAL ACTIVITIES**
- ♦ **MEDIA COVERAGE**
- ♦ **PLACEMENT NEWS**
- ♦ **SSIP ACTIVITIES**
- ♦ **CREATIVE SECTION**



## **FACULTY ACHIEVEMENTS**

### **BIOMEDICAL ENGINEERING**

- ◆ Prof. Chintan P. Shah received his PhD degree in Instrumentation and Control with specialization in Brain Signal Analysis under guidance of Prof. Dr. Vipul A. Shah from Gujarat Technological University in January 2020.
- ◆ Prof. Ghanshyam Parmar and Prof. Dr. Mitul B. Patel were honored with a Juror seat for evaluating teams of participants in regional round of Smart Gujarat for NEW India Hackathon 2019-20 on February 27th & 28th, 2020 held at CHARUSAT, Changa.
- ◆ Prof. Piyush V. Patel was honored with a Juror seat for evaluating teams of participants in regional round of Smart Gujarat for NEW India Hackathon 2019-20 on February 27th & 28th , 2020 held at IITRAM, Ahmadabad.

### **ELECTRONICS & COMMUNICATION ENGINEERING**

- ◆ Prof. Shahid S. Modasiya completed his PhD in Electronics & Communication with specialization in Antenna Design from Gujarat Technological University in February 2020.
- ◆ Prof Shahid S. Modasiya has delivered expert lectures on “Advances in Electronics” at LDRO-ITR held on January 22, 2020.
- ◆ Prof Shahid S. Modasiya has delivered expert lectures on “Antenna Measurement Techniques” at BVM Engineering College held on February 01, 2020.

### **GENERAL & HUMANITIES**

- ◆ Dr. Daksha M Diwan has delivered webinar on “Differential Equation” organized by science and humanities department, Mahavir swami polytechnic, Bhagwan Mahavir swami University on May 11, 2020.
- ◆ Dr. Mahendra A Patel has delivered expert lecture on “Numerical solution by Homotopy Analysis Method” in STTP on “Numerical Methods and its applications in Engineering” at LDRP Institute of Technology and Research, Gandhinagar on January 10, 2020.
- ◆ Dr. Shashi Vivek Ranga has delivered a lecture in an international webinar organized by Swami Shri Swaroopanand Saraswati Mahavidyalaya, Bhilai, and Chattisgarh on, “Role of Chemistry in fight against Covid-19 pandemic” on June 12, 2020.
- ◆ Dr. Tarun Patel conducted a Personality Development workshop for the students of Computer Engineering and Information Technology on February 1, 2020.
- ◆ Dr. Tarun Patel conducted an online Resume Writing workshop for the final year students of the Metallurgy Engineering branch of GEC, Gandhinagar on May 9, 2020
- ◆ Dr. Vashishtha J Patel has delivered a webinar lecture on GROUP DISCUSSION: ‘A STEPPING STONE TO EMPLOYMENT’ held on May 22, 2020 organized by General Department, Shri K.J.Polytechnic, Bharuch.



## FACULTY ACHIEVEMENTS

### METALLUGRY ENGINEERING

- ◆ Prof. D. G. Sharma coordinated One Day Seminar on "Friction Stir Processing". IEI Sponsored One Day FSP Program on February 15, 2020.
- ◆ Prof. D. G. Sharma received letter of appreciation from zonal officer for placement camp activity at Mega placement camp RCTI during February 13th & 14th, 2020.
- ◆ Prof. H. H. Thakar received special appreciation from Hon. Principal Secretary Higher and Tech. Education, Anju Sharma (IAS) for highly esteemed contribution in planning implementation and organizing mega placement camps in all districts of gujarat.
- ◆ Prof. H. H. Thakar served as an OSD and received appreciation for Scrutinizing and verification of MYSY applications of at MYSY cell ACPC Ahmedabad.
- ◆ Prof. H. H. Thakar received special appreciation from Hon. Principal Secretary Higher and Tech. Education, Anju Sharma (IAS) for highly esteemed contribution in planning implementation and organizing mega placement camps in all districts of gujarat.
- ◆ Prof. H. H. Thakar served as an OSD and received appreciation for Scrutinizing and verification of MYSY applications of at MYSY cell ACPC Ahmedabad.
- ◆ Prof. P. K. Nanavati was awarded PhD degree in Metallurgical & Materials Engineering by the M. S. University of Baroda, in 68th Annual Convocation on January 29, 2020.
- ◆ Dr. P. K. Nanavati coordinated One Day Seminar on "Friction Stir Processing", IEI Sponsored One Day FSP Program on February 15, 2020.
- ◆ Dr P. K. Nanavati has Contributed a talk on "Welding Metallurgy & Weldability of Steels" during IIW Sponsored Welding Inspector Course 2020 on January 25, 2020.
- ◆ Dr. P. K. Nanavati coordinated One Day Seminar on "Friction Stir Processing", IEI Sponsored One Day FSP Program on February 15, 2020.
- ◆ Dr P. K. Nanavati has contributed a talk on "Welding Metallurgy & Weldability of Steels" during IIW Sponsored Welding Inspector Course 2020 on January 25, 2020.



## FACULTY PUBLICATIONS

### BIOMEDICAL ENGINEERING

- ◆ Prof. Vijay Dave along with his students; Dave V., Shrimankar A., Gokani D., Dashora A., wrote a research paper on 'Mathematical Modeling Of Magnesium Block Driven NMDA receptor Response In CA1 Pyramidal Neuron For Alzheimer's Disease' which was published in 'Proceedings of the 5th International Conference on Nanoelectronic Circuits and Communication Systems 2019' as well as 'Lecture Notes in Electrical Engineering, vol 692. Springer, Singapore'.
- ◆ Prof. Vijay Dave along with his student Sonupriya wrote a review on 'Modelling Aspect of Ryanodine Receptor in CA1 Neuron' which was published in International Journal of Engineering Research & Technology, Vol. 9, 153-157, 2020.

### ELECTRONICS & COMMUNICATION ENGINEERING

- ◆ Prof Shahid S. Modasiya has published a patent "One and Two Shorted Outer Ring and Slot Loaded Log Periodic Microstrip Antenna for Navigational Applications" in Indian patent office in the field of Antenna Design.

### GENERAL & HUMANITIES

- ◆ Prof. Hemangini S. Shukla has published paper on "Similarity Analysis of MHD Three Dimensional Nanofluid Flow for Non-Newtonian Power-Law Model over Linearly Stretching Sheet with Convective Boundary Conditions " in "International Journal of Heat and Technology" in March 2020.
- ◆ Prof. N.D.Patel has presented paper "INVESTIGATION OF MAGNETO HYDRODYNAMICS JH-FLOW PROBLEM USING DIFFERENTIAL TRANSFORM METHOD UNDER THE THERMAL EFFECT "in National conference organized by OM College of Science, Junagadh on January 18, 2020.
- ◆ Dr. N.D.Patel has published paper " Numerical study of Magneto hydrodynamics Jeffery-Hamel flow with Cu-water Nanofluid between two rectangular smooth walls with transverse magnetic field " in International Journal of Computational Materials.(DOI: 10.1142/S2047684120500104)
- ◆ Dr. Tarun Patel presented a research paper 'Role of Technological Tools and Platforms in ELT Post COVID-19' during the ELT Summit 2020 virtual international conference, June 27-28, 2020.
- ◆ Dr Vashishtha J Patel has attended and presented a paper entitled 'TEACHING POETRY THROUGH MULTIMEDIA' in the virtual international conference ELT SUMMIT 2020 held on June 27-28, 2020.
- ◆ Prof. Yamini M Parmar has published paper on " Edge Vertex Prime Labeling for some graphs " in "South East Asian J. of Mathematics and Mathematical Sciences" in April 2020.
- ◆ Prof. Yamini M Parmar has published paper on " Edge Vertex Prime Labeling for some graphs " in "South East Asian J. of Mathematics and Mathematical Sciences" in April 2020.



## FACULTY PUBLICATIONS

### METALLURGY ENGINEERING

- ◆ Prof. D. G. Sharma and Prof. D. V. Mahant presented paper in 10th Int. Conference on materials processing and characterization, which has been published in Scopus Indexed Journal as: “Manufacturing of Metal Matrix Composites: A State of Review,” during February 21-23 2020. Materials Today: Proceedings, ISSN: 2214-7853.



## **PARTICIPATION IN STTP/SEMINAR/WORKSHOP**

### **BIOMEDICAL ENGINEERING**

- ◆ Prof. C. P. Shah has attended two week training program entitled 'INDUCTION PHASE - 2' (Online) conducted by NITTTR Bhopal in the month of June,2020.
- ◆ Prof. H. K. Mehta has attended Four Week Massive Open Online Course on "Effective Engineering Teaching In Practice " organized by NPTEL during January 27, 2020 to February 21, 2020
- ◆ Prof. H. K. Mehta has participated in STTP on "Course Design in Context of NBA" conducted by GMCA College, MANINAGAR during January 20-24, 2020 AT GMCA-MANINAGAR
- ◆ Prof. H. K. Mehta has attended two week training program entitled 'INDUCTION PHASE- 1' (Online) conducted by NITTTR Bhopal in the month of June,2020.
- ◆ Prof. M. M. Nanavati Patel has attended Twelve Week Massive Open Online Course on "Applied Ergonomics" organized by NPTEL during January 27, 2020 to April 17, 2020.
- ◆ Prof. M. R. Khandedia has attended one week FDP on "Digital Signal Processing conducted by NITTTR Bhopal during January 27-31, 2020.
- ◆ Prof. N. V. Limbad Limbad has attended Twelve Week Massive Open Online Course on "Biomedical Signal Processing" organized by NPTEL during January 27, 2020 to April 17, 2020.
- ◆ Prof. P. V. Patel has attended SSIP Faculty Development Program during January 6-10, 2020 at EDI–Ahmedabad.
- ◆ Prof. P. V. Patel has attended Twelve Week Massive Open Online Course on "Biomedical Signal Processing" organized by NPTEL during January 27, 2020 to April 17, 2020.
- ◆ Prof. V. P. Dave has attended one week FDP on "Enhancing Employability Skill" conducted by NITTTR Bhopal in January 2020.

### **ELECTRONICS & COMMUNICATION ENGINEERING**

- ◆ Prof. A. A. Vithlani & Prof J.K.Bhavsar attended one week online STTTP on " Parivartan: Changing Scenario in Science, Education and Psychology - A combined approach" by Government Science College Veraval, during May 24-31, 2020.
- ◆ Prof. D.H.Patel has attended one week Faculty Development Programme on " Faculty Development for Teachers of Technical Courses" Organised by IIITE, Gandhinagar during January 27, 2020 to February 2, 2020.
- ◆ Prof. Kishor G. Maradia has attended one week STTTP on " Promoting Excellence through Industry Institute Partnership" organized by NITTTR, Bhopal during February 17-21, 2020.





## PARTICIPATION IN STTP/SEMINAR/WORKSHOP

- ◆ Prof. Nilesh M Banker has attended one week STTTP on “Course Designing in Context of NBA” organized by GMCA, Maninagar, Ahmedabad during January 21-24, 2020.
- ◆ Prof S.S. Modasiya has attended various one week online courses on “International Tech Conclave” by BVM Engineering college; “Antenna Designing and Troubleshooting” by Pillai college of engineering; and on “ MATLAB based Teaching learning in Mathematica, Science and Technology “ by D Y Patil University.
- ◆ Prof. T.B.Sheth has attended online training programmes on “ Technological Inventions using wireless communication”, “Outcome based Curriculum Design”, and “ Real world Application of Microcontrollers” organised by NITTTR, Chandigarh in duration of May 18, 2020 to June 19, 2020.

## GENERAL & HUMANITIES

- ◆ Prof. Ashokkumar Vaghamshi has attended Twelve Week Massive Open Online Course on “Control Engineering” organized by NPTEL during January 27, 2020 to April 17, 2020 with 94 % assignments Score
- ◆ Prof. Ashokkumar Vaghamshi has attended One Week online Faculty Development Program on “Energy & Sustainable Development” organized by N. G. Patel Polytechnic, Isroli-Afwa in Association with Department of Electrical Engineering, during June 8-12, 2020.
- ◆ Prof. Ashokkumar Vaghamshi has attended online short term training program on “MATLAB based teaching-learning in Mathematics, Science and Engineering” organized by Department of Electronics Engineering, Ramrao Adik Institute of Technology Navi Mumbai in collaboration with Design Tech Systems Pvt. Ltd., Mumbai during May 18-22, 2020.
- ◆ Dr Daksha M Diwan has attended training on “Application of Bhartiya Ganit Shasta in Mathematics (Basic and Advance)” held at GTU, Chandkheda during January 27,2020 to February 01, 2020.
- ◆ Prof. Hemangini S. Shukla has attended one week training on " Faculty Development for Teachers of Technical Courses " at IITE, Gandhinagar during January 17-23, 2020.
- ◆ Dr.N.D.Patel from General Department has participated in the 4-days Online Course on Examination Reforms conducted during April 29, 2020 to May 2, 2020 organized by AICTE
- ◆ Dr. Shashi Vivek Ranga has attended one week faculty development program on “Multimedia enriched e-content development” organized by “GAD-TLC, SGBT Khalsa College, MHRD from May 21-26, 2020.
- ◆ Prof. Sunilkumar Agrawal has attended Twelve Week Massive Open Online Course on “Fuzzy Sets, Logic and Systems & Applications” organized by NPTEL during January 27, 2020 to April 17, 2020 with 95% assignments Score.
- ◆ Dr. Vashishtha J Patel has attended two week training program entitled ‘INDUCTION PHASE- 1’ (Online) conducted by NITTTR Bhopal in the month of June,2020.



## **PARTICIPATION IN STTP/SEMINAR/WORKSHOP**

### **INSTRUMENTATION & CONTROL ENGINEERING**

- ◆ Prof. M.B. Hingu has participated in 'An online STTP on MATLAB based teaching-learning in Mathematics, Science and Engineering' organised by Department of Electronics Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during May 18-22, 2020.
- ◆ Prof. M.B. Hingu has participated in 5 Days STTP on "Internet of Things (IoT) & It's Applications in Industry" organised by Department of Instrumentation Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during June 8-12, 2020.
- ◆ Prof. M.B. Hingu has participated in a Short Term Online Course on "OUTCOME BASED EDUCATION AND NBA ACCREDITATION PROCESS" Organized by Internal Quality Assurance Cell (IQAC) held at P. R. Pote (Patil) College of Engineering & Management, Amravati, during during June 8-12, 2020.
- ◆ Prof. M.B. Hingu has participated in STTP on "Course Design in Context of NBA" conducted by GMCA College, MANINAGAR during January 20-24, 2020 AT GMCA-MANINAGAR
- ◆ Prof. P.N. Patel has participated in 5 Days STTP on "Internet of Things (IoT) & It's Applications in Industry" organised by Department of Instrumentation Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during June 8-12, 2020.

### **METALLURGY ENGINEERING**

- ◆ Prof. D. G. Sharma has attended International Faculty Development Program on "Research and Development in Materials Behaviour, Processing and Characterization Techniques" during June 9-14, 2020 organized by Indian Institute of Metals, GLA University & Punjab University.
- ◆ Prof. D. G. Sharma has attended Faculty Development Program on "Hands on Creating and Managing Online Teaching Tools for Teachers" from May 28-30, 2020 organized by S.N. Patel Institute of Technology & Research Centre.
- ◆ Prof. D. G. Sharma has attended Faculty Development Program on "Future Materials: Nanocomposites" from June 15-21, 2020 organized by Bharti Vidyapeeth College of Engineering.
- ◆ Prof. P. K. Nanavati has attended Twelve Week Massive Open Online Course on "Welding Processes" organized by NPTEL during January 27, 2020 to April 17, 2020.
- ◆ Prof. P. K. Nanavati has attended One Week FDP Program on "Augmented Reality (AR) and Virtual Reality (VR)" organized by AICTE ATAL Academy during May 18-22, 2020 .



## STUDENT ACHEIVEMENTS

- ◆ Kalpesh Prajapati student of 8th semester from Biomedical Department featured his project in “Project of the Year 2020” under the guidance of Prof. Maulindu Patel at International Level Competition Organized by Dassault Systèmes in the period of April 20, 2020 to June 26, 2020. The project is about the design of a prosthetic foot. In this design, he made a structure for a prosthesis that has a post knee amputation. The design primarily focuses on the foot segment of the prosthesis.
- ◆ Riya Patel, student of 7<sup>th</sup> semester from Biomedical Department served as Vice- President at an International Organization called “Rotaract club of Ahmadabad Narol” working for the betterment of the society along with personal development.
- ◆ Sauravsuman Poddar, student of 5th semester from Biomedical department is working as a City Leader of Gandhinagar in a Known National NGO named "Zomato Feeding India". With his team, he regularly conducts several late night drives and flaunts his motto and mission of #nomorehunger #zerohunger. Under the campaign "FEED THE DAILY WAGERS" he has distributed 700+ ration kits in Gandhinagar and 300 kits in Surat along with his team in this Lockdown period.
- ◆ Jyotik Simaria currently in 5th sem IC Department has made PCB designed for Sanitization Machine. It contains Atmega328p as a microcontroller unit, Ultrasonic and IR sensors for sensing the proximity near it. And it contains Relay Section for Controlling motor of Sanitization Machine
- ◆ Raj Kumar Singh from 3rd semester IC Department has attained a national webinar on Advance design of turbo charger, a webinar on Entrepreneur mind-set organised by Design innovation centre, GTU and 2-day workshop on 3D EM simulation involving CST software and R&S Van instruments conducted by CIC3 in association with Jyoti electronics Ahmedabad.
- ◆ Vedant Panchal, currently in 3rd sem IC Department , was Certified & Selected for 2nd Round In International Astronomy and Astrophysics Competition (IAAC), an International Level Quiz Competition.
- ◆ Devam Trivedi, of 7th semester IC Department was selected by the Forest Department of Gujarat for the Wild Ass Census 2020 held at Wild Ass Sanctuary, Little Rann of Kutch. The census was conducted during March 13-14, 2020.
- ◆



## STUDENT ACHIEVEMENTS

- ◆ In this pandemic situation of COVID-19, two final year students Pankti Sugandhi & Chirag Ramchandane of IT department made an application that will be useful. They made salon booking app in that anyone can book appointments in his/her own favourite salon, spa, beauty parlour etc. in few simple steps.
- ◆ Students of Metallurgy department, Aasif Mansuri, Aparna Srivastav, Apurva Chavhan and Shashi Shekhar has received appreciation form Principal, GEC Gandhinagar, Dr. S. P. Dave on January 26, 2020 for filing 2 patents on Revolutionary Non-ferrous Innovatory Furnace (Design and Utility) under the guidance of Prof. D. V. Mahant, under Students Start-up and Innovation Policy.



- ◆ Semester 3 student Shivanshi Desai from Metallurgy Department grabbed third rank in “ Corona Warrior Digital Competition 2020-21” organized by GTU in May 2020.
- ◆ Semester 3 student Shivanshi Desai from Metallurgy Department has qualified 1st round for National Engineering Olympiad 3.0 organized by NEO foundation during April 24-28, 2020.
- ◆ Semester 3 student Ankush Meghani from Metallurgy Department has qualified 1st round for National Engineering Olympiad 3.0 organized by NEO foundation during April 24-28, 2020.



## DEPARTMENTAL ACTIVITIES

*Learning is not limited to the classroom, in fact learning in the classroom is a very tiny part of all the knowledge student's gain in their academic career. Therefore the various departments of Government Engineering College, Gandhinagar always comes up with innovative ideas and practices to bring learning out of the classroom make it more interesting. Next section focuses on the various activities organized by the various department in the first half of this year.*



---

# BIOMEDICAL ENGINEERING

---



## DEPARTMENTAL ACTIVITIES

- ◆ Mother Tongue Day—February 20, 2020 on this auspicious day celebrating our Mother Tongue 'Gujarati', a debated focused on the importance of Gujarati in our life was arranged in which more than 50 students passionately participated.



### Glimpses of QUENCH 2020

- ◆ Quench is a massive Tech-Fest event celebrated across the whole college, where every department organizes various activities for the students to take part in. It is a great way to increase interdepartmental interaction. This year the BM Department organized a Quiz competition based on the basic knowledge of biology named 'Mad Medicos'. Fun right?



## DEPARTMENTAL ACTIVITIES

- ◆ Expert seminar on “Woman Entrepreneurship”: Ms. Siddhi Vora, Founder at DBreath Medical Devices Ltd, Ahmedabad shared her inspiring as well as roller coaster journey of her start-up with pre-final year students. Total 30 number of students participated in this Expert Seminar.



## Glimpses of OPEN House 2020

- ◆ Event was organized in every Department of our college. It was scheduled on March 7, 2020. Main objective behind organizing this event was to present the ideas of students by presenting the poster regarding the project idea. Many students had also demonstrated their projects to External Industry-Academia Experts. More exciting thing was that to get an Rs.50,000 funding to design prototype from the Student Start-up and Innovation Programme (SSIP), if an idea/solutions accepted by the examiner





---

# COMPUTER ENGINEERING

---



## DEPARTMENTAL ACTIVITIES

### GLIMPSE OF QUENCH 2020

Compute Engineering Department has organized various technical event in Quench–2020

1. Short Code–Coordinated by Prof. D. P. Khem
2. Web Dev– Coordinated by Prof. S. B. Patel
3. Crypto Hunt–Coordinated by Prof. N. S. Shroff
4. Cod–O–Fiesta–Coordinated by Prof. P. B. Patel
5. Cyber Hunt–Coordinated by Prof. B. U. Ghadia
6. Tech Build–Coordinated by Prof. Z. K. Gajjar
7. IT Wiz Quiz–Coordinated by Prof. A. B. Sangada



## DEPARTMENTAL ACTIVITIES

### EXPERT TALK

- ◆ THE “EXPERT TALK” was organized in association with Digipple and main focus of this event was to deliver values and knowledge other than academics basically focusing on soft skills development. Prof. T. J. Patel, Prof. D. P. Khem & Prof. P. J. Patel gave their contribution by sharing their knowledge. Valuable contribution from Dr. S. P. Dave—Principal and Prof. J. S. Dhobi—HOD added the charm to this event.



### Glimpse of Open House—2020



---

**ELECTRONICS &  
COMMUNICATION  
ENGINEERING**

---



## DEPARTMENTAL ACTIVITIES

### INDUSTRIAL VISIT

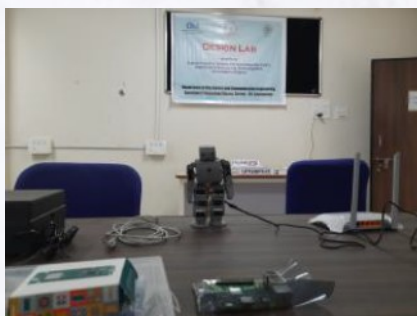
- ◆ An Industrial Visit is arranged at Sahajanand Laser Tech. Pvt. Ltd. (RF and Antenna section) Gandhinagar as on January 20, 2020. There were 59 students from Semester-6 participated along with 02 faculty members of E&C Dept



- ◆ Software Defined Radio (SDR) Kit worth INR 1.75 Lacs (approx.) purchased under the GUJCOST-Minor Research Project Grant of INR 3.7 Lacs received by Prof.N.M.Bankar (PI) and Prof. (Dr.) Kishor G. Maradia (Co-PI). The demonstration of the SDR Kit supplied by CoreEL Technologies, Bangalore is arranged at the E&C Dept. on February 25, 2020.

### DESIGN LAB

- ◆ To provide the platform to the young students with creative and innovative ideas, “Design Lab” is established in Electronics & Communication Engineering Department, Government Engineering College, Gandhinagar by Gujarat Council on Science and Technology (GUJCOST), Department of Science and Technology, Govt of Gujarat on March 7, 2020.



---

# INSTRUMENTATION & CONTROL ENGINEERING

---



## DEPARTMENTAL ACTIVITIES

### INDUSTRIAL VISIT

- ◆ IC Department has organized visit for Students of semester 6 at the Chemical Department of Vishwakarma Government Engineering College, Chandkheda, for conduction of various experiments related to Environmental Instruments.
- ◆ IC Department has organized visit for Students of 8th semester at the Automobile Lab of Automobile Department, LD College of Engineering as a part of curriculum, on March 13, 2020. Prof. Suley Patel and Prof. Shyam Dabhi were the resource persons. The students were given practical exposure to various sensors related to automobile instruments. Prototype working model of ECU was also explained with other fundamental practicals of Automobile engineering.
- ◆ IC Department has organized visit for Students of 6th semester visited the GMERS Hospital, Gandhinagar as a part of the curriculum of Biomedical Instrumentation subject. Mr. Priyakant Parmar and Mr. Jignesh Patel, Biomedical Engineer, Central Medical Store, GMERS, Gandhinagar demonstrated various instruments to students on date February 25, 2020.
- ◆ IC Department has organized visit at Novatrice Technologies IOT, Centre of Excellence, ITI Chandkheda, Ahmedabad on IOT and it's applications on January 30-31, 2020.



## DEPARTMENTAL ACTIVITIES

### Open House—2020

- ♦ Open House Project fair was organised by the IC department on March 7, 2020. All final year students displayed and demonstrated their projects with charts and models. Two Industry Experts, Mr. Parag Shukla, Managing Director, Micon Automation Pvt. Ltd. And Mr. Shrenik Waweker, Director, Novatrice Technologies pvt. Ltd., evaluated the projects and guided students for further project work.





## DEPARTMENTAL ACTIVITIES

### Webinar Organized

- ◆ A Industrial Automation using Embedded System' was organized by IC department, which was conducted by Mr. Vishal Vadher, Embedded System Engineer, SOFCON India Pvt. Ltd., Ahmedabad, on June 16, 2020.
- ◆ “Automation In Renewable Energy,” Webinar was organized by IC department,



### Expert Lecture

- ◆ IC department has organised an Expert talk on “Career Opportunities after Engineering and How to face the interviews” was organised on January 21, 2020, by IC department and was conducted by Mr. Mayank Trivedi, Training Manager, GATE Forum, Ahmedabad.



---

# INFORMATION TECHNOLOGY ENGINEERING

---



## DEPARTMENTAL ACTIVITIES

### Open House—2020

- ◆ All the Students of Final year B.E. INFORMATION TECHNOLOGY participated in Project Expo March 2020 held on March 7, 2020 in Computer Engineering/ IT Department at Government Engineering College, Gandhinagar.

### Training Program Organized

- ◆ IT department has conducted A two-week STTP on Machine Learning, Data Science and Deep Learning with Python had been conducted during June 10-19, 2020, at Government Engineering College, Gandhinagar.



## DEPARTMENTAL ACTIVITIES

### Khovayel Khel

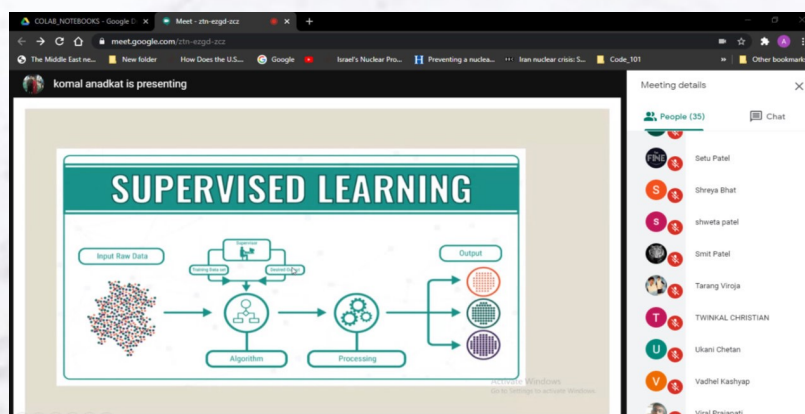
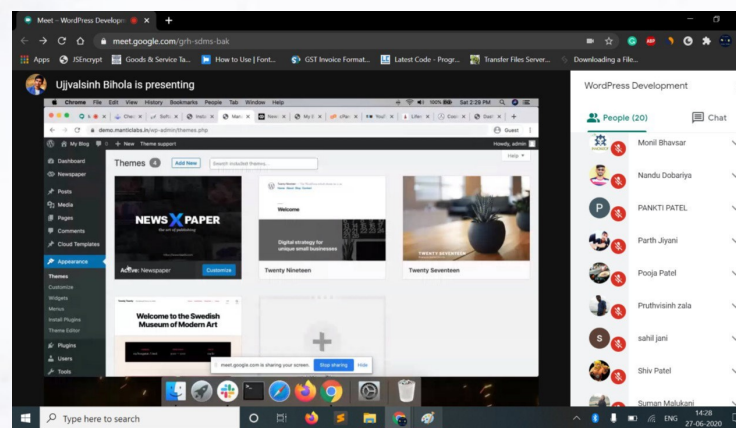
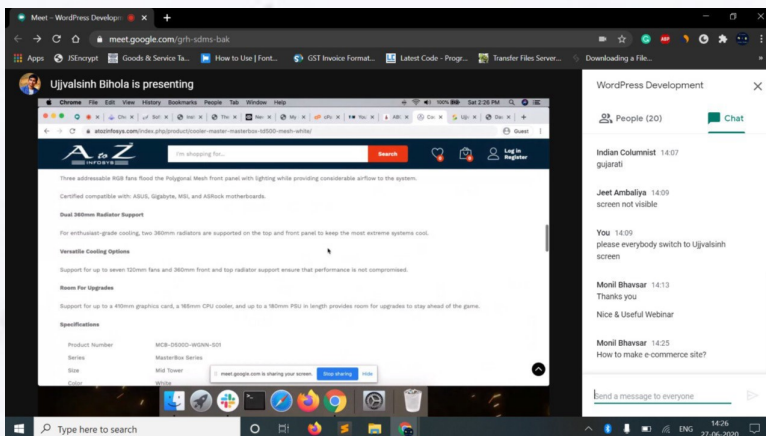
- ◆ To take a ride to those childhood nostalgic days again. A break from your everyday mundane schedule. Interaction between faculties and students apart from regular academia. IT Department has organized one day event on February 26, 2020.



# DEPARTMENTAL ACTIVITIES

## EXPERT Session

- ◆ IT Department has organized Expert session with Silver touch Tech. Ltd. March 12, 2020 on “Digital Transformations” Delivered by Aadarsh Parikh & Miss. Akanksha Goplani.
- ◆ IT Department has organized Wordpress Development webinar by ManticLabs on June 27, 2020.
- ◆ Prof. Komal Anadkat has delivered Machine Learning webinar on “Baby steps in Machine Learning through Google Colab” on July 4, 2020.



---

# METALLURGY ENGINEERING

---



## DEPARTMENTAL ACTIVITIES

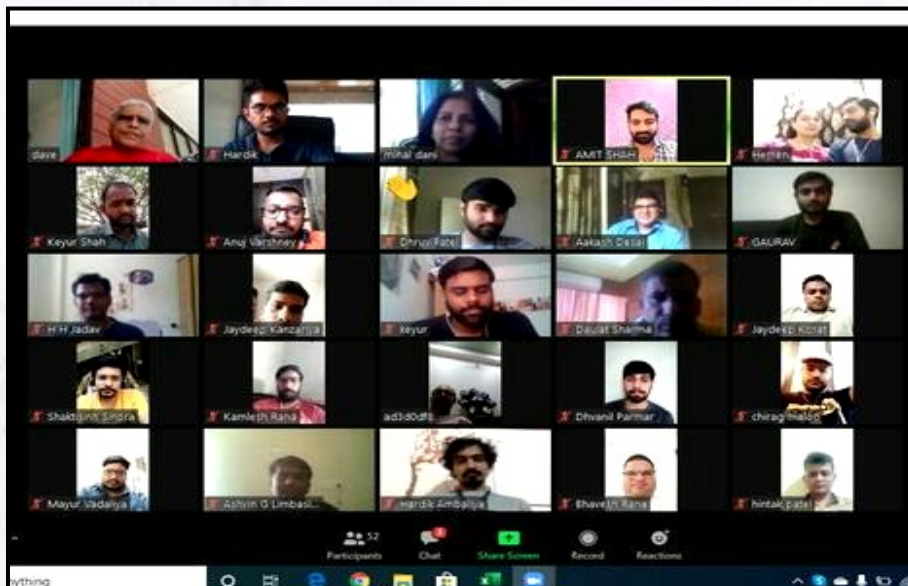
- ♦ The Institution of Engineers (India), Gujarat State Centre sponsored One Day Seminar on “Friction Stir Processing” was jointly organised by Government Engineering College, Gandhinagar & IIW-PDPU Student chapter on February 15, 2020.

The program was inaugurated by the chief guest Shri. B. J. Panchal, Jt. Director, DTE, Prof. Shayam Varghese, Hon, Secretary, IE, Prof. R. J. Dave, Former Jt. Director, DTE in presence of chairman IIW-PDPU Chapter Dr. Vishvesh Badheka in presence of Dr. S. P. Dave, Principal GEC Gandhinagar and Dr. I. B. Dave Head, Metallurgy Dept, GEC Gandhinagar. Departmental newsletter for the period of July 2019 to December 2019 was published by metallurgy department after lightening the lamp by dignitaries on the dais.

Total 64 BE/ B.Tech students including PhD research scholars have participated from reputed state institutions like PDPU-Gandhinagar, Rai University, Nirma University, The M. S. University of Baroda, Gujarat Technological University, SVNIT Surat and Indus University.



- ♦ Glimpses of Alumni Meet–2020 organized on May 17, 2020 via online platform



## DEPARTMENTAL ACTIVITIES

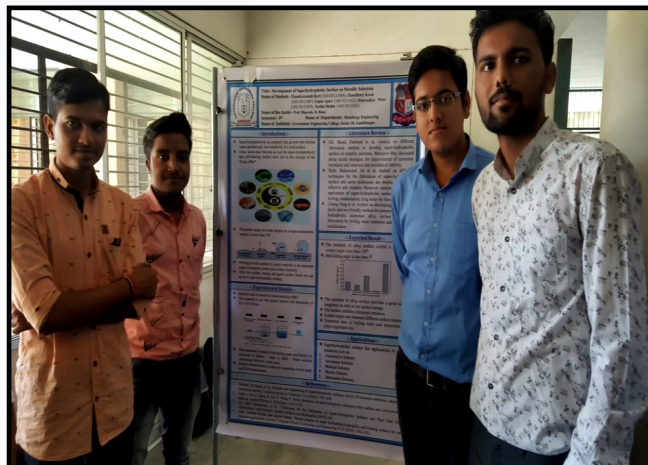
- ◆ Expert Lecture by By Mr Mahipal Jadav, Asst. Manager, Essar Steel Ltd. Was organized on January 10, 2020 and more than 50 students has participated in the same lecture.
- ◆ Expert Lecture on Welding as a career' The Untold Success (Hindi) by Mr Gope Devendra - Business development Manager Western & Central- Fronius India Pvt Ltd was organised during 3:00 - 4:30 PM on 5th May 2020. More than 125 students along with Metallurgy / Mechanical engineering faculty members have attended the webinar.
- ◆ 6<sup>th</sup> Semester 43 students have visited CFER, Odhav along with Prof. B. R. Rana, Prof. M. S. Dani and Prof D. V. Mahant on January 7, 2020.
- ◆ 6<sup>th</sup> Semester 43 students have visited Bhagwati Spherocast Pvt. Ltd., Odhav along with Prof. B. R. Rana, Prof. M. S. Dani and Prof D. V. Mahant on January 7, 2020.
- ◆ 6<sup>th</sup> Semester 43 students have visited Technocraft Enterprise (Heat Treatment) along with Prof. B. R. Rana, Prof. M. S. Dani and Prof D. V. Mahant on January 7, 2020.
- ◆ 15 students of Metallurgy department has undergone sand casting and sand testing training at IFTARC, Indus University during February 11-12, 2020.





## DEPARTMENTAL ACTIVITIES

- ◆ Open house project exhibition was organised at Metallurgy department for final year students on March 7, 2020. Various projects were displayed and valuable suggestions were given by judges.



- ◆ Resume writing webinar was organised for Metallurgy final year students under training and placement cell GEC Gandhinagar. Dr. I. B. Dave, Prof. D. G. Sharma and 30 students participated in this event on May 9, 2020.
- ◆ Students, staff and alumnae have participated and presented their views on emerging science and technology in various fields at the National Science Day, celebrated at metallurgy department on February 28, 2020.



- ◆ Students and faculties of metallurgy dept. participated and presented patent filled for RNIF in Orientation programme on “Women, Innovation, IP and Entrepreneurship” organised by GUJCOST and GEC Gandhinagar on February 18, 2020.
- ◆ Students of Metallurgy department has undergone sand casting and sand testing training at IFTARC, Indus University during February 11-12, 2020. Students have learned various testing operations and various steps for melting and casting of metals in to different shapes through hands on practice.

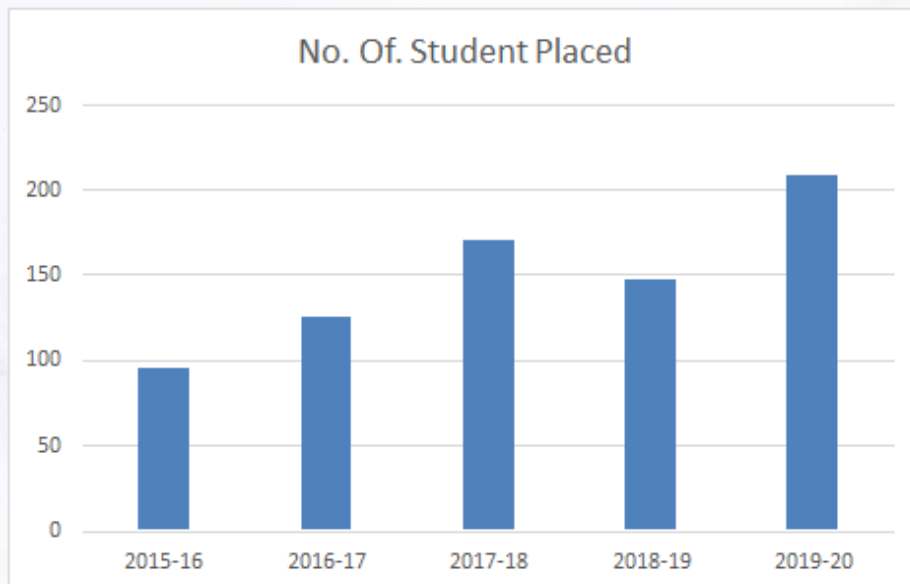


## PLACEMENT NEWS

As a part of T & P activities we have a team of faculties and students which is coordinated by TPO under the mentorship of Principal

Activities....

- ◆ Maintain and update students database for placement
- ◆ Maintain and update industry database for placement
- ◆ Interact with industries by E-mails, phone calls and personal visits
- ◆ Interact with HR representatives in various training programs
- ◆ Invite experts from industries for expert lecture and interact for placement too
- ◆ Conduct industrial visits and try to know industry requirement
- ◆ Train students as per need of industries
- ◆ Groom students by way of finishing school and technical programs for soft skills, life skills and latest technical skills as per industry requirement



## SSIP ACTIVITIES

GEC–Gandhinagar “Sarjan SSIP Cell” in association with GUJCOST organized a program on “Orientation Programme on Women, Innovation, IP and Entrepreneurship” on February 18, 2020. More than 100 students of GEC Gandhinagar along with startup founders participated in this event.

The main objective of the events were:

To motivate women for starting a start-up by growing awareness of the role and status of economic society.

To give women more involvement and participation in legislation and decision-making processes.

Role modelling of women in non-traditional business sectors to break through traditional views.

Building and change in mentality amongst women, whereby women see themselves as capable achievers and build up



## MEDIA COVERAGE

### ફાઉન્ડ્રી ઉદ્યોગમાં ૬૦થી ૭૦ ટકા ઉર્જા માત્ર ધાતુ પીગાળવામાં જ વપરાશ થાય છે

ગાંધીનગરની સરકારી ઈજનેરી કોલેજ દ્વારા બિન લોહ ધાતુ પીગાળવાની ભઠ્ઠીના સંશોધનનું પ્રકાશન કરાયું



અમદાવાદ, તા. ૧૧ સરકારી ઈજનેરી કોલેજ, ગાંધીનગરના મેટલર્જી વિભાગના પ્રાધ્યાપક પ્રો. દેવાંગ વી. મહંતના માર્ગદર્શન હેઠળ ભૂતપૂર્વ વિદ્યાર્થી આસિફ મનસુરી તથા તેઓની ટીમના સાથીઓ શશી શેખર, અપર્ણા શ્રીવાસ્તવ અને અપૂર્વા ચૌહાણ દ્વારા “Revolutionary Non-Ferrous Innovatory Furnace” (RNIF)ના સંશોધનનું ભારતીય પેટેન્ટ ઓફિસ દ્વારા પ્રકાશન તાજેતરમાં રોજ થયેલ છે. ફાઉન્ડ્રી ઉદ્યોગ એક વધુ ઉર્જા વપરાશ કરતું ઔદ્યોગિક ક્ષેત્ર છે. ફાઉન્ડ્રી યુનિટમાં ૬૦થી ૭૦ ટકા ઉર્જા માત્ર ધાતુને પીગાળવામાં જ વપરાય છે જે તેની પાયાની મૂડીનો બહુ મૂલ્ય ભાગ હોય છે. પરંપરાગત રીતે બિન લોહ ધાતુને પીગાળવામાં વધુ સમય અને કાર્યશ્રમ વ્યય થાય છે. લઘુ એકમના ફાઉન્ડ્રી ઉદ્યોગોની

ઉપરોક્ત સમસ્યાઓને ધ્યાનમાં રાખીને RNIFની રચના અને અજમાયશી કાર્યરત પ્રતિકૃતિ “RNIF” કે જેમાં બિન લોહ ધાતુને પીગાળતી વખતે ઉત્પન્ન થતી ઉર્જાને ઉર્જા સંચયના સિદ્ધાંત મુજબ વપરાશ કરી ભઠ્ઠીની કાર્યક્ષમતામાં વધારો કરવાનો પ્રયત્ન કરેલ છે. આ ભઠ્ઠીના કાર્યક્ષમતામાં વધારા સાથે બિન લોહ ધાતુના ઉદ્યોગ સાહસિકો ઓછા મૂડી રોકાણ સાથે લઘુઉદ્યોગ પ્રસ્થાપિત કરી શકશે.

આ પ્રોજેક્ટ ગુજરાત રાજ્ય સરકારની “Student Startup and Innovation Policy” હેઠળ પસંગી પામેલ હતો. ઉપરોક્ત સંશોધન પ્રક્રિયામાં સંસ્થાના આચાર્ય શ્રીમતી ડો. સ્વેતા પી. દવે, SSIP મેન્ટર ડો. કે. જી. મારડિયા તથા મેટલર્જી વિભાગના વડા ડો. આઈ. બી. દવેના સતત માર્ગદર્શન, પ્રોત્સાહન અને પ્રેરણા મળેલ છે.

### ભઠ્ઠીમાં બિનલોહ ધાતુ પીગાળવાશે સરકારી એન્જિ. કોલેજોમાં યુનિક ભઠ્ઠી તૈયાર કરાઈ

એજ્યુકેશન રિપોર્ટર | અમદાવાદ

ગાંધીનગરની સરકારી એન્જિનિયરિંગ કોલેજના મેટલર્જી વિભાગના પ્રાધ્યાપક દેવાંગ વી. મહંતના માર્ગદર્શન હેઠળ ભૂતપૂર્વ વિદ્યાર્થી આસિફ મનસુરી તથા તેઓની ટીમ શશી શેખર, અપર્ણા શ્રીવાસ્તવ અને અપૂર્વા ચૌહાણ દ્વારા રિવોલ્યુશનરી નોન ફેરિયસ ઈનોવેટરી ફુરનેસના સંશોધનનું ભારતીય પેટેન્ટ ઓફિસ દ્વારા પ્રકાશન 30 ઓગસ્ટ 2019એ કરાયું છે.

ફાઉન્ડ્રી ઉદ્યોગો એક વધુ ઊર્જા વપરાશ કરતું ઔદ્યોગિક એકમ ક્ષેત્ર છે. ફાઉન્ડ્રી યુનિટમાં 60થી 70 ટકા ઉર્જા માત્ર ધાતુને પીગાળવાવા માટે જ વપરાય છે. જેના પર મોટો

ખર્ચ થાય છે. પરંપરાગત રીતે બિનલોહ ધાતુને પીગાળવા માટે વધારે સમય જાય છે.

લઘુ એકમના ફાઉન્ડ્રી ઉદ્યોગોની ઉપરોક્ત સમસ્યાઓને ધ્યાનમાં રાખીને આરએનઆઈએફની રચના અને અજમાયશી કાર્યરત પ્રતિકૃતિ આશરે 100 કિલો બિનલોહ ધાતુને પીગાળવાની ક્ષમતા ધરાવે છે. બિનલોહ ધાતુને પીગાળતા સમયે ઉત્પન્ન થતી ઊર્જાનો પણ ઉપયોગ કરીને ભઠ્ઠીની કાર્યક્ષમતામાં વધારો કરે છે. આ ભઠ્ઠીના ઉપયોગથી ઉદ્યોગ સાહસિકો ઓછા ખર્ચે વધારે કામ લઈ શકશે. આ પ્રોજેક્ટના ગુજરાત રાજ્ય સ્ટુડન્ટ્સ સ્ટાર્ટઅપ અને ઈનોવેશન પોલીસી અંતર્ગત પસંદ કરવામાં આવ્યું છે.



## MEDIA COVERAGE

### સરકારી ઈજનેરી કોલેજ, ગાંધીનગર ખાતે ટેકનીકલ સેમિનાર 'ફિક્શન સ્ટિર પ્રોસેસિંગ'નું આયોજન



ગાંધીનગર, તા. ૧૭ ઉચ્ચ શિક્ષણના તાબા હેઠળના મેટલર્જી વિભાગ, સરકારી ઈજનેરી કોલેજ, સેક્ટર-૨૮, ગાંધીનગર ખાતે 'ફિક્શન સ્ટિર પ્રોસેસિંગ' વિષયનું ટેકનીકલ સેમિનારનું આયોજન ઈન્સ્ટિટ્યૂટ ઓફ ઈજનીયર્સ અને ઈન્ડિયન ઈન્સ્ટિટ્યૂટ ઓફ વેલ્ડિંગ-પીડીપીયુ સ્ટુડેન્ટ ચેપ્ટર ના સંયોજન થી તારીખ ૧૫ ફેબ્રુઆરી ૨૦૨૦ના દિવસે કરેલ છે. આ તાલીમના સંયોજક મેટલર્જી વિભાગના પ્રાધ્યાપકો શ્રી ડી. જી. શર્મા તથા શ્રી પી. કે. નાનાવટી હતા. ઉપરોક્ત તાલીમમાં ગુજરાત રાજ્યની વિવિધ ઈજનેરી કોલેજો અને યુનિવર્સિટીઓ જેવી કે અંસવીએનાઈટી, સુરત, એમએસયુ બરોડા, નિરમા યુનિવર્સિટી, ઈડુસ યુનિવર્સિટી, રાય યુનિવર્સિટી, ગોંડલ ગ્લોબલ યુનિવર્સિટી, જીટીયુ અમદાવાદ અને પીડીપીયુ ખાતેથી ૬૪

બી.ઈ., એમ.ઈ. અને પીએચડી ના વિદ્યાર્થીઓએ ભાગ લીધેલ છે જેનો મુખ્ય હેતુ વિદ્યાર્થીઓને મટિરિયલ્સની આધુનિક પ્રોસેસિંગ પ્રક્રિયા ફિક્શન સ્ટિર પ્રોસેસિંગ અને તેના રિસર્ચનું તજજ્ઞો દ્વારા તાલીમ આપવાનું હતું.

તાલીમનું ઉદઘાટન શ્રી આર. જે. દવે, પુર્વ જોઈન્ટ ડાયરેક્ટર અને શ્રી બી. જે. પંચાલ, જોઈન્ટ ડાયરેક્ટર, ટેકનીકલ શિક્ષણ વિભાગના હસ્તે ડા. સ્વેતા. પી. દવે, આચાર્ય, સરકારી ઈજનેરી કોલેજ, ગાંધીનગર, ડા. આઈ. બી. દવે, મેટલર્જી વિભાગના વડા, ડા. વી. જે. બધેકા, ચેરમેન, ઈન્ડિયન ઈન્સ્ટિટ્યૂટ ઓફ વેલ્ડિંગ-પીડીપીયુ સ્ટુડેન્ટ ચેપ્ટર, શ્યામ વર્ગીજ અને શ્રી વિજય સોલંકી, ઈન્સ્ટિટ્યૂટ ઓફ ઈજનીયર્સ તથા વિવિધ ખાતાના વડાઓની ઉપસ્થિતિમાં કરવામાં આવેલ હતું.



સરકારી ઈજનેરી કોલેજ ગાંધીનગર ખાતે ગુજરાત કાઉન્સિલ ઓફ સાયન્સ એન્ડ ટેકનોલોજીના સહયોગ થી એક દિવસીય સેમીનાર કે જેમાં મહિલા વિદ્યાર્થીઓ ને સ્ટાર્ટ અપ, ઈનોવેશન, પેટન્ટ અને ઉદ્યોગ સાહસિકતા અંગે ખુબ જ રસપ્રદ માહિતી આપવામાં આવી હતી. આ કાર્યક્રમમાં ૧૦૦ વિદ્યાર્થીઓ એ લાભ લીધો અને તેમાં GUJCOST તથા NIDના તજજ્ઞો, પેટન્ટ એટર્ની, અને મહિલા ઉદ્યોગ સાહસિકો એ વિદ્યાર્થીઓ ને માહિતગાર કર્યા હતા. વિવિધ લેક્ચર્સ અને ઉદ્યોગ સાહસિકો ના પ્રદર્શન દ્વારા મહિલા ઓ પછ, ઉદ્યોગ ક્ષેત્રે અને સ્ટાર્ટ અપ ક્ષેત્રે ઘણું કાર્ય કરી શકે છે અને પોતાનો સફળ વ્યવસાય શરુ કરી શકે છે તે બાબતે પ્રેરણા આપી હતી. આ કાર્યક્રમ દ્વારા વિદ્યાર્થીઓને કોઈ નવા વિચાર સાથે પોતાનો પ્રોજેક્ટ બનાવવા, તેની પેટન્ટ ફાઈલ કરવા અને એક સારી પ્રોડક્ટ બનાવી ને તેને માર્કેટ માં કઈ રીતે લઈ જઈ શકાય તે બાબત સમજાવી ને, માર્ગદર્શન આપવામાં આવ્યું હતું.



## CREATIVE CORNER

### શીખવી દેય છે

વધારે છે જરૂરી જે તે પહેલા શીખવી દેય છે  
જન્મતાવેત આંખો સહુને જોતા શીખવી દેય છે.

જરૂરી છે આ બધા લોકોની વચ્ચે સ્નેહ થી ભળવાની  
જે ના આવડે તો આ દુનિયા શીખવી દેય છે.

રહો છો આ દુનિયામાં હાથ જોડી મસ્તક જૂકાવી  
ન પૂછો વાત આ દુનિયા શું-શું શીખવી દેય છે.

અહીંયા કોઈ ભાષા કે ઈશારા નહીં આવે કામ  
ઠોકર છે તેનું નામ જે સરળતાથી શીખવી દે છે.

થવું કઈ રીતે ઉભા આ દુનિયામાં  
શીખતા પહેલા બીજને પડતા શીખવી દેય છે.

ગજબ છે આ દુનિયા ન બોલતાં ને બોલતાં  
અપાહીઝ ને ચાલતા શીખવી દેય છે.

હા, હું એ જ ગુજરાત છું..

હા, હું એ જ ગુજરાત છું..

જેણે કચ્છની ધરાનાં કંપનો ધરાર ઝીલ્યા,  
જેણે મચ્છુના નિરને નિર્ભયતાથી નભાવ્યા,  
જેણે વાયુના વાવાઝોડાને પણ વિલીન કર્યા,  
જેણે હિપેટાઇટિસનેય હિંમતભેર હંફાવ્યા,  
જેણે પૂરનાં પાણીને પણ પાણીયા પકડાવ્યા,

હા, હું એ જ ગુજરાત છું..

બસ એ જ રીતે,  
કોરોના મહામારીને પણ મક્કમતાથી માત કરીશ..

હા, હું એ જ ગુજરાત છું..

એવાં અડીખમ ગુજરાતનાં સ્થાપના દીને સત  
સત નમન.. 🙏🙏🙏

પ્રો. નિલેશ એમ. બેંકર  
તા. ૦૧/૦૫/૨૦૨૦

Ankush Meghani ,Sem 4, Metallurgy

Prof. Nilesh Banker, EC Department





## **EDITORIAL BOARD**

### **Chairman**

Dr. Sweta. P. Dave  
Principal,  
GEC, Gandhinagar

### **Editor**

Dr. K. G. Maradia  
Dr. I. B. Dave  
Dr. D. A. Parikh  
Dr. V . V. Prajapati  
Dr. S. A. Rankawat  
Prof. S. R. Sarda

### **Members**

Prof. K. K. Acharya  
Dr. T. J. Patel  
Prof. S. P. Agrawal  
Prof. M. M. Nanavati



**GOVERNMENT ENGINEERING COLLEGE  
SEC -28, GANDHINAGAR**

