

# INSTRUMENTATION & CONTROL

## DEPARTMENT

ISSUE - III

JULY '20  
To DECEMBER '20



**Dr. Sweta P. Dave** | Principal,  
G.E.C. Gandhinagar.

Government Engineering College Gandhinagar, aims to produce quality engineers, entrepreneurs and leaders to meet the technological needs of society with environmental consideration.

Our organization primarily stands to nurture the shelved potential hidden in the young talent. We intend to provide a platform to the students to let out their creativity and channelize their knowledge and young inspirational energy to bring innovative solutions relevant to society and environment.

"Education is not the learning of facts, but it is training of mind that how to think" - Albert Einstein. And we believe in this statement a lot. The department has well qualified and highly experienced faculties and their innovative teaching methodologies encourage students to develop critical thinking.

In this pandemic situation, all the faculties are working diligently and have explored out alternative methods like various online resources for content delivery, student evaluation, training and webinars etc., for the student's.

Students have also actively participated in various activities during pandemic and I appreciate every student who shared the joy of participation in co-curricular and extracurricular activities along with their commitment to curriculum.

I heartily congratulate the Instrumentation & Control Department for publishing the third issue of departmental Newsletter-MindSpark and wish them all the best for future endeavors.

**Dr. S. A. Rankawat** | Prof. & Head, I & C,  
G.E.C. Gandhinagar.



It gives me immense Pleasure to present the third issue of Departmental newsletter, MindSpark. The Instrumentation & Control department vision is to impart quality education through innovation to meet technological challenges of industries and society with environmental consideration. There are many senior experienced teaching faculty members in the department to prepare the young minds for global competition. Department works for overall growth of students and inculcate the moral and ethical qualities to be as an asset for the Society.

In this pandemic situation, where the world is facing so many challenges, our faculties as well as students are highly motivated to meet these challenges. Teaching learning activities are continuously done by using online tools like Microsoft Teams, various simulation platforms and Virtual Labs. As per new GTU syllabus various electives have been offered and to give latest technological exposure online webinars are arranged by the Industrial experts and Academia so that students get uninterrupted quality teaching. Under ISA student's chapter, state level Gujarat section webinar on topic "Industrial Process control and Automation" was organised where many students participated from all over the Gujarat. Teaching faculties have also taken various trainings to update their technical knowledge. Department organized pedagogical sessions on latest technological trends and also on stress management, benefits of Yoga & Pranayam etc.

The departmental Training & Placement cell is working very hard for grabbing the placement opportunities for the students. Many students are placed at good companies and several students have applied for higher studies abroad. Some of the students have become entrepreneurs and are giving the opportunity to department's students to diversify the job opportunity. Alumni meet in the department gives benefit to current students for getting good trainings, job opportunities and guidance for their future growth.

This newsletter provides an overview of the departmental activities, resources, faculty achievements and participation of students in technical/non-technical activities with their achievements. 2020 was a difficult year but 2021 promises to get the world out of pandemic. I wish faculties and students should participate in technical activities and extracurricular activities to develop their overall growth and also contribute in the growth of the department. Once again, I congratulate to all the I&C family members for the Newsletter and wish all the bright future ahead.



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# 0 ABOUT THE INSTITUTION



Government Engineering College, Gandhinagar is approved by AICTE, administrated by Directorate of Technical Education, Gujarat State and it is affiliated to Gujarat Technological University.

Since its establishment in 2004, the college is committed to give best education to its students in a manner that they not only excel in academics but are completely aware of future industrial needs for professional expertise through innovative and flexible curriculum.

This trains the students of this campus to reach their highest potential. The highly dedicated faculty members of GEC-Gn are experts in their professional fields.

Their professional skills and industry linkages help the students by grooming them to become competent engineers who will contribute to the society and economy in the long run

## VISION

To be a premier engineering institution, imparting quality education for innovative solutions relevant to society and environment.

## MISSION

- ☞ To develop human potential to its fullest extent so that intellectual and innovative engineers can emerge in a wide range of professions.
- ☞ To advance knowledge and educate students in engineering and other areas of scholarship that will best serve the nation and the world in future.
- ☞ To produce quality engineers, entrepreneurs and leaders to meet the present and future needs of society as well as environment.



The Department of Instrumentation and Control Engineering offers B.E. programme at the Under Graduate level since year 2004. Presently department offers undergraduate course B.E.(Instrumentation & Control), recognized by AICTE (All India Council for Technical Education).

Instrumentation engineering is the science of the measurement that includes study of sensors and transducers to measure and control crucial process variables like pressure, temperature, humidity, flow etc. Automation controllers as PLC, DCS and advance embedded controller are also the part of study to implement control algorithm for automation application. The department is equipped with well-developed laboratories to satisfy the course curriculum and the laboratories are planned to fill in the industry institute gap.

We aim to produce talented instrumentation and control specialists who cater to meet the technological challenges of industries and society with environmental consideration.

## VISION

To impart quality education in Instrumentation & Control engineering through innovation to meet technological challenges of industries and society with environmental consideration.

## MISSION

- To impart knowledge about present trends in the field of Instrumentation & Control engineering.
- To train competent Instrumentation & Control engineers who can design, operate process instrumentation and also manufacturing an automation systems in industries.
- To encourage students to work on innovative research projects related to Instrumentation & Control engineering considering environmental aspect.

## PROGRAM EDUCATION OBJECTIVE STATEMENTS (PEO)

- PEO-I To operate and maintain industrial Instrumentation & Control system.
- PEO-II To design Industrial Instrumentation & Control system by innovative approach.
- PEO-III To inculcate professional and ethical attitude, effective communication skills, multidisciplinary approach and an ability to relate Engineering issues in social and environmental context.
- PEO-IV To acquire the ability for life-long learning needed for a successful Professional career.

## PROGRAM SPECIFIC OUTCOMES STATEMENTS (PSO)

- PSO1 Design and develop solutions for process control and automation industries and able to pursue career in research, industry, higher studies and adapt to changing technology.
- PSO2 Able to understand professional and ethical responsibility with effective communication skills and life-long learning.

# ABOUT THE FACULTY

## TEACHING STAFF DETAILS

### DR. S. A. RANKAWAT

Associate Professor (Head Of The Department)  
PHD Qualified  
25.5 Years of Teaching Experience



### DR. D. H SHAH

Associate Professor  
PHD Qualified  
21.5 Years of Teaching Experience



### PROF. A. D. RATHOD

Associate Professor  
ME (IC) Qualified  
20.5 Years of Teaching Experience



### PROF. M. B. HINGU

Assistant Professor  
M.Tech., SYSCON - IITB Qualified  
23.5 Years of Teaching &  
01 Year Industry Experience



### PROF. I. U. AJMERI

Assistant Professor  
ME (IC) Qualified  
22.5 Years of Teaching Experience



### PROF. K. C. DAVE

Assistant Professor  
M.Tech (E And Tc) Qualified  
11.5 Years of Teaching Experience



### PROF. K. K. ACHARYA

Assistant Professor  
ME (IC) Qualified  
20.5 Years of Teaching &  
02 Year Industry Experience





# ABOUT THE FACULTY

## TEACHING STAFF DETAILS

### DR. K. B. PATHAK

Assistant Professor  
PHD Qualified  
16.5 Years of Teaching Experience



### PROF. K. S. VASHISHTHA

Assistant Professor  
ME (IC) Qualified  
10.5 Years of Teaching Experience



### PROF. N. V. PATEL

Assistant Professor  
ME (IC) Qualified  
09.5 Years of Teaching &  
05 Year Industry Experience



### PROF. P. N. PATEL

Assistant Professor  
ME (IC) Qualified  
06.5 Years of Teaching Experience



### PROF. R. S. RANA

Assistant Professor  
M.Tech (IC) Qualified  
04.5 Years of Teaching Experience



### PROF. R. L. ZADFIYA

Assistant Professor  
M.Tech (IC) Qualified  
10.5 Years of Teaching Experience



### PROF. A. N. BOKADE

Assistant Professor  
ME (IC) Qualified  
15.5 Years of Teaching Experience



# ABOUT THE FACULTY

## NON - TEACHING STAFF DETAILS

## TEACHING STAFF DETAILS

### PROF. J. J. SHAH

Assistant Professor  
ME (IC) Qualified  
04.5 Years of Teaching Experience



### PROF. C. B. PANCHAL

Assistant Professor (Contractual)  
ME (IC) Qualified  
04.5 Years of Teaching &  
05 Years Industry Experience



### PROF. J. B. MAHETA

Lecturer  
BE (IC) Qualified  
07.5 Years of Teaching &  
05 Year Industry Experience



### PROF. R. B. GADHIYA

Lecturer  
ME (IC) Qualified  
11.5 Years of Teaching Experience



### MISS N. J. MAKWANA

Lab Assistant  
BE (IC) Qualified  
05.5 Years of Teaching Experience





**The Department has Spacious and Ventilated Classrooms and state of the Art Laboratories with Research Lab Facility, all that makes an excellent Infrastructure.**



**Process Control  
Laboratory - II**



**Embedded System  
Laboratory**



**Computer  
Centre 1 & 2**



**Analog Electronics  
Laboratory**



**Communication  
Laboratory**



**Measurement & Process  
Control Laboratory**

# 0 ABOUT THE PLACEMENT TRAINING & PLACEMENT CELL, IC DEPARTMENT 7

The Training and Placement cell continuously explores different areas of opportunities for placement. The Department's T&P team maintains liaison with industries for various training programs for students as per the need of industries as well as for final placement of students. Due to strong liaisoning with industries, our students are placed at many well-known companies.

Some of the major recruiters are:

- ✓ Adaptive Engineering Private Ltd., Ahmedabad, Gujarat
- ✓ Tatvasoft, Ahmedabad, Gujarat
- ✓ Eurotech Power Controls
- ✓ Vodafone India Ltd
- ✓ Axis Solutions Pvt. Ltd., Kathwada, Ahmedabad
- ✓ Gujarat Alkalies And Chemical Limited, Dahej, Bharuch
- ✓ Zydus Cadilla, Bharuch
- ✓ Multispan Control Instruments Pvt. Ltd., Ahmedabad
- ✓ Biolitec India Pvt. Ltd., Baroda
- ✓ Zydus Healthcare Ltd., Ahmedabad
- ✓ Cadila Healthcare Ltd
- ✓ Atul Ltd., Ahmedabad





## TRAINING, IC DEPARTMENT

### *All faculties of the Department*

Completed Online Certificate Course on "Intellectual Property Rights " conducted during 06-07-2020 To 14-09-2020 (11 Weeks), organized by iHub , SSIP CELL, GKS , DTE Gandhinagar.

Completed course on UDAYAM "E-Content Development Course " conducted during 28-07-2020 To 18-08-2020, jointly organised by Knowledge Consortium of Gujarat, Ahmedabad and HRDC, Gujarat University.

### *Prof. M. B. Hingu*

Participated in Online Webinar Series on " NBA-12 Days 2 Week" During July To August 2020, Conducted By NITTTR – Bhopal.

Participated in One Day Online Webinar on " On Line Instruction-2020", On 21st August 2020, Conducted by NITTTR – Bhopal.

Participated in One Day Online Webinar on " NEP 2020-Higher Education Perspective", On 17th September 2020, Conducted by NITTTR – Bhopal.

Participated in One Day Online Webinar on " NEP 2020-Autonomy For Frame Work ", On 15th October 2020, Conducted by NITTTR – Bhopal.

Participated in GUJCOST Sponsored Online STTP on "Research Methodology And Technical Writing", During 01st To 05th December 2020, Conducted By GEC Surat.

Participated in One Day Online Webinar On "New Education Policy- Autonomy 2020 ", On 10th December 2020, Conducted by NITTTR – Bhopal.

Participated in a research study on "Status of Use Of Rubrics In Technical Institutions Of India", conducted in the month of December 2020, By National Institute Of Technical Teachers' Training And Research, Bhopal.

***Prof. P. N. Patel***

Completed a Swayam MOOC on "Accreditation for Undergraduate Engineering Programmes" (8 Week) Through DTE Gandhinagar

Completed Online Certificate Program on "Nurturing Innovation and Start-up Ecosystem (NISE)" 12-09-2020 To 24-10-2020 (6 Week Plus) by i-Hub, SSIP CELL, GKS, DTE.

Attended a Faculty Development Program on "Facing 21st Century Education: Challenges, Skills, Innovations", from December 14 to 18, 2020 (1 Week) GEC, SEC-28, GUJCOST, DTE GANDHINAGAR.

**PUBLICATIONS, IC DEPARTMENT*****Prof. K. K. Acharya***

Has published a research paper on "Novel Approach to Diagnose Chronic Kidney Disease (CKD) with predicted Pathophysiological parameter using Neural Network and Fuzzy Logic", in International Research Journal on Engineering & Technology (IRJET), Volume 07, Issue 08, date: 08 August 2020.

## Online Webinar

Was conducted by ISA Students' Chapter, IC Department, GECGn, on "Industrial Process control and Automation", by Mr. V. M. Prajapati, Project manager, Servilink Systems Ltd, on 17th September 2020. Students of final and prefinal year took advantage of this webinar.



ISA Students' Chapter GEC  
Gandhinagar  
organizes a webinar in association with  
ISA Gujarat Section



**"INDUSTRIAL PROCESS CONTROL AUTOMATION"**



**About the speaker:**  
**Mr. V.M. Prajapati**  
Project Manager at Servilink Systems Ltd. for Rockwell Automation(PLC and DCS)  
Highly experienced person in Industrial Automation  
Green Belt in Six Sigma Program  
Lead auditor for ISO

**Patron:**  
Dr. Sweta P. Dave,  
Principal, GEC-Gandhinagar

**Convener:**  
Dr. Shalini A. Rankawat,  
Head & Faculty Advisor to ISA Students' Chapter, GEC-Gandhinagar

**Faculty Coordinators:**  
Prof. Ketan K. Acharya  
Prof. Jiten B. Mehta

<p><b>Devam Trivedi</b> President</p> <p><b>Jainam Shah</b> Vice President</p>	<p><b>Umang Joshi</b> Treasurer</p> <p><b>Jatin Patel</b> Program Head</p>
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 **September 17, Thursday**

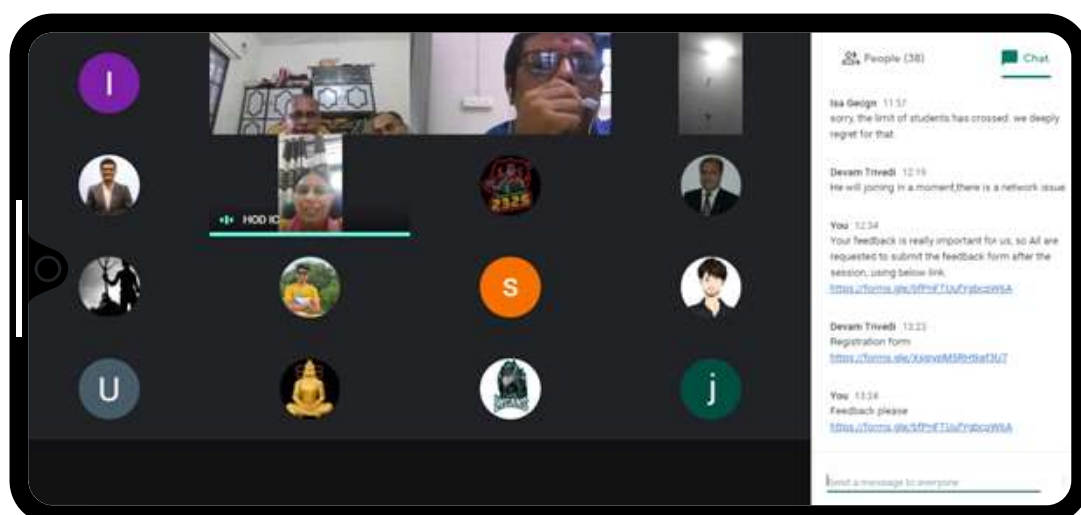
 **11:30 AM Onwards**

e-Certificates will be given to all Participants

**Join us on:**

 **Link:-**  
<https://meet.google.com/xeb-npq-cfo>

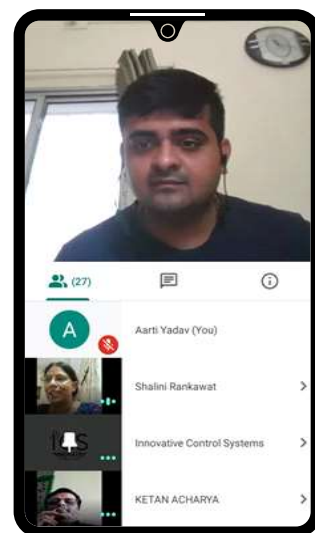






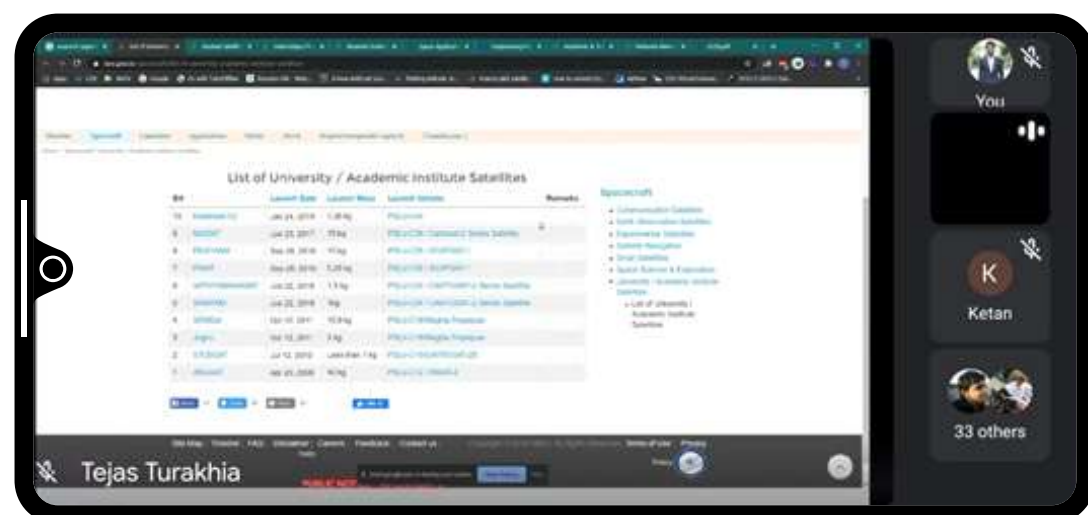
# Online Webinar

Was organised by IC Department on **"Revolutionary Changes in Industrial Automation POST COVID-19"**, by Mr. Narendra Chhatrawala, Innovative Control System, on 29th August 2020. Final and Pre final year students were benefited from this webinar.



# Online Webinar

Was conducted by the Department on **"Employment and Research Opportunities for Instrumentation Engineers in Remote sensing, Satellite communication and Space applications"**. The speaker was one of the Alumni of the department, Mr. Tejas Turakhia, Researcher, ISRO Ahmedabad. The webinar was held on 15th October 2020. Final and prefinal year students along with the faculties of the department had joined the same and discussed the opportunities for IC engineers in various fields.



# Alumni Meet

**The Institute's alumni are the reflection of its past, representation of its present and a link to its future.**

They are the ambassadors of the program and their good standing indicates long term success of the department. Their feedback helps to make necessary changes in teaching learning methodology to meet the challenging demands of the real world.

One of the main purposes of alumni associations is to support a network of former graduates who will, in turn, help to raise the profile of the department. Good alumni relationships bring many benefits to both the institution and the alumni. As graduates of the institution, alumni have a special connection with the institute and as a result are likely to be some of its more loyal supporters.

The Department of Instrumentation and Control Engineering had organized an Alumni meeting for all pass out batches on 11th October 2020 on the Google Meet Platform.

Expert talks on different topics were delivered by alumni experts. Many students from all pass out batches and faculties of the department participated in the event. Students and staff shared the memories, most of them volunteered to render services for the benefit of the current students of the department.

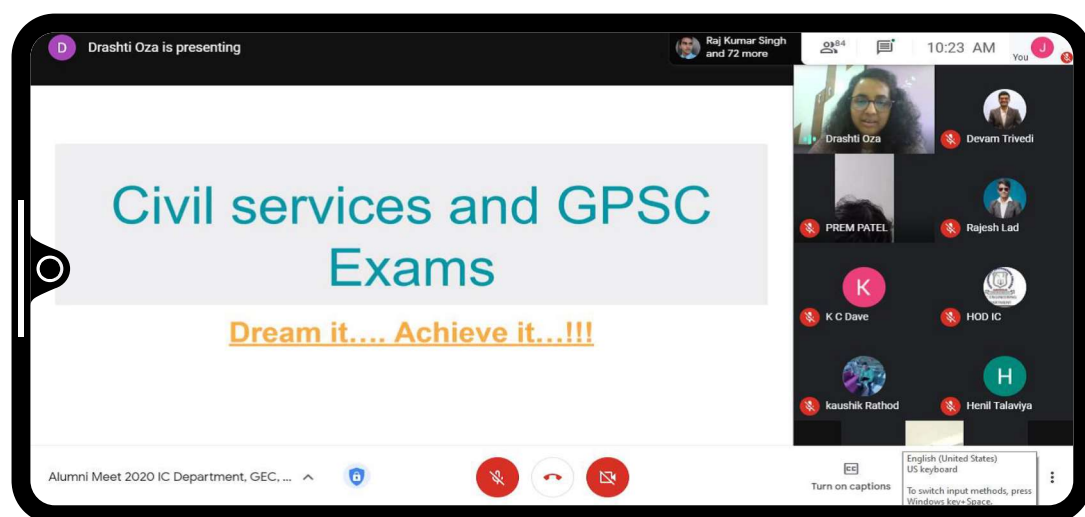
The event was stimulating and enjoyable and simultaneously profitable as all insights came up.

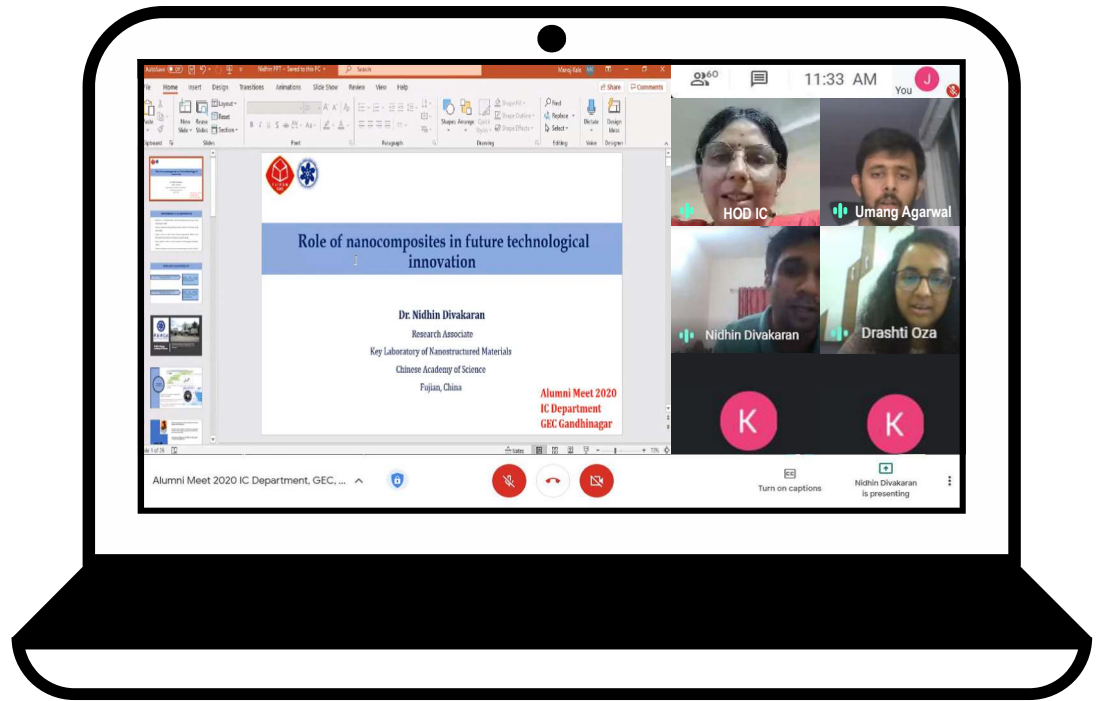
Some of the Alumni Experts/speakers conducted the session on different topics.

Mr. Umang Agrawal, who is currently at Ontario, Canada for higher studies, delivered a talk on opportunities of further studies in India and abroad.

Mr. Nidhin Divakaran, currently working as a Research Associate at Key Laboratory of Nanostructured Materials, Fujian Institute of Research, Fujian, delivered a talk on "Role of nanocomposites in future technological innovation".

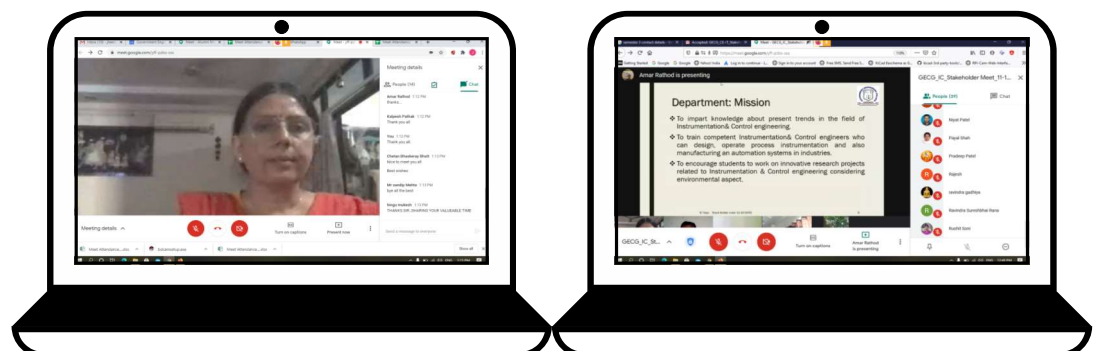
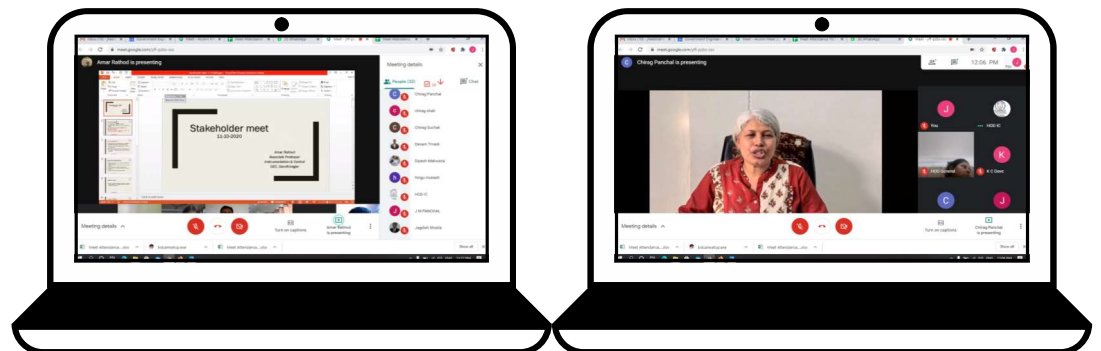
Ms. Drashti Oza, currently working as an Assistant District registrar, Class-2, Department of Agriculture and cooperation, Ahmedabad, guided students about the preparations required for Civil services and GPSC exams.





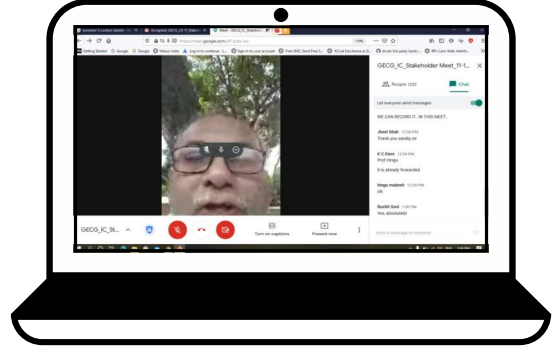
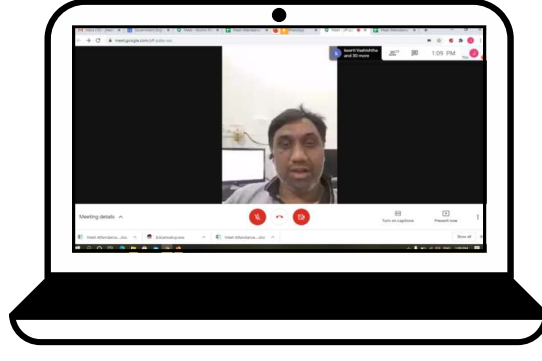
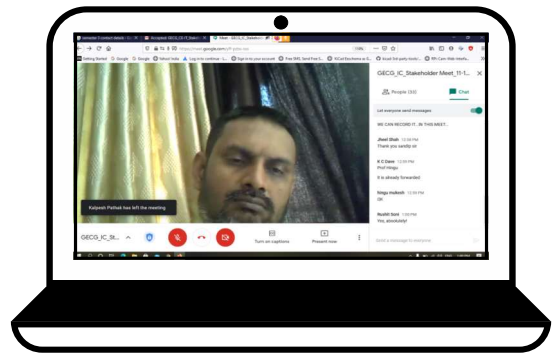
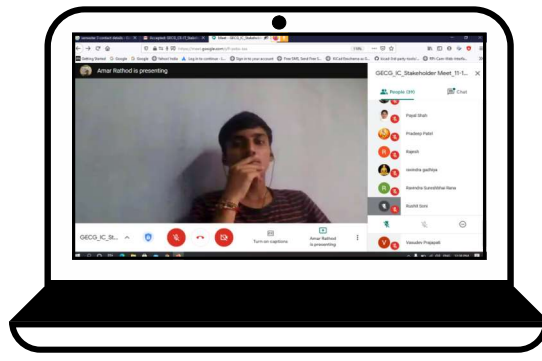
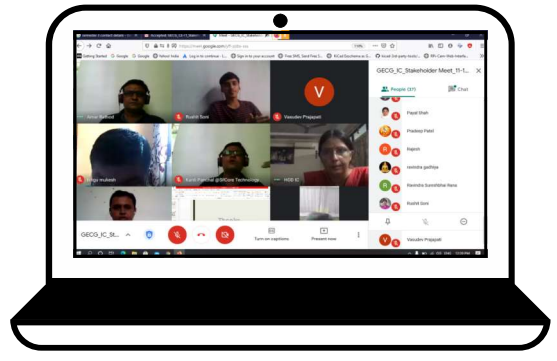
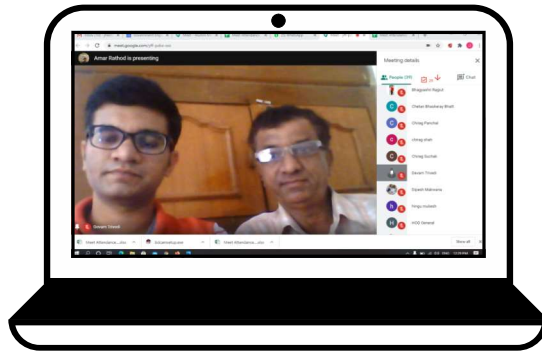
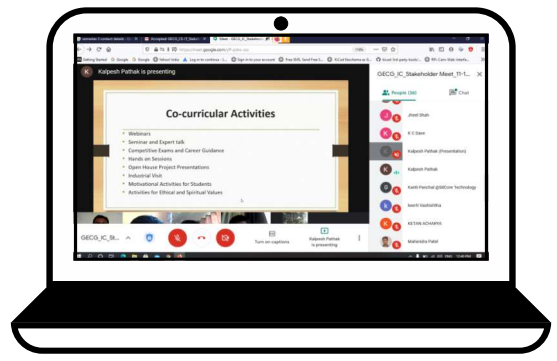
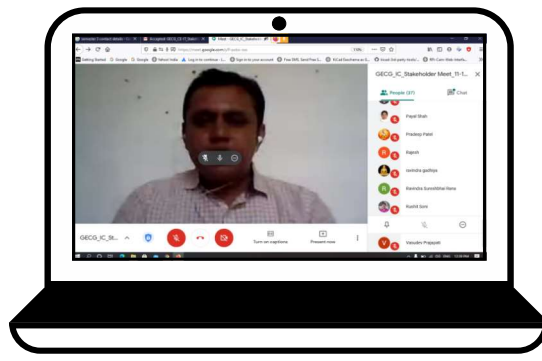
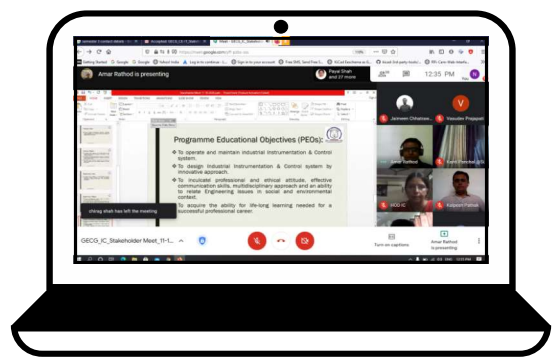
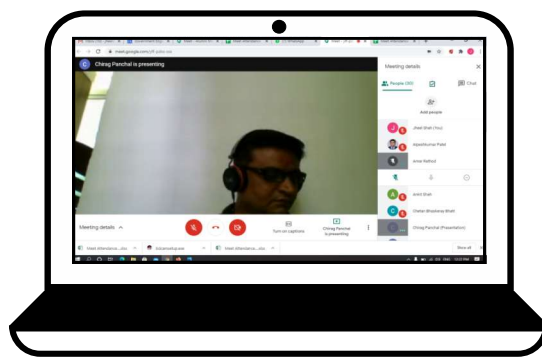
## Stakeholder Meet

A stakeholders Meet was held on 11th October, 2020 where the vision, mission and PEOs were disseminated to the stakeholders of the program. Many suggestions were given to improve the attainment of the same.





# 4 ABOUT DEPARTMENTAL ACTIVITIES



# Shaikh Mohammad Hasnain Gulamnabi

From 7th semester, has successfully summited Jagatsukh peak, a 16700ft tall mountain near Manali, Himachal Pradesh. Till 3rd October 2020, no organization or individual summited this Mountain from GUJARAT. Their team is the first one from Gujarat who reached the top. This Expedition was organized by Invincible NGO.

રાજ્યના ૨૨ યંગસ્ટરે શિખર પર ધ્વજ ફરકાવ્યો  
બાલાસિનોર રહેતા બે યુવાનોએ  
૧૬,૭૦૦ ફૂટ ઊંચું શિખર સર કર્યું

હિમાચલ પ્રદેશનું જગતસુખ શિખર સર કરવા રાજ્યની ટીમ ગઈ હતી

બાલાસિનોર : ૦૨ યુવાનો સહિત રાજ્યના ૨૨ યુવાનોની ટીમ હિમાચલ પ્રદેશમાં આવેલા જગતસુખ શિખર ચઢીને એક નવી ઉંચાઈ સર કરી છે. જેમાં બાલાસિનોરના બે યુવાનો દ્વારા ૧૬,૭૦૦ ફૂટની ઉંચાઈએ ચઢીને ભારત દેશનો સપ્ટેમ્બર હોરરાવ્યો હતો જેને લઈને બાલાસિનોર નગર સહિત મહિસાગર જિલ્લામાં ગૌરવ બેવાની સાથે યુવાનોને શિખ મળે તેવી ઉંચાઈ સર કરી છે.

આ અંગે મળતી માહિતી અનુસાર બાલાસિનોર નગરમાં તમામ દરવાજા પાસે રહેલા ચેખ હાસને ન ગુલામનબી એન્જનીયરિંગ અભ્યાસ કરી રહ્યા છે અને નગરના રાજપુતી દરવાજા પાસે રહેતા શેખ અબરાર



જગતસુખ શિખર સર કરી તીરંગો લહેરાવતા રજ્જુના યુવાનો.

તારીખભાઈ જેવો બી.એસ.સીમાં અભ્યાસ કરવાની સાથે કન્ટ્રી નવું કરવાનો ઉત્સાહ રાખતા હતા. આ બંને મિત્રો અમદાવાદ ખાતે આવેલી એક એન્જિનિયરિંગ માટે ગુજરાતમાંથી ૩૭ યુવાનોની ટીમને લઈને ૩ મહિના અગાઉ હીમાચલ પ્રદેશમાં આવેલા જગતસુખ શિખર ચઢવાની ફ્રેન્ડિંગ આપ્યા બાદ પાંચ દિવસ સુધી સતત ત્યાજ કર્યા બાદ

૧૬,૭૦૦ ફૂટ જગતસુખ શિખરની ટોચે આ ટીમ પહોંચી ગઈ હતી.

જ્યાં બાલાસિનોરના બે યુવાનો સહિત ૨૨ યુવાનો જગતસુખ શિખરને સર કરીને આવેલી ઓળખ ઉભી કરી છે. જેને લઈને બાલાસિનોર ખુસ્તીમાં સમાજ, નગર અને મહિસાગર જિલ્લાના યુવાનો માટે આ બે યુવાનો પેરણાડુખ બન્યા છે.

IV  
SANDESH



બાલાસિનોરના બે યુવાને સહિત રાજ્યના ૨૨ યુવાનોની ટીમ હિમાચલ પ્રદેશમાં આવેલા જગતસુખ શિખર ચઢીને એક નવી ઉંચાઈ સર કરી છે જેમાં બાલાસિનોરના બે યુવાનો દ્વારા ૧૬,૭૦૦ ફૂટની ઉંચાઈએ ચઢીને ભારત દેશનો સપ્ટેમ્બર હોરરાવ્યો હતો જેને લઈને બાલાસિનોર નગર સહિત મહિસાગર જિલ્લામાં ગૌરવ બેવાની સાથે યુવાનોને શિખ મળે તેવી ઉંચાઈ સર કરી છે.

આ અંગે મળતી માહિતી અનુસાર બાલાસિનોર નગરમાં તમામ દરવાજા પાસે રહેલા ચેખ હાસને ન ગુલામનબી એન્જનીયરિંગ અભ્યાસ કરી રહ્યા છે અને નગરના રાજપુતી દરવાજા પાસે રહેતા શેખ અબરાર

ખેડા-આણંદ  
AHMEDABAD

THURSDAY, 8•10•2020

મા તુજે સલામ : ૧૬,૭૦૦ ફૂટ ઊંચું ‘જગતસુખ’ શિખર સર કરી તિરંગો લહેરાવ્યો



બાલાસિનોર : ૦૨ યુવાનો સહિત રાજ્યના ૨૨ યુવાનોની ટીમ હિમાચલ પ્રદેશમાં આવેલા જગતસુખ શિખર ચઢીને એક નવી ઉંચાઈ સર કરી છે જેમાં બાલાસિનોરના બે યુવાનો દ્વારા ૧૬,૭૦૦ ફૂટની ઉંચાઈએ ચઢીને ભારત દેશનો સપ્ટેમ્બર હોરરાવ્યો હતો જેને લઈને બાલાસિનોર નગર સહિત મહિસાગર જિલ્લામાં ગૌરવ બેવાની સાથે યુવાનોને શિખ મળે તેવી ઉંચાઈ સર કરી છે.

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# Jainam Shah

From 7th semester has Volunteered at Invincible NGO. Invincible NGO is India's largest Trekking organization, based in Ahmedabad.



## Darji Sagarkumar Rajendrakumar

Has completed a national level E-quiz on NCC and INDIAN ARMED FORCES by the NCC AIR WING of St. Aloysius College, Mangaluru with 100% result.

## Jyotik Simaria

Currently in 6th Sem is part of GTU ROBOTICS CLUB(GRC) which secured 1st runners-up in National Robocon 2020 and became Team India this year and represented GTU at international Level of ABU ROBOCON 2020. Also GRC team achieved Sponsor's Special Award by Toyota Motors for best design of Robots.



## Chauhan Chetansinh

From 5th semester supported Divya Bhaskar for their attempt of "Ek Salam Desh Ke Naam".

Improving your skill set is an important task for everyone related to technical fields. Here are some students who learnt even during this pandemic :-

☯ **Rajesh Lad** from 3rd semester completed 15 days Arduino master class at Pantech Prolabs India Pvt Ltd.

☯ **Urvish Kiritkumar Bhavsar** from 3rd semester has completed introduction to programming with MATLAB by Vanderbilt university through Coursera and completed a campus ambassador internship at Internmind.

☯ **Hemil Shah** from 5th semester has completed 10 days webinar series on Matlab Master Class 2020, organised by IETE Mumbai and Pantech Prolabs India Pvt Ltd.



## THE STORY OF MY RESEARCH

Inspired by a quote of Swami Vivekananda "Take up one idea. Make that one idea your life — think of it, dream of it, live on that idea. Let the brain, muscles, nerves, every part of your body, be full of that idea, and just leave every other idea alone. This is the way to success." Subconsciously I started journey of my research. After some efforts I consciously realized that progress takes place outside the comfort zone!! Motivation for my research in the domain of advanced control strategies was past work done on applying model predictive control for surfactant flooding enhanced oil recovery during my PG at PDPU.

GATE score of 98.98 percentile helped me getting admission in PhD without any entrance test. Wholehearted support of all members of the department, positive concern by HOD and Principal, eased my work of getting CTE permission also. During initial phase of PhD at NIRMA University, under the guidance of Dr. Dipak Adhyaru, I started exploring domains of robust and adaptive control. I found that Model Reference Adaptive Control (MRAC) has been suggested as an effective strategy to deal with such plant parameter and reference value conditions and partially explored by researchers. Considering present technological trend and scope of work, we used effective features of soft computing technique based adaptation mechanism for MRAC. Fuzzy Subtractive Clustering (FSC) based adaptation for MRAC was presented and analyzed for the first time.

Journey was like joyful and curious child playing in a park taking experiences of roller coaster (many versions before publications), Swing (repeated simulations to get best results), Maze (lost in the topic trying to reach up to conclusion), puzzles (dealing in two frontiers: Mathematical proof of stability and hardware realization), sliding (enjoyable spree after acceptance of publication) and much more. To stay motivated during rejections, I used to think famous quote of Muhammad Ali "I hated every minute of training, but I said, don't quit. suffer now and live the rest of your life as a champion."

Certainly, duration of last part after pre-synopsis seminar was bit long, like Sachin's 100th century after 99th. Finally achieved it. I think it was journey towards fulfilment!!

~ Dr. Kalpesh B. Pathak

It's 23rd of April and the Raj Bhavan in Delhi is once again decorated for new protocolled ceremony i.e., the swearing in ceremony of the 48th Chief Justice of India CJI N.V RAMANA and also the bidding adieu to the 47th CJI S.A BOBDE. Continuing the legacies and responsibilities the very 1st CJI HARILAL JEKUSANDAS KANIA. He was not only the 47th CJI but also one the most Popular CJI. He has resolved many Land mark Judgements under his Coat.

#### ✧ HERE'S A BRIEF BIOGRAPHY OF CJI S.A BOBDE.

He was born in Nagpur in the house of sir Arvind Bobde, who has served our country as advocate general to the state of Maharashtra. He has served 28 years as an Advocate to the Bar Council of Maharashtra. Then served as Judge to The Bombay High court to Chief justice of High Court of state of Madhya Pradesh. Then he was elevated to the post of Judge of the Honourable supreme court in 2013 further being appointed as a 47th Chief Justice of India, by President of India.

#### ✧ LET US SEE SOME OF THE IMPORTANT JUDGEMENTS WHERE HE BENCHED AND AUTHORED THE JUDGEMENTS.

- ❶ Starting with the famous AYODHYA TITLE DISPUTE between M Siddique and Mahant Suresh Das.
  - ⤴ The dispute was for 2.77 acre of land where Babri Masjid was built in 16th century. It was claimed to be birth place of lord RAM. The case begun in 1950. In 2010 the Allahabad high court ruled that out of the Cased on 2.77acre of land giving its order to divide the land into 3 parts and be given to all 3 parties that is 1) Sunni Waqf Board, 2) Nirmohi Akhada & 3) Hindu Mahasabha.
  - ⤴ But all the 3 parties were not satisfied with it the court eventually went to the Supreme Court.
  - ⤴ A 5-judge bench was constituted for it's hearing. The Judges where,
    - Former and 46th CJI Ranjan Gogoi.
    - 47TH CJI S.A BOBDE.
    - JUSTICE ASHOK BHUSHAN.
    - JUSTICE S ABDUL NAZEER.
    - JUSTICE D.Y CHANDRACHUD
  - ⤴ Initially the court gave each party a time of 8 weeks for the mediation which was of no result.
  - ⤴ Finally on the 9TH November,2019 the Honourable Supreme court gave its verdict on it. It was 1045-page long judgement which stated that, 2.77 acre of land was given to shree Ram janmbhoomi and an alternate 5 acre of land was given to Sunni waqf board also the trust was made for the temple.
- ❷ Just after 4 Months of becoming The 47th CJI of India the nation was put under lockdown Due to the spread of COVID-19 resulting to change of all physical Hearings into Virtual Hearing.
  - ⤴ Here also, CJI S.A BOBDE was quite instrumental in encouragement of the Virtuality of the Supreme Court. An e-court was encouraged by the CJI and launched the 3 portals shown below,
    - Supreme court portal for Assistance in Court Efficiency (SUPACE).
    - Track legal docs, data mining, evidence collection .

- SCI-INTERACT.
  - To make court paperless.
- Supreme Court Vidhik Anuvaad Software (SUVAS).
  - For the translation of the judgement from English to 9 vernacular language.
- ③ RIGHT TO PRIVACY AND ADHAAR JUDGEMENT.
  - ⤴ It is the second longest case in the history of the Supreme Court after the Kesavnandabharti vs State of Kerala case.
  - ⤴ The scenario was; in 2012 Government begin to Roll-out Mass participation for the Aadhaar cards and they became basics for Government schemes. However, it was challenged in the HON. Supreme court for the Violation of privacy, even claiming that the government will track the citizen through them. In 2016 The GOI made Aadhaar Mandatory for all citizens.
  - ⤴ In 2017 a 9 Judge Bench of the Hon Supreme Court Comprises of
    - THEN CJI KHEHAR
    - JUSTICE NAZEER
    - JUSTICE BOBDE
    - JUSTICE SAPRE
    - JUSTICE CHANDRACHUD
    - JUSTICE AGARWAL
    - JUSTICE KAUL
    - JUSTICE NARIMAN
    - JUSTICE CHELAMESHWAR
  - ⤴ THE court Unanimously stated that Indians Have Fundamental Right to Privacy Under Article 21. Finally, in 2018 The ADHAAR act was held and was Constitutionally Given Green Signal.
- ④ The Freedom of Speech and Contempt of Court.
  - ⤴ A senior advocate of the supreme court of India, tweeted about the failures of supreme court, then in another tweet which was done on 29th June 2020 he criticised the CJI for riding a superbike without helmet and mask. After that the contempt was filed against him by the court.
  - ⤴ Then he regreted for the second tweet but justified the 1st tweet in the namesake of the freedom of the speech. Then the senior advocate was found to be guilty for contempt and was fined 1 rupee by the apex court.
- ⑤ THE FARM LAWS.
  - ⤴ In 2020 the government passed 3 new farm laws according to which
    - The farmer can sell there produce outside the state mandi.
    - The farmer where even given permission to do contractual farming.
  - ⤴ But this law was heavily criticised by the farmer resulting into one of the largest protest in our country.
  - ⤴ The apex court constituted of 3-judge bench took up this matter under CJI bobde.
  - ⤴ On 12th Of January, 2021 the apex court put a stay on this law and made 4-member committee for reviewing this law.
  - ⤴ Along with this judgement the CJI SA BOBDE held a record having authoring just 68 cases which less than his predecessors and fellow colleagues

THIS WAS ALL JUST A GLIMPSE ABOUT THE 47TH CJI BOBDE.

~ Jigar Suratsang Mahedu  
B.E.(4th Sem.)



