REFLEXIA

2020 - 2022

REFLECTION OF MEMORIES

Jawaharlal Nehru Government Engineering College, Sundernagar

Vision

"To be a premier institution imparting value based education enabling innovation in frontier areas of technology that propels development of society at national and global arena."

INSTIGATION

Imagination encircles the world. We are all creative enough to put our imagination into words, but the worst enemy of creativity is self-doubt. Sometimes it is the fear of coming out and expressing ourselves openly, sometimes it is the dearth of opportunities and sometimes we just let our talents remain undiscovered. We all have the potential, we all have that spark, just the proper ignition is awaited. College is probably the best place where one can come up with innovative ideas, develop skills and build social as well as creative aptitude.

We are glad to announce that a fresh edition of JNGEC's annual magazine is out, where we have tried to explore and give a platform to every budding talent of this institution. This edition has the perfect blend of art, technology and literature to enlighten the readers. There are alumni success stories and tips to boost your morale and highlights of all the events that have unfolded in the past year to pump you up with enthusiasm.

Accomplishing the task of bringing a fresh edition with such vast content would have been impossible without our students. We have tried our best to include all the received entries. However, some restrictions limit us from including all the entries and we are deeply apologetic to those whose entries could not be included.

We are grateful to the teaching faculty and the alumni for their constant support and guidance. We would also like to thank the students from the core of our hearts for amazing us with their overwhelming response.

Reflexia-2022 is finally here. Are you ready to get charmed?

DIRECTOR'S MESSAGE

Dr. S.P. Guleria

I am pleased, delighted and happy to release the institutional annual magazine "Reflexia-2022" edition, which has been long awaited due to the closure of the institution as a result of the COVID-19 pandemic.

I hope that now is the time to chart a new course and provide a supportive learning environment for students, as well as institutional extracurricular activities.The release of this annual magazine "Reflexia-2022" is one of the initiatives in this direction.

Reflexia magazine, I feel, will mirror the creative and innovative ideas of both the faculty and the students. At the same time, I am confident that all the faculty members and student community involved with the magazine must have put in their best efforts so as to make the magazine more entertaining and for igniting the mind of budding engineers.

I congratulate, Er. Nitasha Bisht, Editor, faculty committee members and student editors on having successfully brought out the magazine in a very useful way.

Jai Hind! Jai Bharat!

Dr. S.P. Guleria

FACULTY COORDINATOR'S MESSAGE

ECE DEPARTMENT

Dear readers,

With pleasure, I would like to present you with the sixth edition of the college magazine, Reflexia 2022. College magazine provides a platform for students to sharpen their soft skills and strengthen the academic activities of the campus. This magazine contains useful articles related to the latest changes in the technical field, students' academic achievements, important events/activities that have taken place on the JNGEC campus, and other articles projecting the extracurricular activities. The wide spectrum of articles in different sectors give a sense of pride that our students and staff possess the creative potential and original thinking in ample measures.

I would like to express my humble gratitude to the Director/Principal of JNGEC Sundernagar, who has always been there to encourage the students and put in his best efforts to make REFLEXIA 2022 a reality, and to the HODs and faculty members.

I congratulate all the students who contributed to this year's Reflexia by catering their content.

Er. Nitasha Bisht

Assistant Professor

FACULTY COORDINATOR'S MESSAGE

CIVIL DEPARTMENT

The ability to express oneself through creative writing, art, poetry, and other forms of expression is what distinguishes humans from other living beings. We all must have a souvenir of collective expressions of a variety of students and a variety of experiences of indelible college life. "Reflexia" is a platform for all of us to exhibit the remarkable journey and incredible experiences from college life. This is a forum to showcase your hidden talents and leave a long lasting impression. It provides a medium to summarise the academic and extra-curricular achievements that our Institute has to its credit.

Team Reflexia presents to you all with the 2022 edition which will be more special as this time, we have endeavoured to abridge two years' worth of experiences into one edition. As you will scroll through the pages of the magazine, you will see a rainbow of thoughts, inspirations, talents, aspirations and hopes, expressed beautifully in various ways by the contributors. You will be able to identify the growth of our Institute through various activities, events and accomplishments, contributed by students, faculty and staff of different departments/ sections.

Reflexia magazine is a gift which you can open time and again and relive your college life repeatedly.

This magazine is an outcome of support and efforts of our worthy Director/Principal; chairman and members of magazine committee and hard work and dedication of all the student members (current and preceding) who have worked endlessly to bring to the fore, the college experiences of two years in such an efficient way.

I am honoured to be a member of this team, and am grateful to all of the team members as well as the magazine's contributors.

Er. Sulakhi

Assistant Professor

FACULTY COORDINATOR'S MESSAGE

TEXTILE DEPARTMENT

"Reflexia" is not only a magazine, it is a testimony of presence of such creative minds and hearts, who have put their souls in preserving the beautiful memories as well as achievements of the Institution.

When few years down the line, all the students of this batch will be in different parts of the world, chasing or living their ambitions, this magazine will serve as the collection of anecdotes which will time travel them to the days spent in this premise.

This is the 6th edition of the annual magazine and an evidence of how our institution has evolved in these years. The evolution in terms of infrastructure, community and academics.

It is very important at this point to thank each and everyone who has contributed in making this magazine. First and foremost, the guiding light worthy Director-cum-Principal, Prof. S.P. Guleria, whose constant motivation has made this edition possible, the faculty and students for their unfathomable efforts.

I wish for all the readers a delightful experience and good luck to all the students for their future endeavors.

Er. Ankush Sharma

Assistant Professor

FACULTY COORDINATOR'S MESSAGE

MECHANICAL DEPARTMENT

Dear Students,
Greetings,

I am immensely pleased to know that Jawahar Lal Nehru Government Engineering College, Sundernagar is bringing out its annual institutional magazine, "Reflexia", for the years 2021-22. Life is all about learning. Learning is not a process limited to classrooms only; it is indeed a lifelong process. The purpose of material knowledge is to give you the means to earn the recourses for living, but the true meaning of education is fulfilled when it turns you inward and makes you a human of higher values. College is our first introduction to the outside world; it is a time of joy, healthy competition, fear, adjustment, and sharing love. It is not merely the classrooms, wide open spaces, library laboratories or the large fields that make up the institution, but the efforts of students and staff towards nation-building that make the true sense of it. Engineering is all about solving of problems with strong, innovative ideas and scientific knowledge. Your commitment to becoming an engineer by dedicating four years of your academic journey to JNGEC will be fruitful and enjoyable in every aspect. The experience you gain from here and the moments you spend here will be cherished by you throughout your life. Bring the best out of you and achieve the highest outer world, over and beyond the possibilities of your inner-self. I extend my good wishes for the successful publication of the magazine.

Er. Rohit Bhardwaj

Assistant Professor

EDITOR'S NOTE

Aarti
CE 4th Year

We are all mapping our worlds into millions of blueprints as we speak, and even though our destinations are different, we are still the same lines on a graph, all overlapping at the same time but only up to certain coordinates. And all that remains are our memories of college life. This magazine is living proof that we all have existed as one entity with our insatiable desire to make memories. It is a way to honour people we have loved and lost in the pandemic, goals we have conquered, and stories we have shared.

With immense gratitude and pride, we present to you the sixth edition of Reflexia, which accounts for the hard work and dedication of the team, voices of students in the form of poems and articles, glimpses of events and achievements, and the years we lost to the pandemic.

Aakanksha
CE 4th Year

Being able to release another edition of Reflexia after an agonizingly long period of time is an achievement in itself. We are immensely thankful for the faith and support of our director, Dr. SP Guleria, and editorial coordinators, Nitasha ma'am and Surabhi ma'am.

Someone once said, "Giving people stories is not a luxury. It's one thing we all live and die for. " We hope this edition of Reflexia inspires you to keep going, creating and sharing more stories to give to the world.

DESIGNER'S NOTE

As Seamus Heaney once said, " if you have the words, there's always a chance that you'll find the way."

Often times it is believed that an artistic stream helps another exponentially when comingled. An actor enhances the words of a writer if performed well. Poetry itself is an effective writing style but when mixed with theatrics , the effect is trebled. Similarly, I hope that our illustrations help in giving the desired effect.

The mind is not a vessel to be filled but a fire to be kindled and this magazine is a true example of these words. It has helped in rekindling the voice of our students.

We, at Reflexia are just trying to showcase the talents of our students through a platform which they deserve and I hope that this magazine creates an impact in the mind of the readers.

Artika Bansal
ME 4th Year

We have already lost years to COVID-19 and we are in dire needs of joy and I'm confident that the work of the students published in this magazine will evoke a sense of joy in the readers.

After all, " what is a work of art, if not to evoke."

CONTENTS

HOD'S MESSAGE

Department of Applied Science & Humanities

I am happy to know that college is publishing magazine for academic year 2021-22. College magazines have a great educative value. They encourage students to think and write. In fact, young talent finds its first exposure through this medium. The magazines also record the achievements and various activities of the institution. I hope that this publication would be successful in achieving these objectives. My best wishes for entire endeavor.

Dr. Champa

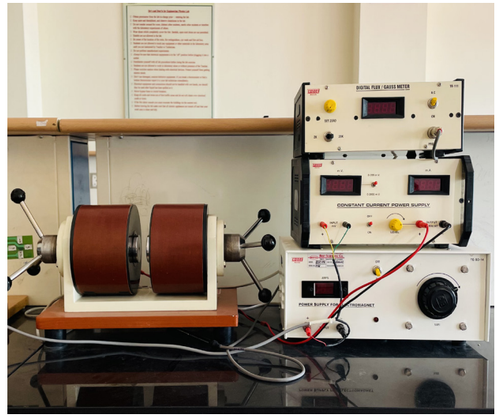
Associate professor

ABOUT
THE DEPARTMENT

The Department of Applied Sciences and Humanities is established to strengthen the basic and practical requirements of an engineer in the field of natural sciences, society and communication as well as to produce good human beings. The engineers produced from this college should not only be perfect in the concepts of engineering but they must possess managerial skills, which are most required nowadays. Moreover, basic Sciences are the backbone of Engineering field and whatever an engineer does is based upon the basic principles in the field of natural sciences. The department has well equipped labs for imparting practical knowledge to the students in the field of Applied Sciences. The Department of Applied Sciences & Humanities assists in establishing a base for an engineer to flourish.

LABORATORIES

Engineering Chemistry Laboratory



Engineering Physics Laboratory

DEPARTMENT OF APPLIED SCIENCES & HUMANITIES

Workshop

Computer Programming Laboratory

HOD'S MESSAGE

CIVIL DEPARTMENT

I am quite pleased to learn about the forthcoming issue of the college magazine, 'Reflexia 2022' after the vulnerable phase for the education system due to the pandemic COVID-19.The teaching learning process has drastically changed in the last two years. With the use of technology, the teaching fraternity has learned a lot of new techniques to deliver and share the knowledge to the students. However, we are still struggling with the technology in digital learning and sharing.This magazine also gives us an opportunity to share an insight into the reflection of imagination and creativity of our students and faculty members visually. Such efforts provide the faculty and students a chance to showcase their talents in technical writing, essay, poetry writings, sketching and drawings etc. Such value additions are very much essential for the young technocrats and engineers who the college produces, to demonstrate their ideas for a developed India. I do appreciate and applaud the editorial team for their successful completion of this tedious yet daunting task in a meaningful and delightful visual fest called 'Reflexia'.I congratulate the editorial team.

Dr. Madhu
Assistant Professor

ABOUT

THE DEPARTMENT

The department was established in the year of 2010 with undergraduate programme i.e. B.Tech in Civil Engineering under the DEPARTMENT OF TECHNICAL EDUCATION VOCATIONAL AND INDUSTRIAL TRAINING , HIMACHAL PRADESH. The department vision is "To become a center of excellence, providing quality education & research for civil engineers with ethical standings for socio-economic and sustainable development of the nation." The department has well qualified and dedicated faculty. Also, department has established all the Civil Engg. Laboratories those are well equipped with advanced machinery. The objective of the department is to prepare Civil Engineering students for a successful career in Industry, Research and Academics with professional ethics to meet the needs of growing technology. For the overall development of the students, department of Civil engineering is associated with memberships of professional bodies such as Institution of Engineers (India), ISTE etc. We have also formulated a Civil Engineering Society i.e. CES. Various activities under these chapters and society help to improve the knowledge, professional ethics and interaction within the students as well as with the Industry persons. Our graduates are working in Government Sector as Assistant Engineer, Junior Engineer in PWD, IPH, also in Multinational Companies, Defense Services, and Academic Institutions in India and abroad. Last but not least our Technical supporting staff is unique in its own way.

AASTHA SHARMA
MS, Delft University Netherlands
2015–19

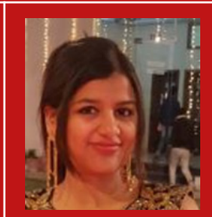
Aditi Sharma
M.Tech, IIT Kanpur
2015–19

AKSHAY KUMAR
Assistant Engineer, HPPCL
2015–19

ANKUSH KUMAR
Assistant Engineer, HPPCL
2015–19

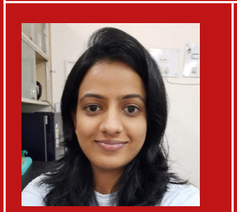
ARUN KUMAR
M.Tech IIT Mandi,PhD IIT Delhi
2015–19

ARBING CHOUDHARY
Assistant Engineer, HPPCL
2013–17



ARUSHI GUPTA
Asst. Engineer, HPPWD
2011–15

ASHISH DEV
Asst. Engineer, I & PH
2013–17



CHANDNI THAKUR
M.Tech IIT Mandi, pursuing PhD IIT Roorkee
2013–17

DHANJAY KAUSHAL
Assistant Engineer, HPPCL
2013–17

HARISH THAKUR
M.Tech & Pursuing Ph.D. IISC Bangalore
2013–17

LAKSHAY AGGARWAL
Regional Technical Manager, ICICI Bank
2012–16

NAVDEEP SINGH
Asst. Engineer, HPPWD
2011–15

SANKALP GAUTAM
SDM, HPAS
2010–14

SHUBHAM SHARMA
Ph.D., Queensland University, Australia
2013–17

VINAYAK KAUSHAL
Assistant Professor of Instruction, University of Texas, Arlington, USA
2011–15

SHINING ALUMNI

LABORATORIES

Surveying Laboratory

Concrete Laboratory

DEPARTMENT OF CIVIL ENGINEERING

Highway Engg. Laboratory

Geotechnical engg. Laboratory

Construction Knowledge Centre (ACC Ltd.)a

Software Laboratory

Rock Mechanics Laboratory

Environmental Engg. Laboratory

EXPERT LECTURES

01

Webinar on National Education Policy (NEP 2020)- Effective Governance and Leadership for Higher Education

Prof. Shyam L. Kaushal, Professor, HPUBS Shimla

02

Webinar on National Education Policy (NEP 2020)

Prof. SP Bansal, VC, HPTU and Prof. Kulbhushan Chandel, Dean Academics, HPTU

03

Webinar on Rohtang Tunnel Project

Rajesh Arora, Project manager Rohtang Tunnel/ Banihal Quazigund Tunnel

04

Webinar on A guidance program on career opportunities from B.Tech

Anand Kumar,Sr. faculty member, ACE Engineering academy

05

Webinar on Bye laws and regulations in building planning

Er. Pradeep Thakur, Town Planner

06

Webinar on Use of trenchless technologies for underground pipeline renewal

Dr. Vinayak Kaushal, Asst. Prof., University of Texas

07

Knowledge sharing session on 4D Project management using Bentley Synchro4D software

Mr. Gaurav Kumar Chalwa, CEO, GKC Consultants OPC Pvt. Ltd.

08

Webinar on Bentley's STUDENT SERVER

Mr. Rominder Singh Bedi, Business Manager Innovative Systel and Mr.Lalit Negi, Implementation Engineer, Bentley Systems

STUDENT PARTICIPATION

EVENTS OUTSIDE COLLEGE

Technical Exhibition at Techfest (Techshila) held at RGGEC Nagrota Bagwan

Training Programme on Disaster Resilient Building Construction Practices held at CBRI Roorkee

SRIJAN 2020: Civil Engineering Fest held by Nirmaan Club at IIT Mandi

Atal Tunnel visit 25-26 nov 2021

Knowledge sharing session on 4D Project management using Bentley Synchro4D software by GKC Consultants

CONTRIBUTION TO SOCIETY

Training of Masons, Carpenters and Bar Binders on Hazard Risk Resistant Construction arranged by DDMA Bilaspur and provided by faculty of Dept. of Civil Engineering, JNGEC Sundernagar.

Training Demonstration Unit (TDU) under National Seismic Risk Mitigation Project is being established under Dept. of Technical Education with active involvement of Dept. of Civil Engineering for its establishment and functioning.

Road Alignment Exercise for Forest rangers held at JNGEC Sundernagar by faculty of Dept. of Civil Engineering, JNGEC Sundernagar

Swacchta Abhiyan

Tree Plantation Drive

CIVIL ENGINEERING SOCIETY
ESTD. 2019

CES was started under the guidance of faculty; in which around 120 students of Civil engineering from 1st to 4th year are registered. The society was inaugurated by worthy Director/Principal JNGEC Sundernagar in October 2019.The main objective of civil society is to enhance technical skills through some technical and co-curricular events.

Logo making Competition by CES

Inauguration of CES, October 2019

EVENTS CONDUCTED

- Diwali celebration; distribution of stationery to children of workers by Parivartan team
- Logo competition
- Essay writing competition

Diwali Celebration by CES with faculty and children of workers

HOD'S MESSAGE

ECE DEPARTMENT

It gives me immense pleasure and satisfaction to make ECE department the epitome of technical education that blends modernity with tradition and culture, where science and technology merge harmoniously with performance, progression and innovation. The Electronics & Communication Engineering department has been dedicated to its mission to cultivate scholars who will contribute to the society by developing newer forms of knowledge and disseminate it across the globe. The department is known for excellence in teaching and research and for its service to the community. To ensure that every ECE scholar becomes a success story, the department works day and night to achieve it. Our Alumni are reaching heights in the professional world due to their holistic development at the campus. The rise is not only due to academics but also because of the ethos and values imbibed in them. I am happy to mention that the ECE department is the preferred choice of students and a sought-after destination for the youthful minds where young researchers and staff members are bringing the best of innovative work to solve social/ community problems. "Reflexia 2022" is an endeavor to reflect the richness of campus life at JNGEC. It is also an excellent platform to showcase the innovative and creative potential of our students along with faculty and staff. My best wishes to the team.

Dr. Himanshu Monga
Professor

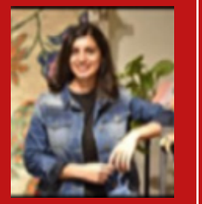
ABOUT

THE DEPARTMENT

The Department of Electronics and Communication Engineering was established in the year 2010 in JNGEC. It offers a four year Bachelor of Technology course in the field of Electronics and Communication Engineering. Electronics is the field with the potential to bring up a revolution.Electronics industry is ever increasing. Almost all the appliances we use, like our computers, mobile phones, and even cars work through its applications. In addition to this, wireless communication and satellite technology also feats on its applications. It is perhaps the most extensive industry making the role of Electronics and Communication engineers crucial in this era. The department has specialized labs to make students aware about the actual working and creation of devices. Having its tie-ups with reputed institutions, the department is marching ahead by providing the students an exposure to the outside world and the global competition.

AANCHAL SHARMA
M. Tech, IIRS Dehradun

ANSHUL THAKUR
M.Tech, IIT Bombay



ALISHA SHARMA
Project Manager, Hewlett Packard Enterprise

ASHISH THAKUR
Senior Software Developer, Agiliad Technologies

AVINASH SHARMA
Data Analyst, Mindstix Software Labs

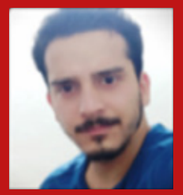
CHIRAG THAKUR
Data Analyst, Mindstix Software Labs

HIMANSHI
Software Engineer, Capgemini

DEESHANT SHARMA
M.Tech, IIT Hyderabad

JYOTISHA AZAD
SOC Power Engineer, Qualcomm

KANISHAK VAIDYA
PhD, IISC Bangalore

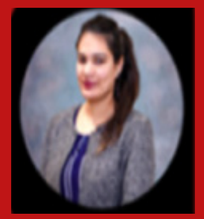


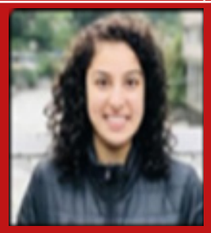
NITESH THAKUR
Indian Oil Corporation Ltd

RAHUL GAUTAM
Analytical Developer, Airbnb Inc.

SHAMLI SOOD
Product Manager, IDFC First Bank

SHIVANGI DHIMAN
HR Executive, Spectraforce Technologies



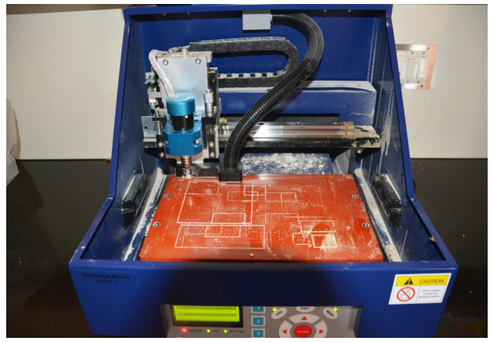


SHRIYA BHANDARI
Account Manager, Google

VINAYAK MARWAH
Senior Consultant, Navisite

SHINING ALUMNI

LABORATORIES



Basic electronics lab, Analog lab, PCB design lab

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Digital laboratory
Communication system laboratory
Computer network laboratory
Optical fiber and Microwave laboratory
TV laboratory

Microprocessor laboratory
Microcontroller laboratory
EMMI laboratory
Microwave laboratory
Wireless laboratory

Basic electrical lab, Control laboratory
Power laboratory

Matlab laboratory
Electronic Simulation laboratory
VlSI laboratory
DSP laboratory

ACHIEVEMENTS

GATE RESULT 2021

AIR 316

736

Anshul Thakur

AIR 5622

488

Jatin Sharma

AIR 6480

390

Parth

AIR 15441

274

Raksham

AIR 7330

425

Anmol Verma

AIR 7526

446

Kshitij Singh

AIR 9896

407

Shubham Thakur

AIR 10708

396

Sonika Thakur

AIR 11051

361

Anurag Rana

AIR 15119

312

Ankush Kumar

AIR 24138

243

Sahil

ELECTRONICS & COMMUNICATION DEPARTMENT

RESEARCH ACTIVITIES

01

Aarushi Thakur

Sine cosine algorithm assisted tuning of pid controller for dc servo-motor.

IEEE Explore

02

Sakshi Mehra

Application of sca for level control of three-tank system.

IEEE Explore

03

Neha Nainta

Performance analysis of wireless sensor networks under adverse scenario of attack.

IEEE Explore

04

Divya Bharti

Performance analysis of wireless sensor networks under adverse scenario of attack.

IEEE Explore

ACHIEVEMENTS

SHINING ALUMNI

Shubham Sharma
M. Tech, NIT Hamirpur
2016-2020

Sahil
M. Tech, VNIT Nagpur
2016-2020

Sakshi Mehra
M. Tech, NIT Hamirpur
2016-2020

Pratibha Singh
M. Tech, NIT Hamirpur
2016-2020

Ankush Kumar
M. Tech, PEC Chandigarh
2016-2020

Oorja
MBA, NIT Jalandhar
2016-2020

Deeshant Sharma
M. Tech, IIT Hyderabad
2016-2020

Anmol Verma
M. Tech, PEC Chandigarh
2016-2020

Anurag Rana
M. Tech, PEC Chandigarh
2016-2020

Anshul Thakur
M. Tech, IIT Bombay
2017-2021

Bandana Negi
Microtek Pvt. Ltd. Parwanoo,
Graduate Engineer Trainee
2017-2021

Chandermani
PIE INFFOCOMM Pvt. Ltd.,
Junior Automation Engineer
2017-2021

Chirag Thakur
Ztudium Ltd.
Data ANalyst
2017-2021

Avinash Sharma
Mindstix Software Labs,
Member of Technical Staff
(Data Analyst)
2017-2021

Sirpreet Kaur
Bharti Airtel Ltd.,
Geographical Information
System Engineer
2016-2020

Shilpa
Genpact India Private Ltd.,
Chatbot Developer
2017-2020

Shivani Sharma
HCL,
Associate Engineer
2016-2020

Swati Tank
Orange Business Services,
Cyber Security
2017-2021

Yogita Sharma
Microtek Pvt. Ltd. Parwanoo,
Quality Engineer
2017-2021

Raveena
Microtek Pvt. Ltd. Parwanoo,
Quality Engineer
2017-2021

Rushank Sharma
Microtek Pvt. Ltd. Parwanoo,
Quality Engineer
2017-2021

Kajol Sandhu
Microtek Pvt. Ltd. Parwanoo,
Quality Engineer
2016-2020

HOD'S MESSAGE

MECHANICAL DEPARTMENT

The Mechanical Department was started in 2006 with an intake of 60 students. The department has well qualified and dedicated faculty. The faculty members give the students a hands-on approach in the use of Engineering principles and the opportunity to develop creative approaches to problems. The objective of the department is to prepare students for successful careers in industry, research and academics to meet the need of growing technology. For the overall development of students, the Department of Mechanical Engineering is associated with memberships of professional bodies. Various technical activities of these chapters provide students to gain knowledge and interact with the students and staff of other Colleges/ Universities as well as Industry Engineers. Our graduates are working in multinational companies, defence services and academic institutions in various parts of India. Today JNGEC has grown in all directions and has become a distinguished centre for modern learning. I am happy to learn that our college is coming out with the annual college magazine. This magazine certainly would induce the young engineers to promote their creativity in approaching things differently. I extend my best wishes and greetings to the editorial board for the release of our college magazine.

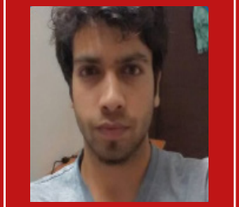
Dr. Rajeev Khanduja

Professor

ABOUT

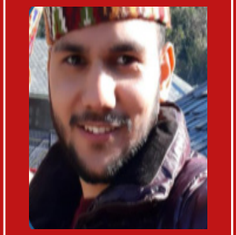
THE DEPARTMENT

The Department of Mechanical Engineering was one of the first streams started in JNGEC in 2006 at the time of its inception. Department offers a four
year Bachelor of Technology course in the field of Mechanical Engineering. Having one of the strongest alumni networks, this department focuses on developing engineers with sound fundamentals and revolutionary ideas. The
department has specialized labs for workshop technology and CAD, making the students aware about the practical work and allowing
them to keep pace with the ever developing
technological advancements. The available equipments, excellence in instruction and an emphasis on quality of education in Mechanical Engineering combined together to prepare the students to step into positions of responsibility at the leading edge of today's technology. The Mechanical Engineering students, with a desire to learn will develop and expand his or her knowledge and skills in the areas of engineering sciences, testing techniques, material properties, analysis and evaluation along with communication.



Amar Thakur
Executive Engineer,
ONGC

Anurag Garg
Assistant Comissioner,
State Taxes and Excise



Ashish Kapoor
MBA, IIM Amritsar,
Strategic Mentor,
E-GMAT

Drishti Awasthi
Product Executive,
Foodpanda,
Ex-Digital Product Analyst, Disney

Garima Soharu,
Pursuing PhD,
IIT Roorkee

Govind Sharma
M.Tech, IISc Bengaluru,
Deputy Manager,
Reliance Jio Infocomm

Jitender Kapoor
Assistant Engineer,
HPPWD

Manik Sharma
Sena Medal Awardee,
Indian Army

Priybrat Sharma
M.Tech, IIT Mandi &
Pursuing PhD, KAUST
Saudi

Rahul Thakur
Lieutenant Commander,
Indian Navy

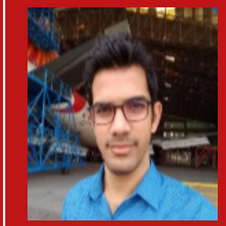
Rajnessh
PhD, NIT Hamirpur

Shubham Sharma
pursuing PhD,
IISc Bengaluru

Sumit Kumar
Assistant Manager,
HPCL Mumbai

Vijay Chauhan
Chief Research Officer,
GEC Iceland & PhD,
Reykjavik University Iceland

Vikas Kumar
Scientist, ISRO

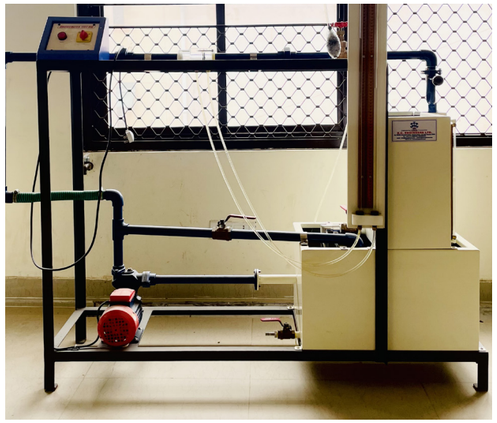


Vipan
Sr. Engineer,
BHEL Haridwar

SHINING ALUMNI

LABORATORIES

Strength of Materials Laboratory



Fluid Mechanics Laboratory

DEPARTMENT OF MECHANICAL ENGINEERING

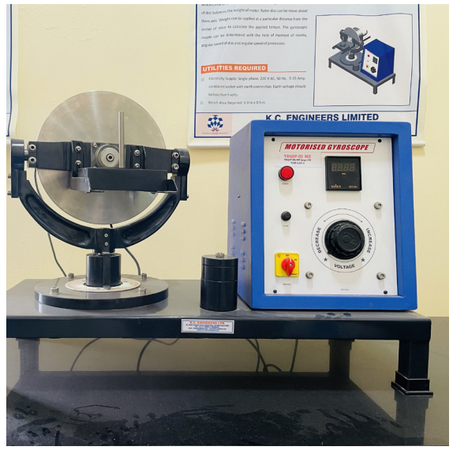
CAD Laboratry

Internal Combustion Engine

Turbo Machinery Laboratory

Heat Transfer Laboratory

Mechanical Workshop



Theory of Machines Laboratory

Material Science Laboratory

ACHIEVEMENTS

EXPERT LECTURES

01

3-D Printing

Dr. Sushant Negi,
Department of
Mechanical Engineering,
NIT Silchar

02

Conceptualization To Final Product Using Software and Designing Tools prevalent in Current Industrial Scenario

Dr. Sushant Negi,
Department of
Mechanical Engineering,
NIT Silchar

03

Solar Thermal Technology

Dr. Avadhesh Yadav
Assistant Professor
Mechanical Engineering,
Department
N.I.T. Kurukshetra

04

Advance Manufacturing Processes

Dr Rahul Vaish ,Associate Professor,
School of Engineering,
IIT Mandi

05

Advance Manufacturing and Non-Conventional Machining

Dr. Sushant Negi,
Department of
Mechanical Engineering,
NIT Silchar

GOLDEN JUBILEE CALENDAR OF EVENTS STATE LEVEL

First Prize at State Level Competition for Technical Projects

Name of Project: RH Trike
Name of Students:
Kulshreshth
Abhay Singh Thakur
Sumit
Diya
Avantika

MECHANICAL DEPARTMENT

GATE RESULT 2021

AIR 14852

381

Nitin Sharma

AIR 12287

419

Saurav

AIR 19036

331

Kundan Kumar

AIR 16590

358

Kamlesh Saini

AIR 14852

381

Mukesh Kumar

INDUSTRIAL TOUR

Venue: Center for Snow and Avalanche Study Establishment

Defense Research & Development Organization, located near Manali.

HOD'S MESSAGE

TEXTILE DEPARTMENT

I am extremely happy to know that students of Jawaharlal Nehru Government Engineering College, Sundernagar are bringing out a college magazine "REFLEXIA-2022" this year also. Bringing out a magazine is not an easy task, but it is a venture of combined efforts of students and teachers of this college. Ambition, planning, hard work, and courage are the key to success. I am sure that the college magazine will provide a platform for the students to sharpen their writing talent and will strengthen the academic activities of the college. This is a platform for you to reflect your vibrant talent creatively. I congratulate all the contributors and editorial board for their sincere efforts in bringing out this magazine. Wishing you all the best in your ventures, efforts and careers

Er. Praveen Kumar

Assistant Professor

ABOUT

THE DEPARTMENT

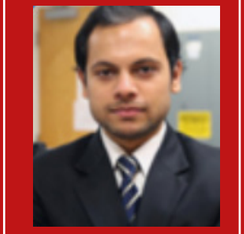
The Department of Textile Engineering was started in 2006 with the start of this college and is one of its kinds in the state of H.P. The department offers B.Tech (T.E.) with the aim to provide students with technical and specialized knowledge as well as with theoretical foundations necessary for development. Textile Engineering contains the principles, law, and scientific techniques which are utilized for development and manufacturing the textile fabrics and all type of yarns. It also involves the study of principles of science that deals with the analysis of polymers involved in the formation of textile fiber. Considered to be the most innovative field, the department has well equipped state-of-the-art laboratories supervised by experienced faculty members, who provide students enough practical knowledge so that Department of Textile Engineering withstand professional work environment.

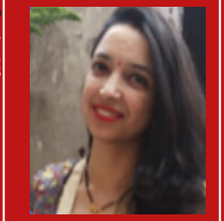
Amit Sharma
Production Leader
Quality & Development
Decathlon Sports India

Angat Kapoor
Quality Assurance officer Textile Committee, Ministry of textiles

Anshul Sharma
Indian Army

Ashish Kapoor
Tech. Development Module & Integration Yield Engineer, Intel Corporation US





Bhawna Kapil
Asst. Executive
Vardhman Textiles Ltd.

Karun Bharmoria
Executive Officer
Dept. of Urban Development, Govt. of H.P

Neha Mohil
Product Development Engineer, Winsome Textile Industries Ltd.

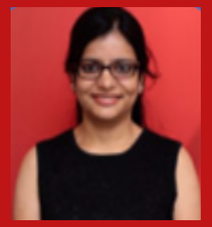
Mohit Sharma
Manager
State Bank of India

Nikhil Saklani
Indian Army

Onkar
Assistant Manager
National Textile Corporation Ltd

Payal S. Dutta
Assistant Professor
Bannari Amman Institute of Technology, Coimbatore

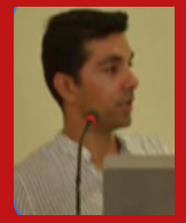
Piyush Sharma
HRTC
Regional Manager



Radhika Vaid
Sr. Engineer, Edwards Life Sciences,
United States

Ritika Thakur
Production Leader
Components, Decathlon Sports India

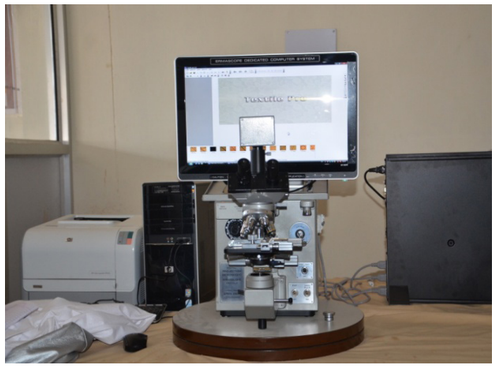
Shweta Singh
Assistant Manager
R&D at SRF Ltd.



Vipul Pandit
Manager/Flying Doctor
Kyung-In Synthetic Corp.
South Korea

SHINING ALUMNI

LABORATORIES



Textile Fibre Laboratory

Yarn Manufacture Laboratory

DEPARTMENT OF TEXTILE ENGINEERING

Fabric Manufacture Laboratory

Textile Testing Laboratory

Knitting Laboratory

Garment Manufacture Laboratory

Textile Designing Laboratory

Non conventional Yarn Manufacture Laboratory

Textile Chemical Processing Laboratory

ACHIEVEMENTS

EXPERT LECTURE

01

Garment Manufacturing

Prof. K.N. Chatterjee, Head, Department of Fashion and Apparel Engineering, Technological Institute of Textile and Sciences, Bhiwani Haryana

02

Latest Development in Spinning and Textile Testing

Sh. Indrajit Pal, Sr. Manager Arisht Spinning Mills (A unit of Vardhman Textile Ltd), Baddi (H.P)

03

Nanotechnology and applications in Textile And Advancements in Weaving technology

Dr. Rajesh Mishra, Technical University of Liberec, Chez Republic and Prof. B K Behera ,IIT Delhi

04

International Conference on "Innovation in Textiles"

05

Smart Textiles

Mr. Ashish Kapoor, Research Scholar, College of Textiles, North Carolina State University, Raleigh US

06

Marketing in Textile Industry

Er. Varun Sharma, Auxilia technology Private Limited Chandigarh

07

Latest Dyeing Techniques Adopted in Industry

Er. Isha Agnihotri, Auro Dyeing Vardhman Textile Limited Baddi H.P

08

International Symposium on "Emerging Technologies in Textiles"

GATE RESULT 2021

AIR 40

Aashee Sood

AIR 103

Shveta Thakur

AIR 165

Sakshi Sharma

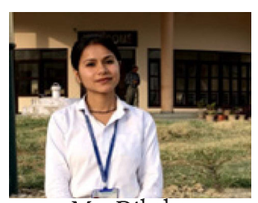
AIR 271

Jagriti Thakur

PLACEMENTS 2021

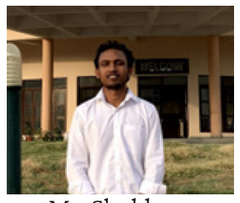
Graduate Engineering Trainee, Trident Group's India

Ms. Saloni



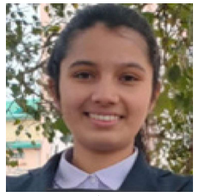
Ms. Diksha

Mr. Atul



Mr. Shubham

Polyester Graduate Engineering Trainee, Reliance Industries Ltd.



Ms. Shagun

Mr. Arpit

Mr. Chirag

Mr. Ritish

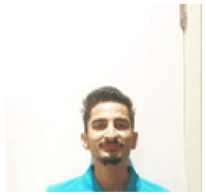
ACHIEVEMENTS

TGT, Nahar Spinning Mills, Ltd.

Mr. Shubham

Mr. Shubham Gupta

Bureau Veritas Group

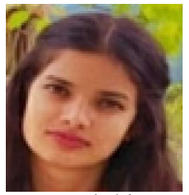


Mr. Ajay

Mr. Gaurav

KISCO India Pvt. Ltd.

Ms. Priya



Ms. Shikha

TGT, Vardhman Textiles Ltd.

Ms. Aakrati

MAKING YOUTH SOCIETY CENTRIC

NCC

NATIONAL
CADET
CORPS

UNITY AND DISCIPLINE

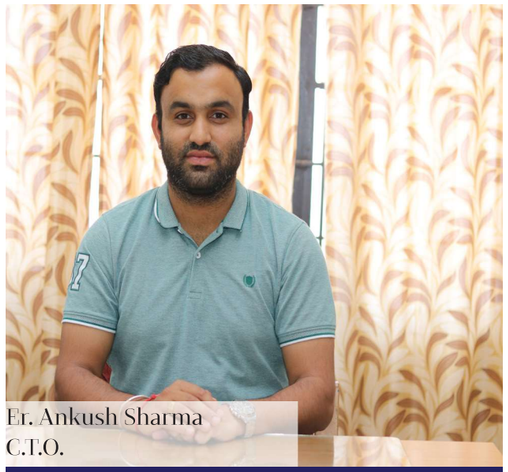
SERVE THE NATION

SELFLESS SERVICE

LEADERSHIP

COMRADE–SHIP

Being the second line of defence, is an experience which will stand you in good tead in all walks of life. This esteemed organization helps in developing character, comradeship, leadership, spirit of adventure, and ideals of selfless service amongst the youth of the country NCC creates a human resource of organized, trained and motivated youth, to provide leadership in all walks of life and be always available for the service of the nation. It provides a suitable environment



Er. Ankush Sharma
C.T.O.

Unit:- 2 HP BN NCC MANDI
Total Number of NCC cadets:- 48
Boys:- 36
Girls:- 12
Senior Under Officer:- Alokik Rana (ME 4th year)
Under Officer:- Kumar Abhinandan Patial (ECE 3rd year)
Under Officer:- Komal Bhardwaj (CE 3rd year)
Sergeant:- Rittul Mamta (CE 3rd year)
BEE certificate passed 2022:- 15
CEE certificate passed 2022:- 15
CAMPS
Combined Annual Training Camp at Pandoh:- 30
SSB camp at Mohali:- 1 cadet

UBA

Unnat Bharat Abhiyaan

Er. Chetan Sharma
Programme Officer

Unnat Bharat Abhiyaan is the flagship programme of the Ministry of Human Resource Development (MHRD) aiming to enrich rural India. On November 13, 2018, Jawahar Lal Nehru Government Engineering College, Sundernagar has been selected and registered as a participating institution under the Unnat Bharat Abhiyan. We have adopted five surrounding villages.

UBA was based on Gandhiji's vision of making self-sufficient "Village Republics." The idea envisions the development of rural areas using local resources and using decentralized, eco-friendly technologies so that the basic needs of food, clothing, shelter, sanitation, health care, energy, livelihood, transportation, and education are locally met.There are huge developmental gaps between the rural and urban sectors, such as differences in health, education, incomes, basic amenities, as well as employment avenues, all of which cause great discontent and large-scale migration to urban areas. Increasing urbanization is neither sustainable nor desirable. So far, our professional higher education institutions have largely been oriented to cater to the mainstream industrial sector and, barring a few exceptions, have hardly contributed directly to the development of the rural sector.

Unnat Bharat Abhiyan (UBA) is a much-needed and highly challenging initiative in this direction. The programme was formally launched by the Ministry of Education (MoE) (formerly the Ministry of Human Resource Development (MHRD)) in the presence of the President of India on November 11, 2014. Under this programme, the institution has adopted five villages in the vicinity of the college where the students have successfully completed the survey. The five villages are: Chamukha, Thalla, Derdu, Kapahi, Thathar.

NSS

NATIONAL SERVICE SCHEME

The National Service Scheme (NSS) is an Indian government sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly knownas NSS, the scheme was launched in Gandhiji's Centenary year, 1969.

Aimed at developing student's personality through community service,NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage. The cardinalprinciple of the NSS programme is that it is organized by the students themselves, and both students and teachers through their combined participation in community service, get a sense of involvement in the tasks of nation building. N.S.S. was started in our college on 18 January, 2017. Till today a total of 200 students from different branches and from different semesters had enrolled themselves in NSS unit JNGEC. 91 students have completed their B.Tech and have passed out from this college whereas 109 students are still studying in this college and along with this are also actively participating in various activities performed by NSS unit JNGEC. It is a matter of pride for our institution that N.S.S. Unit J.N.G.E.C was the first among Technical Institute of state to successfully organise a special Seven-day camp inVillage Chamukha under the Programme Officer Er. Chetan Sharma. N.S.S. volunteers have contributed towards the service of society by engaging

Er. Chetan Sharma
Programme Officer

in activities like plantation, blood donation camps, dental and oral hygiene camps and several visits to the adopted villages. The unit aims at taking forward the legacy and contribute towards the development of society. mong Technical Institutions of state to successfully organize a Special Seven-day Camp in Village Chamukha under the Programme Officer Er. Chetan Sharma. N.S.S. volunteers have contributed towards the service of society by engaging in activities like plantation, cleanliness and vaccination drives, blood donation camps, dental and oral hygiene camps and several visits to the adopted villages. The unit aims at taking forward the legacy and contribute towards the development of society.

MEMORANDUM OF

UNDERSTANDING

MAY 2022

NIT Uttarakhand,
Srinagar (Garhwal)
Uttarakhand.





NOV 21

Govt. Polytechnic
College (Women)
Rehan Kangra.

OCT 2021

Phytec Embedded Pvt.
Ltd. Bangalore
Solex Energy Ltd, Surat,
Gujarat.


MAY2021

University of Texas at
Arlington (U.S.A)
Govt. Millennium
Polytechnic Chamba
H.P




JUL 2021

Bhutti Weavers
Cooperative Society
Ltd. Bhutti Colony,
Teh. Bhunter Distt.
Kullu H.P.

FEB 2021

Dr. B.R. Ambedkar
National Institute of
Technology Jalandhar
Punjab






MAR 2021

National Institute of
Technology Srinagar (J&K).
Govt College of Engineering
Kannur, Kerala.
Government Polytechnic
Kullu, Distt. Kullu H.P.

DEC 2020

National Institute of
Fashion Technology
Kangra H.P.
"PVC" NSSK Government
Polytechnic Bilaspur H.P.






JAN 2021

National Technology of
Technology Hamirpur
H.P.

NOV 2020

Microtek New
Technologies Pvt. Ltd
Sec-2, Parwanoo, Distt.
Solan H.P

NON-TECHNICAL ARTICLES

THE ANSWERS YOU ARE LOOKING FOR

BY-RITULESH MOHAN
18BTO10142
CIVIL ENGINEERING
(2018-2022)

If you've had a few or many unanswered questions in your life, you've come to the right place. You'll be surprised that I am going to answer them all here. No, it's not a magic trick, but how? Let's find out. Now I am going to give you a situation and ask you to tell me what you would do. Be honest with yourself. Imagine that you are travelling by bus in a hilly region and you are daydreaming about yourself in a hypothetical world where you have everything you ever wanted; no worries, no complaints, and everything is as per your conditions. With a sudden jerk, your dream gets shattered. Everyone on the bus is screaming loudly before you even realise what has happened. The very next moment, you feel weightless. Now you realise that your bus is about to crash into a valley and you are in mid-air under freefall. Your brain has calculated all possible outcomes and your chances of survival in the next two seconds before you hit the ground. Now tell me in this tense situation whom you are going to help first. Tell me who?

After a crash, when you regain consciousness, the first person you will undoubtedly assist is yourself. And there is the answer to all your questions. There is always a person to help you at any stage of your life. You just have to look in the mirror.Just give yourself an hour a day to thank yourself, your body, and your mind for being there for you in every situation. Feel blessed and grateful for having such a beautiful life. Nothing matters in the end, just these peaceful and blissful moments, the best time you have spent with yourself. Trust me, when you are happy with yourself, when you are having a great time with yourself, you can take care of yourself and your loved ones, after all we are human beings. We are meant to live happily and joyously, and eventually to live in harmony with other living beings and nature as well. Be blissful and grateful for what you have and trust yourself that more good is coming for you I know that we all know this from the very beginning, it's just that we forget this in the ups and downs of life and start blaming external factors or others for our situations. So it is a reminder, that it is entirely up to us how we react and perceive. Now take a deep breathe and bring a big smile on your face. Lead a happy, healthy, and joyful life. Be a blessing to mankind.

"Become Your Greatest Companion First"

The best life-changing advice you will ever get!

BY SHARABH GAUTAM
20010401046
CIVIL ENGINEERING (2020-2024)

A lot of people tend to say that this book changed my life. 'Change' has to be enforced day after day. And it is not dependent on the introduction of an idea; what an idea does is it opens a new door for your mind to see! Many people call the amazement felt by that idea the change, but in reality, no noticeable change occurs in their behaviour. Many people try to implement what they learned from the idea, but in a few days go back to their old ways. Only a few stay with the idea and bring about a difference in themselves. What we learn is, that no idea can change you, it's what you do with it that causes the change. In short, you cause the change.

And since it is you, let's consider this: Who is that one person that knows most about you?To whom it's consciously not possible to lie? One you care about the most and would listen to the most? Well, it's you again. Why haven't you then changed yourself yet? The reason is that you're only limited to a one-way conversation with yourself, it's not a dialogue. You are moved to action when your best friend is in some trouble, the girl you like is under stress, and you give up everything to rescue them. But when you yourself are going through stress, it never happens, because in those times, you expect others to do that for you. That's why we value other people so much because we want them to hear our problems, treat them with seriousness, and fix us. But they can only offer the pretence of seriousness, they cannot feel that urgency because 'it is your problem.' Your life's story is yours, and everything you go through in it will be felt by you alone. So, here's what you need to do: download any voice recording app on your phone. Record a message for the person you're going to be a week later. This is not a message to the person you are right now. So, talk about

YOU SHOULD GO AND LOVE YOURSELF

the problems you are currently facing, the things that give you stress, advise him on how to solve these, about people you don't trust, people who are wasting your time, talk to him about your dreams, tell him in great details about what you feel about those dreams, how badly you want them to happen. Scold that person if you want to, instruct him to work if you have to, and tell him in whatever manner is required to set his mind straight. Explain to him why he needs to get out of spaces and relationships he is stuck in, tell him that he is important, his life should be great,and join hands with him in making the promise to make your life great. After a week, when you play the message, it's going to change your life, because that would be the best message, the most personal,heart-warming thing you will ever experience. It is your own self talking to you like a brother. And nobody knows more about you indepth than yourself.

So, if there is an idea that can truly change your life, it is giving yourself the opportunity to guide yourself. And keep doing it every week. So, if there is an idea that can truly change your life, it is giving yourself the opportunity to guide yourself. And keep doing it every week. Pick a day on which you hear the message from yourself, and record the other day. Change is a long process, and it is advisable to be pushed, motivated, cared for in every step through, and especially when you're down, procrastinating, uninterested, being sluggish, it is needed more than ever for someone to explain to you what your dumb behaviour will cost. If you have relied on people to always come for you in such heavy moments, well, you're over expecting.

Why rely on people when you can do it yourself! Take responsibility like a boss on that message, and make promises to yourself regarding tasks you're doing to finish, so a week later, you can see for yourself where you are. This is the greatest tool for self-reflection and awareness available to you. Use it. Become friends with yourself. Become loyal to yourself. And start calling out your troubles. Thank you for reading, I hope you will implement this every week. It is not going to cost you a thing. You already talk to so many people. Have a great day, and never forget, you're awesome.

World, Economics and Humanity: A Tremulous Track

BY VISHAL SHARMA
18BT0101163
CIVIL ENGINEERING (2018–2022)

Several thousand years ago, there was no concept of interconnection in humans. The only things they cared about at that time were food and shelter. After evolution, an advanced intellectual man started revolutionizing the whole planet. Interconnections started developing into a crude form of social structure. Common attributes concise society into groups. Modern societies are a result of the amalgamation of different societies. For this reason, you can find children of different races, religions, countries, cultures, etc. studying in the same class in the U.S.A. Similarly, in the U.A.E., only 15% of the population is Emirati. South Asians make up more than 55% of the population. Today, the world is so interconnected that a conflict in faraway nations that normal people may not even have heard of can soar up the prices of daily use commodities. That's why in ancient Vedic Indian philosophy there is a term "Vasudhaiv Kutumbakam", which reflects our broader interconnections.

The Modern World Mathematics: The Fall of British Imperialism

After ruling the world for many centuries, the 'Sun' of Britain started setting in the early decades of the 20th century. The First World War, which began with the assassination of the Prince of the Austro-Hungarian Empire, engulfed the entire European continent. This war strongly impacted British inventories and treasury. By 1918-19, Britain managed to win this war, but there were plenty of casualties and an economic drain. Due to WWI, the Austro-Hungarian Empire collapsed, the mighty Ottomans were defeated, the Tzar of Russia was removed, and the Axis powers' territories were shared between allied powers. The division's basis was power and money. For example, Ottoman's Middle Eastern crude oil. In the African Continent, territories were marked by using just a scale and a map, which summed into future conflicts. Heavy reparations were imposed on Germany following the First World War, prompting Hitler to declare war on the Soviet Union in 1939. Independence struggles were at their peak in the overseas territories. In the late 1940s, it was a challenge for the UK to maintain control over its territories, and soon after WWII, most nations were independent of the UK and the Sun of the Mighty British Empire finally set.

Independence, Economic Rise to a Superpower:

The United States of America There is a saying that 'Only iron can cut iron.' This goes well with the American insurrection against Britain. This was the time period of 1775-1783 AD when the American Revolutionary War started in its 13 colonies on the west coast of the North American continent. It was because of unfair taxes and exploitation. On July 4th, 1776, the Second Congress adopted the Declaration of American Independence and the United Colonies became the United States of America. Finally, on September 3rd, 1783, the American Revolutionary War officially ended and the Treaty of Paris was signed. The Industrial Revolution topped in the USA and economic growth started, driven by private companies. WWI drained the European powers' ammunition and supplies, which were fulfilled by the USA, which boosted its huge economic rise. After the Pearl Harbor attack by the Japanese Kamikaze pilots, America stepped into WWII. In 1945, the USA dropped two nuclear bombs on Japan, which resulted in the end of the war and marked the USA as the new superpower of the world.

The Cold War and Military Interference

The Cold War began just after the surrender of the Nazis in 1945. The space race, nuclear weapons, capitalism vs. communism, the Cuban missile crisis, the Korean War, the Vietnam War, the United States' proxy war against the Soviet invasion of Afghanistan, and the formation of NATO and the World Trade Organization were all prime examples of a polarised world. The Cold War finally ended in 1991 with the disintegration of the Soviet Union into 15 countries, and America remained in the world as a lone superpower. After the 9/11 attacks in 2001, America launched a "War on Terror" in Afghanistan and the Middle East. For an instant coverup of the 9/11 security failure, Iraq was invaded for having weapons of mass destruction, and Saddam Hussein's power vacuum led to the creation of ISIS. After the Cold War, NATO started an Eastward Expansion because of which Russia feared for its security on its western borders. The current Russia-Ukraine crisis is the result of this, and it has the potential to spread to other European countries such as Finland and Sweden, which have recently applied to join NATO.

Economic Rise: China, India, and the Role of Digitalization

Due to the economic reforms of Deng Xiaoping in 1978, China became the fastest growing economy in the world, with an average 10% growth rate over 30 years. The smart mixing of capitalism and communism led China to become the "Factory of the World." India too, after the LPG reforms in 1991, with some political hiccups, still managed to grow at a steady rate. Today, India is the world's fastest-growing major economy. Also, the startup culture has been a huge boom in the economic industry. Recently, India crossed 100 unicorns (1 billion USD worth) companies. Today, more stress is on skill development. With the PLI (Production Linked Incentive) scheme, Aatmanirbhar Bharat, and Make in India, the Indian economy is set to become a 5 trillion dollar economy by 2025-26. Digitalization has become a major boost for world trade in this age of the internet.

Pandemic & Humanity:

After the First World War, the world faced a pandemic in the 1920s. After 100 years, we are at the same point. The world economy dipped to negative growth rates. Until now, the Sars-Cov-2 has killed between 10–15 million people. A new zoonotic disease, Monkey Pox, has recently made news for its rapid transmission in Europe. Its mortality rate is even worse than COVID-19, at about 3%.

In today's world, mental trauma is spreading rapidly within us. The connections between people are the worst in history. In Japan, out of a 12.63 crore population, 3.80 crore people are above 65, mostly playing with robots in old age homes in loneliness. This can be considered the victory of technology, but it is actually the defeat of humanity. Loneliness has become so critical that even a loneliness ministry has been set up in Japan. Due to loneliness, 21,081 people in 2021 committed suicide in Japan, one of the worst rates in the world. Love is connection, compassion, and empathy. According to Mahatma Gandhi, "You must not lose faith in humanity." "Humanity is like an ocean; if a few drops of the ocean are dirty, the entire ocean does not become dirty." So one should try to save the basic morals of humanity.

On which side does the humanity lie?

By Sachin Himalyan
17BT010442
ECE (2017-2021)

We live in a diverse world with people of different consciences. The classification was done much earlier by humans, we classified ourselves based on religion, ethnicity, race, caste, sub caste, sex, color, etc. There is no limit when it comes to classifying people, it's just bizarre. It depends on the criterion on which it is based. Even people living in the same country having the same religion can be different. When such people live together collectively we call it diversity. Our biases make us different from each other, sometimes even two people sharing the same DNA can be different when it comes to beliefs because DNA doesn't decide our inclinations. A child when born doesn't decide its classification, he can't choose where he/she wants to go, he's not born with a specification sheet. We are inherited with the specifications of our ancestry and it automatically stays with us life long.

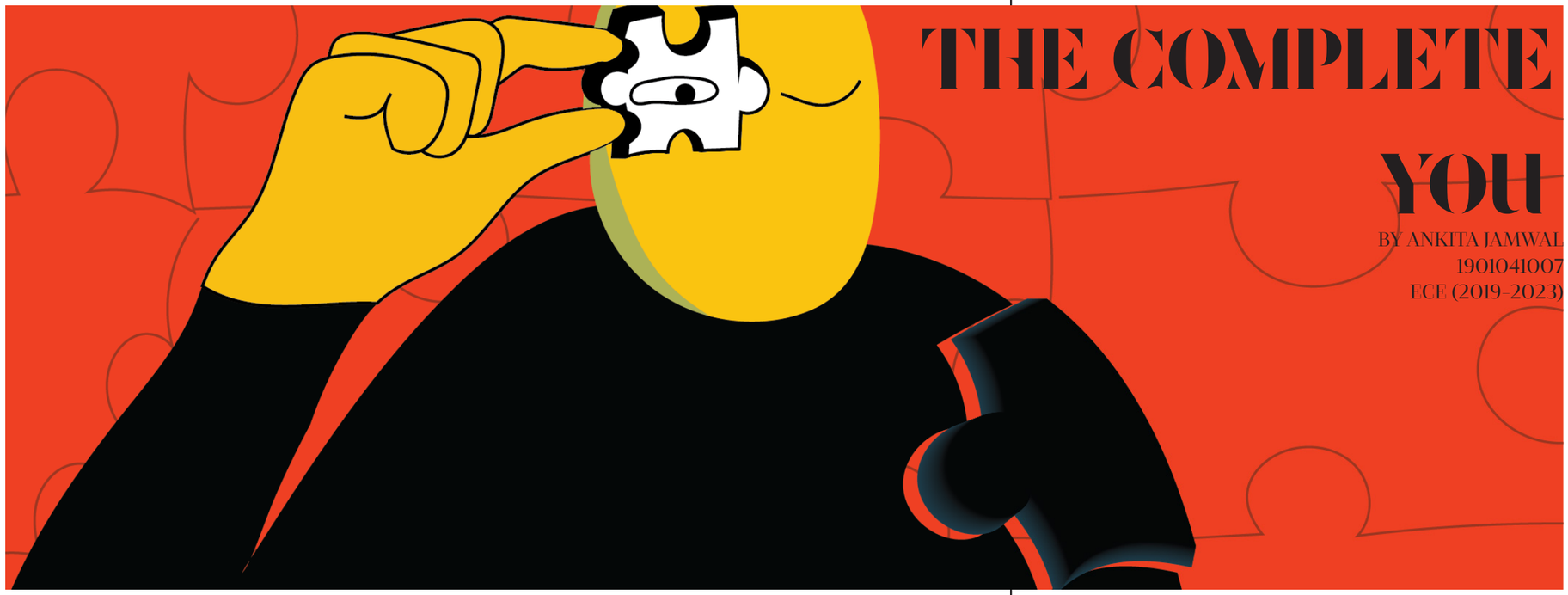
Where there is diversity, there lies a clash of thoughts. And before our predispose we choose our sides and have our opinion. But the main thing which affects the situation of a problem lies in our choice of sides. What are the criteria for our stands, our inclinations, or our conscience? Are we flexible enough to understand the complexity of social differences or are we so orthodox that we don't want to see the other side of the coin? Is our society ready for new thoughts? Is it tolerant enough to listen or understand?

The answer to the above question is complicatedly simple. We just need to put another question. Who controls our biases? Our mind or some other's mind.The answer is complicatedly simple because "simple" if we think by a rational mindset then we conclude that everyone wants peace and humanity and "complicated" makes the classifications i.e. at what cost we need them?. We want peace and humanity, but do we want it with everyone? It's like the end of the world war with a nuke. It stopped the war, but what did it cost was a huge loss to humanity. Similar problems exist even today like terrorism, communal outrage, cold wars, etc.Iran shot down an airplane in its air space for the nation's security and ended up kill

ARE WE SO ORTHODOX THAT WE DON'T WANT TO SEE THE OTHER SIDE OF THE COIN?

inginnocentcivilians.Peopledemonstrating rights in the country resulting in inconvenience for other citizens not giving passage to ambulances , disrupting schools and colleges.Religious radicalization is giving rise to volatile conditions in the society. And we are well aware of the consequences of it like ISIS, Al Qaeda, Jaish, etc. Every religion in common preaches peace and humanity. But some anti-social elements of the society enforce their version of truth among people to disturb the system. In this world full of differences everyone may have a problem with everyone at some point of time. We take our sides according to our mind. But humans do have one thing in common " The humanity".

Hence, before asking ourselves "On what side we are?"
We should rather ask : "On which side does the humanity lie? "



THE COMPLETE YOU

BY ANKITA JAMWAL
1901041007
ECE (2019-2023)

Have you ever given it a thought that you know yourself completely? The complete you, or as people say, the "good you" and the "bad you," or your other part?

Honestly, I don't know about others, but I hadn't given it a thought before this quarantine period or self-isolation. This period gave us plenty of time to get to know ourselves, and I really spent it knowing myself. Here I'm not talking about self-care. We all know various means of self-care like meditation, yoga, exercise, etc.

But let's talk about the stuff related to self-awareness, self-acceptance, self-development, mental peace, and our insane thoughts.

Now you will think what nonsense stuff I'm talking about because everyone knows about themselves, right? Well, I also thought the same as you're thinking now, but... give it a try again. Do you really know yourself that much? The complete you? Okay, let me throw some light here.

Do you understand your own strengths, weaknesses, and flaws, or are you the one without flaws? Have you ever thought at the end of your day that you are happy with what you are doing? How are you doing? Are you happy with who you are and how you are leading your life?

For finding the answers to these questions try to know yourself first.

Some key points for knowing yourself are:
1. Discover your strengths and engage in activities that excite you and that you are good at.

2. We all know we're flawed, but we never accept it; we don't want to because we don't care, but it's worth it. Learn about your flaws and work on them, and stop pointing fingers at others. You never know when those fingers will turn on you.

3. Do not live in "denial." I repeat myself, do not live in denial, at least not with yourself.

4. Accept things about yourself, whether they are good or bad, and don't change yourself for others. Don't seek approval. You have to accept yourself first, then afterwards, society comes. Accept and respect yourself, your personhood, and your being regardless of how well you performed or whether others approved of your actions.

5. If something is going on with you, try to talk about it with someone whom you trust or with whom you feel like sharing. Keeping things piled up within yourself creates a war within yourself, and trust me, you don't want that.

6. Make your thoughts positive. Begin your day being grateful for the small things that you have in your life and end it with a positive thought. There is much more to life. Look on the brighter side. Always keep hope and faith in yourself.

7. Follow your gut instinct: Whatever your feelings are about anything related to yourself, you will be satisfied in the long run that it was your decision. Don't let others influence you and your decisions otherwise, that is all that you are left with.

8. Get control of your own mind and thoughts (positive). Here, meditation plays a vital role.

9. Overthinking is another factor. Don't waste your time thinking about situations that are not in your control.

10. Be the best version of yourself. Put a smile on your face no matter what life throws your way and think about who you are and what you want to be. If these things are different, try to work on them. Embrace yourself.

Knowing yourself is an art. Be the artist of your peaceful mind. Your thoughts become things. You are the only one who knows the true essence of yours.

You have known your energy since day one but never paid attention. You are the eternal energy, and you're the only one, and that is your power. I have seen in my own life and in others that we don't think well of ourselves or love ourselves completely. Not loving ourselves can keep us from achieving our goals. He who has a reason to live can put up with almost anything.

So, these are the few things that I have learnt in the process of knowing myself. As I said, I don't know about others, so you can add things accordingly. Give a gift to yourself by knowing yourself, and trust me, it's the best gift you will ever receive.

Now the question arises, are you willing to know yourself for the betterment of yourself and society? Trust me, there is much more to know about yourself than you think. You will surprise yourself and, in this process, you may find new things that are more you.

In the enlightening words of Buddha: "YOU YOURSELF, AS MUCH AS ANYBODY IN THE ENTIRE UNIVERSE, DESERVE YOUR LOVE AND AFFECTION."

NOT SO STRAIGHT CONVERSATIONS

BY AARTI
18BT010103
CIVIL ENGINEERING (2018–2022)

The first time I heard about same-sex relationships was from a homophobic joke on a TV show that no one dared to explain to me, and the 10-year-old me wondered if it was possible. As an adult now, in my early 20s, when I look back, I realise what the words "gay" and "lesbian" meant. When I look back, all I can recollect is how wrong it was deemed in the eyes of society to be yourself, and it breaks my heart that so many had to go through homophobia because people did not approve of who they chose to be with.

To the people who do not understand what I'm talking about, LGBTQ+ is a community of people who identify as lesbian, gay, bisexual, transgender, queer, asexual, aromantic, pansexual, and non-binary. And honestly, being yourself is very difficult in a society that judges you for everything, especially when you're queer.

Some people like to say it's a western concept, and some like to argue by saying it's unnatural. It's neither. In fact, being queer has been very much a part of our ancient culture and there are so many proofs of it. One example is the Khajurao sculptures.

The supreme court decriminalised same-sex relationships on September 6, 2018, making Section 377 unconstitutional. This gave people hope for a better future. There is, however, a long way to go. Even though the supreme court legalised same-sex relationships, people still find it hard to accept and move on.

Identifying as queer is scary, and people remain closeted for their safety. It's past time for us to bring about change. I wish for a world that would be equal for all of us and no one would have to walk in shadows, terrified of what may happen, that no one would ever hate themselves for being who they are. I pray for wisdom in people to acknowledge the pain and suffering queer people have faced, and hope that my words may bring the slightest change to how things are. Because it is our right to live and to die as who we are.

POETRY

हिमाचल तब और अब

BY AAKANKSHA
18BT01011102
CIVIL ENGINEERING (2018-2022)

हिमाचल तब और अब
भारत माँ के कंठ में सुशोभित,
शालीनता और सभ्यता जिसकी पहचान
हिमालय की गोद में बसा, हिम-आँचल इसका नाम।

15 अप्रैल,1948 को हुआ था एक नया आगाज़,
अनेक रियासतों को जोड़कर बना था,
हिमाचल प्रदेश कहलाता है जो आज।
फिर 25 जनवरी,1971 को हुई थी,
भारत के अठाहरवें संपूर्ण राज्य की नवीन शुरुआत।

धौलाधार, पीर-पंजाल से घिरा
मानो स्वर्ग का एक टुकड़ा हो धरती पर गिरा,
उँचे-उँचे पर्वत, जिनकी शवेत चोटियाँ इसका मुकुट सजाती हैं
असिकनी पुरुषनी अरजिकिया और शतुदरी कल-कल बहती हैं।
जिस ओर नज़र घुमाओ उस ओर हरियाली और खुशहाली है
जल शक्ति की कृपा से घर घर उजियाली है।

बशोली काँगड़ा गूलर शैली की चित्रकला की क्या है बिसात,
इनके मनमोहक रंगों में कथित हैं कथाएँ अपार,
तीनो ऋतुओं में जादुई छटा बिखेरती प्रकृती सदाबहार।

स्वभाव से सरल,
मन में निर्मल,
मेहनती यहाँ के सभी नर नार हैं,
सिर पर ढाठू-टोपी सजाए, हिमाचली होने पर सबको नाज़ है।

गगन भी झूम उठता है उस दिव्य जयघोश मे,
ढोल नगाड़ो और कर्णाल संग विश्व प्रसिध दशहरा
जब मनाया जाता है पहाड़ों की गोद में।

रामपुर का लवी, चम्बा का मंजी, और मंडी की शिवरात्रि
के भी हैं अलोकिक दर्शन ,
खजियार,पराशर ,रिज और रोहतांग हैं कुछ मुख्य प्रयटक आकर्षण।
नाटी, झमाकड़ा,ललुड्डी से होती चारों दिशयें गुंजायमान हैं,
लोक गीतों के सुरों मे खूबसूरती और भक्ति का आहवान है।

मातृभूमि की सेवा में न्योछावर हुए इन वादियों के वीर अमर
बलिदानी हैं,
सोमनाथ शर्मा, सौरभ कालिया, विक्रम बत्रा की शौर्य गाथा सबकी
ज़ुबनी है।

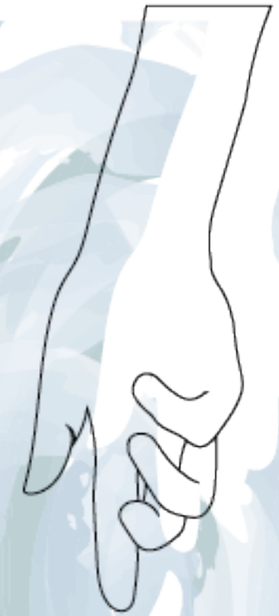
संस्कृति को मन मे सहेजे,
आधुनिकता की डोर थामे,
प्रगती के पथ पर निरंतर अग्रसर हैं।

गत वर्षो मे उन्नति की नई इबारत लिखी,
प्राचीनता और आधुनिकता के सफल मेल की तकनीक सीखी।

पिछले पचास सालों मे विकास की सफल बुनियाद मिली,
आने वाले वर्षो के नव शिखरों की पहचान मिली।
आधी राह तय हो चुकी है आधी अब भी बाकी है,
हिमाचल के नव निर्माण मे जन जन की भागेदारी है,
हिमाचल की तरक्की हम सब की सांझी ज़िमेदारी है।

ख्याल-ए-जिंदगी

BY ABHISHEK KUMAR
1901071003
TEXTILE ENGINEERING (2019-2023)



पूछता हूँ मैं तुझसे और कितने इम्तिहान लेगी ए जिंदगी,
जो हस्ते हस्ते रूला दे शायद इसी का नाम है जिंदगी।
ना आंखो से ना जुबां से,
अब तो कलम से दर्द बयान करवाती है जिंदगी।
खफ़ा तो इससे कभी हो ही नहीं सकते,
क्योंकि खुद मे छुपा हुआ एक गेहरा राज़ है जिंदगी।
हर दिन हर पल एक नयी सीख देती है ,
इसीलिए तो तू सुहानी है ए जिंदगी।
हर लम्हे को तू आखिरी लम्हे की तरह जी,
क्योंकि आज है और कल नहीं है ये जिंदगी।

मेरा पैगाम मेरे दोस्तों के नाम

BY SHAHID AKHTER
20020107006
TEXTILE ENGINEERING (2020-2024)

मत करो गफ़लत के गया वक़्त हाथ नही आयेगा

क़्त के साथ कदम मिला कर चलो मरे दोस्तों
बुधिमान हो तो वक़्त की कदर करो मरे दोस्तों

सज़ा दो इस चमन को इल्मो हिकमत से
मेहनत सच्चाई व मेहरो उल्फत से

जिन्दगी से मिटा दो अंधेरा दोस्तों
उजाला कर दो अपना हर सवेरा दोस्तों

दिलो दिमाग मे बिठा लो शाहिद की इस तहरीर को

कड़ी मेहनत से बदलो यारो सब अपनी तक़दीर को

याद रखो मेहनत ही कामयाबी की चाबी है

गफ़लत और सुस्ती तो जिन्दगी की खराबी है।

मेरा हिमाचल

BY JYOTI SHARMA
1901011022
CIVIL ENGINEERING (2019-2023)

सीधे पहाड़ से डर नहीं लगता,
यहाँ शेर की दहाड़ से।
इन वादियों में कुछ अलग ही नशा,
अफ़सोस यहाँ से दूर जाना पड़े
दिल तो है यहीं पर बसा।

शुद्ध यहाँ हवा,
भोले यहाँ है इन्सान।
कहतें हैं देवभूमि यह है हिमाचल,
इसकी हम हैं सन्तान।

बर्फ़ से लदी ये चोटियाँ,
खूबसुरत ये नीले आसमान।
कल-कल करतीं ये नदियाँ,
यहीं रहना है एक अरमान।

पर शायद नया ज़माना आया है ज़रुर,
बदला है मौसम, नज़ारा बदल गया।
जिन पहाड़ों पर था हमें गरूर,
न जाने इस दौर में क्या-क्या बदल गया।

जहाँ खुलती थीं आंखें,
पंछियों के चहचहाने से।
अब होती है सुबह,
गाड़ियों के शोर मचाने से।

नोच-नोचकर खा रहे हैं,
इन्सान इस धरती को।
कहीं कट रहें हैं पहाड़,
बना दिया है बंजर इस धरती को।

खो रही है खूबसुरती,
नदियाँ-नाले सूख रहें हैं।
अपनी भूमि को स्वयं ही,
अपने हाथों से नष्ट कर रहे हैं।

ऐसा दिन न आए,
प्रदूषित हिमाचल यह कहलाए।
विकास की राह पर हमे चलना है,
स्वच्छ हिमाचल का निर्माण हमे करना है।

कोशिश जारी है

BY KRISHMA
20020104004
ECE (2020-2024)

कोशिश जारी है,
घोंसले से निकल कर नभ को पाने की,
दूर क्षितिज तक पंख फैलाने की।

कोशिश जारी है,
जटिल रास्तों से होकर भी मंज़िल को पाने की,
भयंकर तूफान में भी नौका पार लगाने की।

कोशिश जारी है,
जीवन में एक नया मुकाम पाने की,
आज को बेहतर
और कल को बेहतरीन बनाने की।

कोशिश जारी है,
मेहनत को मित्र
और मंज़िल को मीत बनाने की,
स्वयं से लड़कर स्वयं को जिताने की।

कोशिश जारी है,
खूद को यह विश्वास दिलाने की,
की अब बारी मेरी है इतिहास बनाने की।

वजूद

BY AKSHIT SHARMA
20010101007
CIVIL ENGINEERING (2020-2024)

सिफ़र सा वजूद है मेरा,
जो मुझ में मिला मेरा बनके रह गया।
हज़ारों ख़्वाब थे ज़हन में मेरे,
मगर कोई तारा न टूट जाए
मैं इसी ख़्वाहिश पर टिका रह गया।
पहाड़ो के दिल में भी दरिया बहता है,
न जाने क्यों मैं उसे पत्थर समझता रह गया।
दरिया तो पास रहता है उसके,
नासमझ मैं उसे अशकों की कीमत समझाता रह गया।
चेहरे की बनावट तो दुनिया को भाती है,
मैं तो उसकी मासूम आँखों में खोया रह गया।
आखिरी पन्नो में वो किरदार अलग हो गए,
जिनको मिलता देखने के लिए मैं किताब का हर पन्ना पलटता रह गया।
यूँ ही छलक गए होंगे कुछ आंसू मेरे,
फिर क्यूँ मैं उसकी याद का कसूर बताता रह गया।
और सिर्फ मुस्कुराहट ही काफ़ी थी उसकी मेरे ठीक होने के लिए,
मैं भी बेवजह ही हकीमों से अपना इलाज करवाता रह गया।

Kindness

BY VISHAL SHARMA
1901041060
ECE (2019-2023)

Just I, I, I .... echoes everywhere
Chirping of birds, gone somewhere,
No morning! chilling blindness
Trees awaiting for kindness.

Little cute fleet, awaiting ashore
For ship to get aboard,
Adopted by despondence
A hug is all needed for happiness.

Gold, diamond shines so bright
Humanity looks dull! But it's Alright,
Random good morning! Might make a day
Who knows! poor might make 'hi'.

"Superpower" what all wants
Who is supreme let's ponder,
Batman, Superman,.....Spiderman
Hey! what about 'Kind man.

Let's sing the song of oneness
The rhymes of God who gonna bless
Leaving all our selfishness
Let's move towards Kindness, Kindness.

I like to embrace myself

BY SARIKA KUMARI
1901041046
ECE (2019-2023)

I woke up in the morning,
Looking like a witch.
Messed up hair and my voice out of pitch.

I am same as you who don't like to bath everyday,
I am an average person, whose day starts with a pray.

Sometimes I feel like dying
I try hard everyday, and still trying
I was told sometimes,I am not good enough
Somedays I am weak and other days I am tough.

I often like to talk with myself
I try not to get affected by negativity and anything else,
I often stand in front of mirror and admire the inner me
Cause' sometimes I like to embrace myself.

A SOBBING HEART

BY ATUL DHIMAN
20010104017
ECE (2020-2024)

Does it matter if my words fumble?
can I get hurt if I am humble?
I know, I am not always right
but I have learnt to always walk towards the light.
I am fragile, please do not hurt
I want to be clean, please do not put the dirt.
if I don't talk, doesn't mean I am bad,
if you know the 'real me', you'll be glad.
I want to know people,
look inside their soul, just a little
but they are going to hurt me, it is a gurantee,
as if they are hungry and I am an apple tree.

Let me take my time

BY RITULESH MOHAN
18BT010142
CIVIL ENGINEERING (2018-2022)

This world is mine,
this life is mine
Let me take my time
This story is mine,
this reality is mine
Let me take my time
The victory is mine,
the defeat is mine
Let me take my time
Let me do it in my way,
let me take a break
Let me learn by my mistakes
The options are mine,
the decisions are mine
Let me take my time.
The sleep is mine,
the nightmares are mine
Let me leave a story behind
The vision is mine,
the mission is mine
Let me take my time,
Let me take my time.

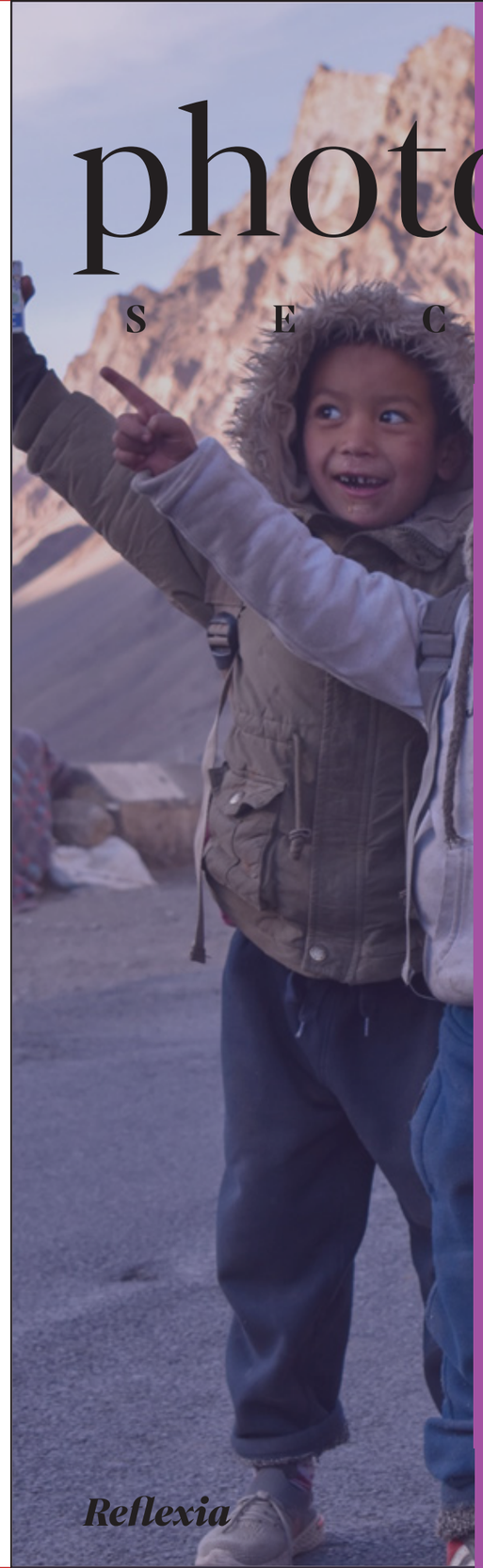
"MOM" THE WORD SO SMALL

BY VISHAL SHARMA
1901041060
ECE (2019-2023)

Mom the word so small,
Yet just an echo gives a bliss to all
If you want to learn how to bear the pain,
Then her name is the one, which comes to brain.
God feels jealous,
As she spreads her graces,
The shelter of her lap
Give the relief, can't be found in world camp.
Scolding , nagging of yours
Teaching things that no one taught.
Giving the support when no one's behind,
You were the one who always read my mind.
Even the dark recedes back,
On seeing your presence in the pack.
Aura of yours full of positive vibes,
Just as moonlight circumvents the moon in the night.
Only god present on the earth,
is my mom who gave me birth.
Never hurting anyone's feeling,
Always making funny faces,
The god also seeks your presence,
On seeing you vanishing grievance.
But hey! God don't you always think like that
Because her loved ones always hold her back.
I hope mom, we just always be together.
I can't afford to lose you mother.

photography

S E C T I O N



HORIZON
vista skyline

MACRO
life through lens

WILDLIFE
flora & fauna

OTHERS

Anuj Chaudhary
M.E. 3rd Year

Piyush
C.E. 4th Year


Aryan Doehr
ME 2nd Year


Kunal Dawal
ECE 2nd Year


Arundhati Jasta
ECE 3rd Year


Somesh Chander
C.E. 3rd Year


Atul Kumar
ECE 3rd Year


Bhaskar Sharma
C.E 1st Year


Munish Awasthi
C.E 2nd Year


Rashi Sood
E. C.E 2nd Year


Ritul Mamtta
C.E. 3rd Year


Avhinav Dhiman
M.E. 2nd Year

ART

S E C T I O N

Kunal Dawal
ECE 2nd Year

Anshul Mishra
M.E 4th Year

Ashwani
M.E. 2nd Year

Dheeraj Kumar
C.E 2nd Year

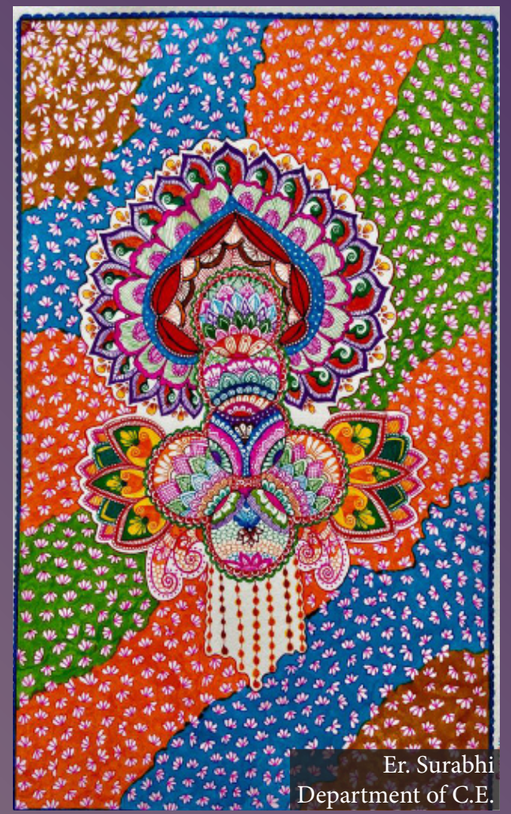
Tushar singh Chauhan
M.E 1st Year

Diya Sharma
E.C.E. 2nd

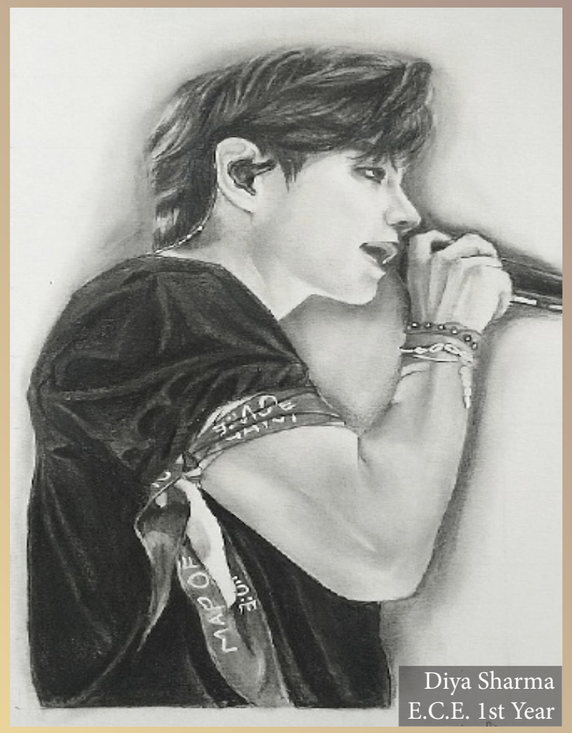
Chand nagpal
C.E. 3rd Year

Narender Negi
E.C.E. 3rd Year

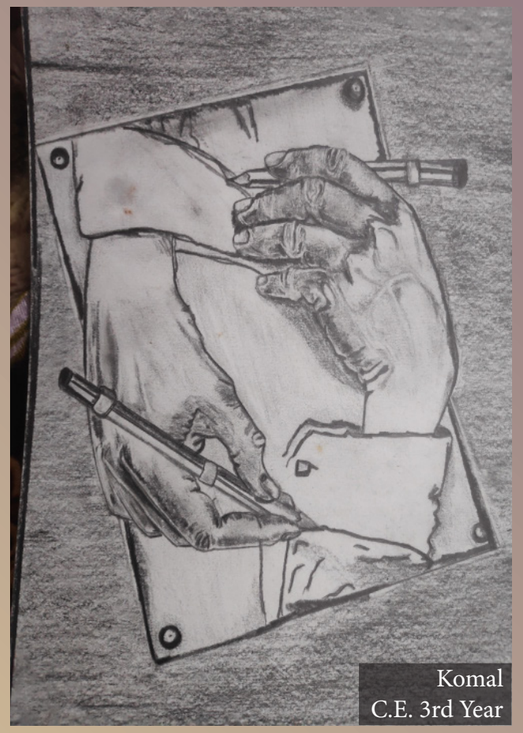
Artika Bansal
M.E. 4th year



Er. Surabhi
Department of C.E.



Diya Sharma
E.C.E. 1st Year



Komal
C.E. 3rd Year

Akshita Gupta
E.C.E 3rd Year

Ashutosh Vohra
C.E. 2nd year

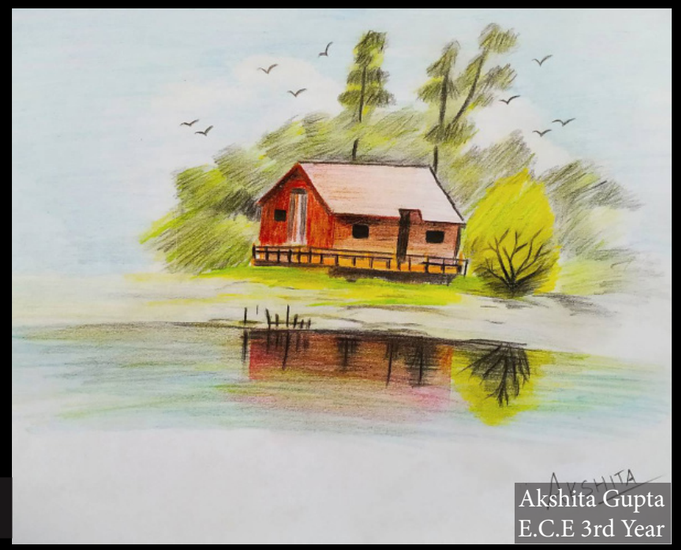
Art by :- Narender Negi

Narender Negi
E.C.E. 3rd year

Er. Surabhi
Department of C.E.

Er. Surabhi
Department of C.E.

Jahanavi Thakur
M.E. 4th year



Akshita Gupta
E.C.E 3rd Year

TECHNICAL ARTICLES

Superelastic Tire

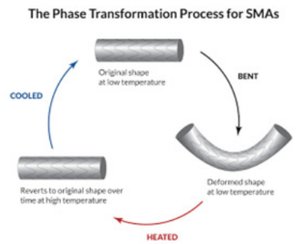
BY DEEPANSHU SHARMA
18BTO40220
MECHANICAL ENGINEERING (2018-2022)

The superelastic tire is a non-pneumatic tire developed at NASA's Glenn Research Center. This tire is made up of NiTiNOL. NiTiNOL is a Nickel and Titanium shape memory alloy developed at the Naval Ordinance Laboratory in the United States. Shape memory alloys (SMA) have the ability to memorize their shapes at a high temperature and recover large deformations imparted at low temperatures on thermal activation.

Shape memory effect (SME) is the recovery of strain imparted at lower temperatures as a result of heating. Common SMEs are-One way and Two-way effects. In One way SME material only remembers its high-temperature shape whereas in Two way SME material remembers both its high and low-temperature shape. It happens through a combination of thermal and mechanical cycle training, which induces micro-stress in the material. At normal temperature, the material possesses a twinned martensite phase. Upon loading, it transforms into a detwinned shape, and on heating, it gets into an Austenite phase and reverts to the martensite phase when cooled. In this tire load-bearing components are made up of NiTi and its derivatives. These SMAs are capable of undergoing significant reversible strain (up to 10%), enabling the tyre to withstand more deformation than other non-pneumatic tires.

Superelastic tire with shape memory

Features:
Safe, strong, robust, simple, versatile, lightweight.
Applications:
Aerospace, high-performance sports, search and rescue, military, and industrial machinery are some of the applications.



Floor Cleaning Robot Using IOT Project

BY SURJEET KUMAR, TAMANNA, VIVEK SHARMA.
18BTO10453, 18BTO10455, 18BTO10460
ECE (2018-2022)

OBJECTIVE

The main aim of this project is to design an automatic floor cleaning robot that can work in places which are hazardous for human beings. To develop an autonomous robotics system we have used the idea of internet of things.

Cleanliness plays a vital role in daily life. It is the process of keeping our surroundings dust-free, and diseases free for social and intellectual health.

Machine-controlled floor cleaners were introduced for the sake of the betterment of mankind. Cleaning is important for every place. Sometimes this is easy and sometimes difficult. We often appoint people for the purpose of cleaning and pay them, but sometimes cleaning is required in areas where the presence of living beings is dangerous and in such cases, we need an alternative to manpower.

To avoid this limitation of personnel we require more technologies.

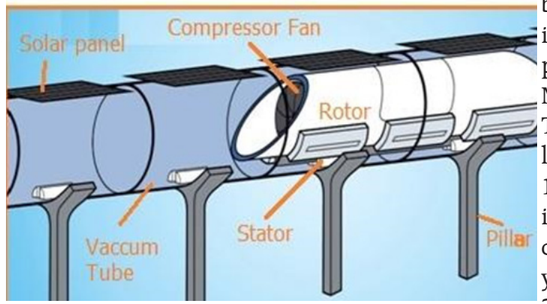
Automation is a great solution to this problem. So we made an autonomous floor-cleaning robot that operates on the concept of the internet of things and Arduino Uno programming.

Hyperloop

BY KARTIK PARASHAR
17BT010227
MECHANICAL ENGINEERING
(2017-2021)

A innovative technological quantum leap
The fifth mode of travel

The pioneer of the fastest mode of travel, the 'Tech Tycoon', Elon Musk, is known for his visionary thinking and out-of-the-box ideas. His pertinacious efforts and dedication have created yet another boom for future technology. This time it is called "Hyperloop".



Brought up by a joint team of "Tesla and SpaceX". Currently, there are two clashing companies named "Virgin" and "Hyperloop TTransportation Technologies" battling to create high-speed and safe hyperloops.I'm sure you'd be interested in learning how it works: A hyperloop is a sealed tube or system of tubes through which a pod can travel free of air resistance or friction, transporting people or objects at high speeds while being very efficient and thus drastically reducing travel times over medium-range distances (referenced by Wikipedia). It uses electric propulsion and magnetic levitation, having minimum friction and air resistance. Magnetic levitation uses two sets of magnets, one to repel the train from the track and lift it upwards, and the other to move the floating train along the track at a considerable speed with reduced friction.The second principle is the use of a low-pressure vacuum-sealed environment for the passenger pods to travel through. By removing air from tubes and having no contact with the ground, the pods face little resistance as they move.Air pressure inside the tubes is equivalent to flying above 2000 feet above sea level, enabling pods to reach over 760mph (1223 kmph+) using very little energy.

Where is the hyperloop?

Hyperloop One has entered into an MOU with the Government of Maharashtra to build a hyperloop transportation system between Mumbai and Pune that would cut the travel time from the current 180 minutes to just 20 minutes, which will be completed by 2022. Virgin hyperloop is also now working in partnership with the US, Mexico, Canada and UK

The advantages of hyperloop

1. It may be possible to live in a city or region of the country other than where you work.
2. It could be powered by renewable technologies like solar and wind.
3. The technology provides twice the speed of an aircraft in terms of transportation.
4. It has very low power consumption.
5. It is resistant to earthquakes.

Hyperloop challenges or disadvantages:

1. The capsule's high speed (nearly at the speed of sound) may cause dizziness in passengers due to vibration and jostling.
2. The initial cost of investment to have the system in place is very high. Long vacuum chamber manufacturing necessitates more technical skills and is costly and risky to maintain.
3. As the hyperloop uses steel for track, it expands and changes shape when the outside temperature changes. This may destroy the track of hyperloop technology. This needs to be considered while designing the system based on the environment of the location where it is being deployed.

This incredible transportation system will become a part of our lives in the future. I hope to see further development in this futuristic technology.

GREEN IoT

BY ARUNDHATI JASTA
19010410111
ECE (2019-2023)

In 1964, long before anything like the internet even existed, Karl Steinbuch, a German computer scientist, predicted that "In a few decades of time, computers will be interwoven into almost every industrial product". Since then, we have gone so far with technology and have seen such progress that once appeared unfathomable. In reality, people have invented technologies that are more efficient than they themselves are. Many technologies played their part in this, and IoT is one of them. On one hand, technological advancements, including IoT, have made our lives better and easier, but on the other hand, the fact that they have a hefty contribution towards the increasing carbon emissions and environmental pollution cannot be ignored. Internet of Things (IoT) devices have significant environmental impact, both positive and negative. The IoT's environmental impacts are important to consider. The dark side is that, for one thing, IoT devices produce and send a significant amount of data. All that data requires energy as it passes through the network. On top of that, many of these devices run on batteries. The more frequently batteries need to be replaced, the more batteries end up in landfills. Billions of "things" mean billions of batteries, which can cause a growing problem as our appetite for the IoT grows. According to global consultants Gartner, Inc. (the world's leading information technology research and advisory company), ICT (Information and communications technology) presently accounts for approximately 0.86 metric gigatons of carbon emissions annually, which is about 2% of global carbon emissions. In this scenario, Green-IoT has emerged as a very promising solution for tackling the environmental crisis we are currently facing. Evolution is an integral part of technology, human beings, and our surroundings. But what if this technology could become green and reduce the impact of greenhouse gases?What if this is the upcoming future? A future that has been restored and will provide long-term development for future generations. This is what green IoT is all about. The Green Internet of Things (G-IOT) basically focuses on energy efficiency and reducing the impact of CO2 on our environment. "Green IoT" is defined as the energy -efficient ways in the IoT to or to eradicate the same in the IoT itself. It is the practice of manufacturing, designing, and disposing of computers and their associated subsystems (i.e., printers, monitors, communication systems, and storage devices) efficiently and more frequently, but with reduced effects on society and the environment. In the former case, the use of IoT will help reduce greenhouse gas emissions, whereas in the latter case, further optimization of the IoT greenhouse footprint will be taken care of. The entire life cycle of green IoT would focus on green design, green production, green utilization, and finally green disposal/recycling to have no negative consequences or very small impact on the environment. As people are becoming more and more aware of their surroundings with the growth of technology, they are also becoming aware of the consequences that these technologies leave on our environment. Recent technological advancements have led to an increase in the carbon footprint. To reduce this carbon footprint and to develop sustainably, green IOT technology is of the utmost importance. Green networks in IoT will contribute to reducing emissions and pollution, make the most of environmental conservation and surveillance, and minimise operational costs and power consumption.

Lean Manufacturing

Abhinav Chaudhry
18BT0102O2
MECHANICAL ENGINEERING (2018-2022)

"No success or achievement in material terms is worthwhile unless it serves the needs or interests of the country and its people."
-J R D Tata

Minimizing waste to ensure a better quality of products. Lean manufacturing, also known as lean production, is a manufacturing practice that considers the expenditure of resources for any purpose other than the creation of value for the end customer to be wasteful and thus a target for elimination. The processes and the methods employed to transform tangible inputs (i.e., raw materials, semi-finished goods or subassemblies) and intangible inputs (ideas, information, and knowledge) into goods and services. In any manufacturing industry, the production process is of prime concern as it brings direct or indirect money or profit to the particular firm.

Lean manufacturing is a Japanese concept which focuses on the elimination of 3Ms, which are

- **Muda:** According to this, we have seven types of waste.

1. Overproduction
2. Waiting
3. Conveyance
4. Motion
5. Processing
6. Inventory
7. Defects

So, if we want to maximise our output, we must eliminate these seven wastes.

- **Muri:** This term means that when a problem is encountered, we won't blame the culture; rather, we will focus on how to solve the problem. People are not problems; they are problem solvers.
- **Mura**: Whatever the problem, always use standard procedure.

There are five S for lean manufacturing.

1. Sort
2. Stabilize
3. Sweep
4. Standardize
5. Sustain

For example, we can illustrate this fact as an example. If we have a cellular layout and we have to set up our machines, and if we arrange them randomly without any proper configuration, that might lead to production delays, so we have to sort out which machine will do what works after that, set things in order (stabilizing). To enhance the performance of machines, we must keep them clean (sweep). Once the setup is done, we have to improve continuously, leading to the standardisation of products. This process has to be continued with discipline every time (sustain).

Lean manufacturing is based on a pull system, which is based on a rigorous forecast system. That means keeping the inventory as small as possible by keeping track of demand. It is tough to maintain this type of coordination. There are several such systems, but

the most popular one is the KANBAN system. This is basically a card which tells the work in progress. In modern terms, a bar code. This KANBAN system helps in reducing handling costs, degradation costs, and ordering costs as this card will have real-time information about inventory levels.

Productivity Improvement in Toyota Systems using Lean Manufacturing:

Toyota's development of ideas that have become lean with time may have started at the turn of the 20th century with Sakichi Toyoda. The seed of plantation was sown in a textile factory with a loom that stopped itself when a thread broke. Toyota's journey with JIT may have started back in 1934 when it moved from textiles to producing its first car. In 1936, when Toyota landed its first truck contract with the Japanese government, his processes faced new problems, and he established the "Kaizen" improvement teams. He made sure that there would be the best quality outputs by intense study of each stage of the process.

Toyota uses the following methods or steps of waste elimination:

1. Overproduction and early production: producing over customer requirements, producing unnecessary materials.
2. Waiting: time delays, idle time (time during which value is not added to the product).
3. Transportation: multiple handling, material handling delays, and unnecessary handling.
4. Inventory: holding or purchasing unnecessary raw materials, work in progress, and finished goods.
5. Motion: actions of people or equipment that do not add value to the product.
6. Over-processing: unnecessary steps or work elements/procedures.
7. Defective units: production of a part that is scrapped or requires rework.
8. Reduced Setup Times: All setup practises are wasteful because they add no value to labour and equipment.
9. Small-Lot Production: Producing things in large batches results in huge setup costs; high capital costs of high-speed dedicated machinery; larger inventories; extended lead times and higher defect costs.
10. Employee Involvement and Empowerment:Toyota organised their employees by forming teams and delegating responsibility and training for a wide range of specialised tasks.
11. Quality at the Source: To eliminate product defects, they must be discovered and corrected as soon as possible.
12. Equipment Maintenance: Toyota operators are assigned primary responsibility for basic maintenance since they are in the best position to detect signs of malfunction.
13. Pull Production: This method is used to reduce inventory holding costs and lead times.
14. Supplier Involvement: Toyota treats its suppliers as partners, as integral elements of the Toyota Production System (TPS).

CASE STUDY

Bajaj automobiles produced one Bajaj pulsar bike in 40 seconds. It means 90 vehicles per hour, and this figure rises to a takt time of 20 seconds and 180 vehicles per minute in 2008. Takt time can be defined as the time taken by one BAJAJ pulsar on the final assembly line. This was done by adopting some simple methods and principles of lean manufacturing.

New Generation Anti-Radiation Missile

Also known as the NGARM (New Generation Anti-Radiation Missile) or simply DRDO ARM (Anti-Radiation Missile), RudraM-1 is intended for the Destruction of Enemy Air Defenses (DEAD) roles where it is tasked to destroy enemy radar installations. This functionality is achieved with the missile's capability to detect and home in on the source of Radio Frequency (RF) sources, thus destroying the ground-based early-warning systems or other anti-aircraft equipment of the enemy.

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In the event of an air campaign, initial sorties are always performed by SEAD aircraft, which employ methods of hard kill (by using munitions and physically destroying anti-air infrastructure) and soft kill (by employing electronic warfare methods) to render the enemy air defence sites useless, ensuring air superiority which is vital for future strike missions by friendly aircraft.vIt is reported that the missile has a "launch speed" of Mach 2, i.e. it can even be launched from the aircraft while it's flying at very high speeds. This gives an additional ability to the pilot, who can fire the missile while aggressively approaching hostile territory or coming back from it- while performing the SEAD missions. Purportedly, it has a range of 250 kilometres,

RudraM: STRIKE WHEREVER WHENEVER

BY KIRTI THAKUR
20010106029
MECHANICAL ENGINEERING (2020-2024)

which is about 100 kilometres more than what was reported earlier. The missile's range could depend upon the altitude at which the carrier aircraft is flying.The missile has both lock-on before launch and lock-on after launch modes.

The NGARM project was started in 2012 and was scheduled for completion in 2017- with a goal to have an indigenous answer to the American AGM-88E AARGM (a similar anti-radiation missile). However, the development took a serious track only when the Indian Air Force picked up interest in the missile, which led to the first captive flight trial in the spring of 2016.

The missile marked its first test firing on 18th January 2018, where it was successfully flight-tested for the first time on parameters such as auto-launch sequence, store separation, control guidance, aerodynamics, thermal batteries, airframe and propulsion without a seeker which were all proven successful.

The development of the NGARM, or or as it's now called the "Rudram-1," was also facilitated by the experience gained by DRDO to develop the Astra and Barak-8 missiles

The missile's primary launch platform is the Su-30MKI, which is the backbone of the IAF's fighter fleet. It is also planned to be integrated into the Mirage-2000, Jaguar, and the LCA Tejas.

vvvFuture:

To make sure the family continues to grow with improvements and compatibilities to deal with future challenges, additional variants with dedicated roles are planned to be rolled out in the coming years.

RudraM-II:

As per the assumptions based on a mockup photographed in January 2021 during the inauguration ceremony of the Integrated Weapon System Design Centre at DRDO's Dr APJ Abdul Kalam Missile Complex in Hyderabad, it is an 800 kg weighted missile with an expected range of approximately 300 km. It further differs from RudraM-1 in the context of the intended target, which will be fortified hostile installations. RudraM-IIA will be derived from the same design but for different targets and varying warhead capacity.

RudraM-III:

RudraM-III is another missile in the family and with bolstered range, precision, speed, and agility, against targets. There are several assumptions about its capabilities, some of which are about its hypersonic speed and beyond the 550 km range. However, these are yet to be confirmed by officials in any public space.

TRAVELOGUE

TRAVEL BEFORE YOU RUN OUT OF TIME

BY Nimish Gupta
1901041012
ECE (2019-23)

Spiti Valley, located high in the Himalayas, is home to many picturesque destinations. Surrounded by high mountain ranges, it's a cold desert valley covered in snow most of the year. With destinations like Dhankar, Langza, Kee monastery, and Chandratal, Spiti has become a prominent tourist destination.

It was the start of May 2021, and after a year of being trapped in a pandemic, I was craving to run away from assignments and tutorials that were bumming me hard.

One afternoon, my friends called and said they were planning a trip to Spiti Valley and were currently staying at Spillow, 300km away from me and that too through the treacherous roads of Himachal Pradesh. But as they say,

"The journey of a thousand miles begins with one step."

So I packed my rucksack and sprinted to the bus stand. Luckily, I got an HRTC at 5 pm. And after 12 hrs of nocturnal torture, I was freezing at the Reckong Peo bus stand at 5 'o clock in the morning waiting for another bus.

It was pitch dark and starkly cold. I had to put on every sweatshirt and jacket I had packed. After 2 hours, the bus didn't come, but God showed up himself.

Nope, not the real God.

It was a chaiwala, but trust me to my shivering soul, he was no less than God. At last, the bus showed up, and so did the sun. And as I saw the

mountains so tall, all covered in snow and sunshine making their tops glitter, I realised that the torturous tour was worth it. The trip was a success for me right at that moment. But the journey hadn't ended yet. We couldn't waste much time reaching Kaza, so as soon as I reached Spillow, we left for Spiti Valley, all three of us.

We crossed the confluence of the Sutlej-Spiti and reached Nako.

Nako is famous for its Gompas and the sacred lake, which was frozen at the time. We had breakfast there and left for our next stop, Kaza. I hadn't slept throughout the journey, thanks to the bus driver, and was so tired but the views! The godly mountains, frozen waterfalls, and splashes of orange, yellow, and white everywhere. It was so mesmerising that I didn't sleep at all. The journey from Spillow to Kaza was magical!!

We reached Kaza at 7 in the evening, freezing, and to our surprise, every local business was closed because of the off-season and post-pandemic restrictions. We managed to get one room to stay in, but no food.

The next day, we explored Kaza and went to Kee Monastery, which is a Tibetan Buddhist monastery located on top of a hill at an altitude of 4,166 metres. It is the largest and oldest monastery in the valley, with a panoramic view of the Spiti valley. The gompa bells and burning incense sticks make the surroundings peaceful and work wonders to soothe your soul.

We couldn't explore Kibber, Hikkim, Dhankar, Langza or Chandratal because everything was closed due to the pandemic. So after a 24-hour long and crazy journey, with empty stomachs, we returned to Spillow, but all of this was worth it.

> The mountains make you realise that in the end, you won't remember the time you spent making assignments or working in the office, so travel before you run out of time!! The most unplanned trips are the most memorable ones.
>
> The immense beauty and rich culture of Spiti are breathtaking. It gives you peace and calmness.

Kareri Lake Trekking

Atul Kumar
1901041009
ECE (2019-23)
Pankaj Chauhan
1901011030
CE (2019-23)

The Kareri lake is located in Kangra district of Himachal Pradesh, it is formed by the inflow of melted waters from the Mankiani peak. The trek to Kareri lake is one of the most beautiful alpine treks in H.P .It was a pleasant day when my friend Aryan called me and put Pankaj on the conference as well. He quickly told his trekking plan to Kareri. Pankaj and i also agreed, as we had a few days off to college.

Day-1

The next morning i arrived at the bus stand with some money and baggage, where Pankaj & Aryan were waiting for me. From there, we took a bus to Kangra, after that we took a bus to Dharamshala from there. We could go to Kareri from there, but we had to have fun, so we thought of staying one night in McLeodganj. From there it was easy and close to go for Triund trek but we already went there last year. Mceodganj is a hill station near Dharamshala, popular among trekkers. Its culture is a beautiful fusion of Tibetan with some British influence. Eventually we reached there and booked a room in a hotel. We kept our luggage in the room and went for a walk outside. We ate our food in our room and to make that time more memorable, we also had a little drink.

Day-2

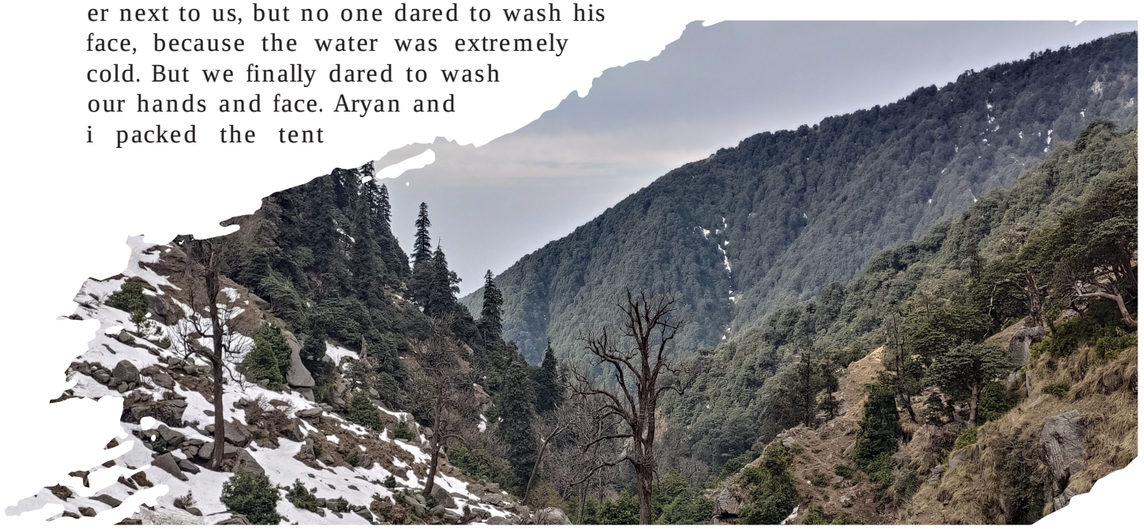
Next morning we packed our things and left to Dharamshala. From Dharamshala we took bus and soon reached a beautiful village Ghera, this place has immense peace and surreal landscape from which one cannot take his sight off. From Ghera we could start our trek but we decided to take a taxi to Kareri village as it would become 10 km from Ghera to our starting point of trekking. We reached Kareri village and rented a tent there, soon we started our trekking from Kareri village. We were told by the shopkeeper that

Kareri lake is currently frozen and it is difficult to get there. The three of us had decided that we would go as far as we could. We reached a little beyond midway after walking 8-9 kilometres, it was difficult to go beyond that because of snow, so we decided to camp there. I and Aryan setup the tent and Pankaj collected dry woods. We lit fire after a lot of difficulty. Let me tell you that there were only three of us camping there that day on that mountain. We made and ate maggi. We went for sleep after talking for a while.

Day-3

I got up in the morning due to the rays of the sun, Aryan and Pankaj also got up. The beauty of that place is mesmerising. There was a river next to us, but no one dared to wash his face, because the water was extremely cold. But we finally dared to wash our hands and face. Aryan and i packed the tent and Pankaj packed all our bags. We stayed there for while and took pictures of each other in that beautiful place. After some time we were ready to go down. we started going back down. So what happened that we didn't reached the lake, we still enjoyed alot. Now the three of us had beautiful memories of that place.

And this was some memories of that wonderful journey....



EVENTS

75 Years of Independence

August 15, 2022 will mark the completion of 75 years of our independence as a nation. On August 15, 1947, we became a free nation. Bhagat Singh once said, "May the sun in his course visit no land more free, more happy, more lovely, than this our own country." And then he and many others died for this nation. The independence we got about 75 years ago was the result of the struggle of years and the blood of many who were lost to the cause. This day reflects our pride and solidarity in our nation's diversity. We are the people of a free nation, and there are many who protect its freedom on the borders all day and night. There are many who have sacrificed themselves for the country, and on this Independence Day, we remember them. To remember and celebrate the freedom fighters to whom we owe this freedom, the government of India has decided to name the celebration "Azadi Ka Amrit Mahotsav". It will be celebrated for an entire year from 2021 to 2022 with several events being held across the country.

50 Years of Statehood

Himachal Pradesh, the state with beautiful valleys, brooks, highlands, orchards, and splendid culture, originated as the 18th state of the Indian Union on January 25, 1971. On January 25, 2021, the state completed its 50 years. The golden jubilee of our magnificent home was celebrated all over the state. A postage stamp was also released. Several documentaries were released; exhibitions, events, and competitions were organized. Himachal Pradesh has come a very long way. From getting recognition as a state in 1971 to celebrating its golden jubilee, it is still thriving and breathing as a state, always embracing its rich culture, which has remained untouched for years due to its difficult terrain.

Our college also celebrated the golden jubilee of our state with delight. College-level painting and poetry competitions were organized. Students showed their amazing talents and gave a tribute to the 50 years of our lovely home. There was a sense of gratitude and pride in being a himachali in everyone.

Competitions Held Under 75/50 Years Celebration

Painting Competition Winners

1st Avantika Bhardwaj
ME 3rd year

2nd Anurag Verma
ME 4th year

3rd Nitika Anand
CE 2nd year

Poetry Competition Winners

1st Aakanksha
CE 4th year

2nd Aditya Sharma
CE 3rd year

3rd Sarika Kumari
ECE 3rd year

Institute Level Technical Paper Presentation Competition

Mr. Vivek Lohmor 1901011059 CE Sustainable Development Practices in Civil Engineering
Ms. Arundhati Jasta 1901041011 ECE IOT and Its Applications
Mr. Abhinav Chaudhary 18BT010202 ME Electrical Vehicle
Ms. Vanshika Sharma 20010107009 TE Technology/Trends reshaping in Textile Industry

Institute Level Working Model/Project Competiton

Smart Dustbin ECE First
RH Trike ME Second
Portable CNC Router Third

State Level Working Model/Project Competition

Abhay Singh, Kulshresth, Sumit Sharma
JNGEC, Sundernagar
RH Trike
First

Zubaur Ahmad Sofi, Pragun Jaswal
JNGEC, Sundernagar
Smart Dustbin
Second

Abhinav Dhiman, Himanshu Rana
RGGEC, Nagrota Bagwan
IOT Smart Home
Third

Vikrant Chandel, Vikas Kumar, Amit Kumar
GHEC, Bandla, Bilaspur
Home Automation
Fourth

Sports Meet 2022

Organizing a college sports fest is a momentous accomplishment and the diligent work pays off when you feel the happiness in the essence of your mates and educators. Planning out a fest is not an easy task, and it cannot be fruitfully accomplished until each and every student is involved. Despite the fact that it appears to be an incredibly fun task, arranging a college sports fest requires a great deal of planning. It takes a lot of time, effort, and resources to organise a college sports fest.

Sports is one of the greatest examples of hard work and dedication a human can demonstrate. With these words in mind, a three-day inter-college sports festival was held at the college from January 1st to January 3rd, 2022. The fest was organised by the college's sports committee, which was guided by Dr Himanshu Monga (HoD, Electronics and Communication Engineering) and Er. Ankush Sharma (AP, Textile Engineering). As it was an inter-college sports event, the students of Mahatma Gandhi Government Engineering College (MGGEC), Jeori, were also invited to participate.

JNGEC Sundernagar was the host of this event. Various games were arranged for the students to participate in, and teams were formed according to the various departments of our college as well as MGGEC. The main games in this sports meet were volleyball (boys and girls), chess (boys and girls), badminton (boys and girls), carrom board (boys and girls) and table tennis (boys and girls). The winning teams got trophies and certificates for their extraordinary performance.

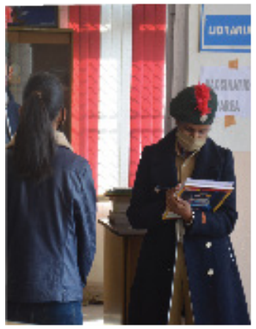
The grand finals of all the matches were held on January 3rd. The winning teams are mentioned below

Games	***Winner Team***	
	Boys	***Girls***
Vollyball	CE	ECE&TE
Badminton	ECE	MGGEC
Chess	CE	CE
Table Tennis	ECE	MGGEC
carrom	TE	MGGEC

The sports meet ended with the prize distribution ceremony in which all the winners were awarded by the Chief Guest, Dr S.P. Guleria (Director-cum-Principal JNGEC Sundernagar). He appreciated the efforts of the sports committee and encouraged the students to participate wholeheartedly in every such event.

This event could not have been such a huge success without the hard work and teamwork of the entire sports committee.

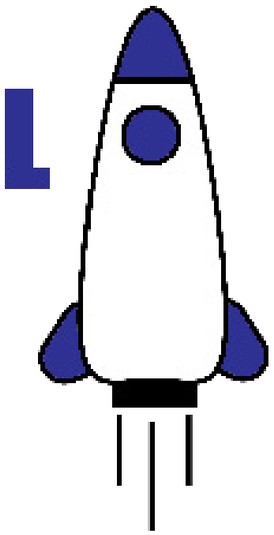
VACCINATION DRIVE



To augment the fight against the COVID 19 outbreak and supplement the government's SOPs, the institute organized two rounds of vaccination drives on the college premises. The first vaccination drive was organized on 8th January 2022 where a total of 80people were vaccinated out of which 70 were from the Jawaharlal Nehru Goverment Engineering College Sundernagar and 10 from other colleges. The second vaccination drive was organized on 17th February 2022 where a total of 64 people got vaccinated out of which 60 were from J.N.G.E.C. and 4 from other colleges. The vaccination drive was organized by strictly following the Standard Operating Procedures with the assistance of an efficient team of professionals. To ensure the smooth organization of these drives, the NCC cadets and NSS volunteers gave their services.

Sh. Vivek Chandel, HPAS
Director Technical Education

STARTUP CELL



Workshops Conducted by Start-up and sponsered by TEQIP III

- *First Brainstorming session on 21st December 2020*
- *Implementation of Start-up and NISP policy in the field of engineering on 30th January 2021*
- *Rendezvous with Innovation and Startups at JNGEC on 06th ruary 2021*
- *Benefit of startup in students' life on 06th February 2021*
- *Transcending Innovations on 6th MARCH 20*

PREVIOUS BATCHES

"About two years ago in 2020, the world shut down reducing us to the finite boxes of our own homes we lived in. As time went by, the finite boxes felt like they had an infinite perimeter. One day we were happily enjoying the days, going to college, underestimating the joy of living such a life and suddenly it grew silent. Some of us who despised the boring classroom lectures were now dying to attend one. Many of us could never see those again leaving their college lives without getting to say a proper goodbye. How did time pass so quickly? Why couldn't we hold on to it? I tried holding it firm in my hands and it slipped like sand. We made friends, lived, loved and laughed but what did we gain other than losing 2 years to this pandemic? There were so many uncountable goodbyes unsaid and it must've felt horrible to let go of things before we could even get a glimpse of their beauty. We dedicate this section to the people who were left yearning for more and did not get to say their goodbyes properly to this college, the place and the people."

DEPARTMENT
OF
ELECTRONICS & COMMUNICATION

2016 - 2020

Aarushi Thakur, Aayush Sharma, Abhishek Sharma, Abhishek Thakur, Abhishek Verma, Adarsh Chaudhary, Akshay Thakur, Anish Kumar, Anjali Thakur, Ankita Suryavanshi, Ankush Kumar, Anmol Verma, Anurag Rana, Apoorva Verma, Arun Verma, Ashwani Kumar, Ayush Dogra, Ayush Sharma, Deeshant Sharma, Diksha Choudhary, Divynish Sharma, Kshitij Verma, Gyan Chand, Harshita, Kanchan Chaudhary, Karan Sood, Kiran Bhatia, Mithilesh Gupta, Navejita Guleria, Nitin Raghwa, Oorja, Pradeep Sharma, Pratibha Singh, Priya Padwal, Rahul Sharma, Ruchika Thakur, Sahil, Sakshi, Sakshi Mehra, Shilpa, Shivam Awasthi, Shivani Thakur, Shivanjan Jaryal, Shubham , Shubham Sharma, Tania Sharma, Tarun Mahajan, Vishal Dhiman, Prahlad Parmar, Gopal Krisha, Malika Kaushal, Namrata , Nandini Devi, Poonam, Priyanka Chandel, Shamli Bharti, Shivani Verma, Shweta, Sirpreet Kaur, Sonika Devi,Vishal Sharma, Anamika Guleria, Poonam.

DEPARTMENT
OF
CIVIL ENGINEERING

2016 - 2020

AasthaSharma, AbhayPratapSingh, Aditi Rana, Aditya Chatak, Akshay Chandel, Akshay Kumar, Akshay Premi, Aman Thakur, Amit Kumar, Ankush Lucktoo, Anurag, Anurag Chaudhary, Ashutosh Sharma, Ayush Sharma, Deepak Sharma, Diksha Kumari, Gagan Deep, Harit Guleria, Harsha Kumari, Himani Thakur, Kamal Kumar, Kartik Thakur, Kehav Ram, Munish Nayak, Neeraj Sharma, Nitin Rana, Pallavi, Pankaj Chauhan, Pranav Sharma, Pratibha Thakur, Rahul Sharma, Rajat Kumar, Rajneesh Kumar, Rishav Kaundal, Robin Bhardwaj, Rohan Shakya, Rohit Kumar, Rohit Kumar, Salil Sharia, Sanjeev Kumar, Sarvesh Kumar, Saurav Chandel, Shabnam Thakur, Shahil Thakur, Shanu, Shashwat Kapoor, Shelly Thakur, Shiwangi, Shreya, Shweta Naik, Sourabh Thakur, Vishal Pun, Vishali, Vaibhav Gupta, Pooja, Umesh Sharma, Akhil, Sahil Chauhan, Anita Thakur, Avedan Kumar, Diwakar Sewal, Harvind Singh, Jyoti Devi Neha Thakur, Pooja Kumari, Rahul Kashyap, Ranjeet Negi, Sahara Thakur, Shivani, Swati Sharma, Vikram Sharma, Waris Abdal, Pankhudi Pa, YoginderThakur

DEPARTMENT
OF
MECHANICAL ENGINEERING

2016 - 2020

Aashish Kumar, Abhey Kumar, Abhinash, Abhinay Awasthi, Aditya Sharma, Akhilesh, Akshat Sharma, Akshay Kumar, Akshay Kumar, Akshay Sharma, Aman Dhiman, Aman Goswami, Aman Kaushal, Amit Kumar, Amit Parmar, Anup Kapoor, Ashish Kumar, Ashish Sharma, Ashtik Parihar, Atul Sharma, Deepansh Thakur, Divya Raj Singh, Kalyani Jaswal, Kamal Jeet, Karan Kalia, Kiran Kamta, Mahinder Sharma, Manik Choudhary, Manish Kumar, Manish Kumar, Manoj Sharma, Meenal Bhardwaj, Naveen Bhatia, Neeraj Kumar, Nikhil Sharma, Nikhilesh Kumar, Peeyush Kashyap, Prajjwal Bhardwaj, Prince, Pushpender Sharma, Rajat Pathania, Rohit Jaswal, Rohit Mattu, Sahil Thakur, Sanchit Thakur, Shivam Goel, Shubham Gupta, Shubham Jamwal, Sidhant Thapa, Sourabh, Sourabh Saklani, Sunny Thakur, Uday Bhushan, Uday Pratap Singh, Vivek Thakur, Yogesh Kr Sharma, Evanshi Walia, Yogesh Sharma, Prashant Thakur, Abhishek Rana, Aditya Sharma, Ajay Kumar, Aniket Singh, Mahesh Sharma, Nigam Kumar, Sachin Kumar, Sushil Kumar, Tasveer Singh, Vivek Rana.

DEPARTMENT
OF
TEXTILE ENGINEERING

2016 - 2020

Aashee Sood, Aayushi, Abhishek, Abhishek, Akash Verma, Akshit, Amit Kumar, Anjli Kumari, Ankita, Ankush, Aprajita, Deepak, Dinesh Kumar, Gaurav, Harish Kumar, Kanchan Rana, Kriti Saklani, Kumari Neha, Liviya Katoch, Mitali, Narinder, Nikhil Sharma, Nisha Thakur, Nisha Verma, Pankaj, Pooja Behl, Pratiyaum, Rahul Sharma, Raksha Devi, Rohan Behl, Sahil, Sahil, Sanjeev Kumar, Sapna, Shivali Katna, Sunder Lata, Sunidhi, Suraj Gupta, Suraj Ratnia, Vaishali Nath, Vikas Sharma, , Yogesh, Ajay Singh, Sumit, Vishal Rana, Shreedhar.

DEPARTMENT
OF
ELECTRONICS & COMMUNICATION

2017 - 2021

Abhishek Kumar, Aman Kumar, Amit Thakur, Amit Valia, Anjali, Anjana Kaundal, Anshul Thakur, Ansul Sharma, Arpan Saklani, Arti Devi, Ashish Kumar, Ashish Sharma, Avinash Sharma, Bandana Negi, Bhanu Sharma, Bhavuk, Chandermani, Chirag Thakur, Deshant Kaith, Diksha Thakur, Gaurav Thakur, Kajol Sandhu, Kapil Dev, Krishna Shashwat, Lalit Kumar, Mansi Sharma, Mukul Sharma, Neha Chaudhary, Pooja Kumari, Pranjal Abrol, Pratyush Thakur, Praveen Kumar, Preeti, Preeti, Prerna Gurung, Rahul Singh, Rajesh Kumar, Rutvek Chandel, Sachin Himalyan, Sahil Roach, Saksham Chauhan, Sourav Thakur, Shalini Chaudhary, Shiv Raj Katoch, Shivam Kumar, Shristy, Sonali, Sumeet Rana, Varun Thakur, Vinay Kumar, Virendar singh, Vishal, Himashu, Mohit Thakur, Rakesh Sharma, Aarushi, Girish Kumar, Preeti Sharma, Rahul Kapalta, Paveena, Rushank Sharma, Sahil, Shilpa, Shrishti Gupta, Swati Tank, Yogita Sharma, Manish Thakur, Siddharth Thakur, Rajat Raina.

DEPARTMENT
OF
CIVIL ENGINEERING

2017 - 2021

Aakash Dhiman, Abhishek, Abhishek Chandel, Aditya Gupta, Aditya Sharma, Ajay Kumar, Akshik Sharma, Aman Kumar, Amit Vikram Bhardwaj, Anil Kumar, Anish Pandit, Anita Verma, Arpit Sharma, Ayush Gaurav, Bhuvnesh Sharma, Chandesh Palsara, Diksha Chaudhary, Divyanshi, Indu Shekhar, Kartik Sen, Kartikey S. Sen, Khushwant Singh, Manay Sharma, Manish Kaushal, Manthan Sharma, Muhammad Farooq, Mukesh Sharma, Mukul Thakur, Naresh Kumar, Nikhil, Nikhil Kumar, Nirmal Thakur, Nitin Kumar, Nitin Thakur, Poonam, Priyanka Chaudhary, Priyanka Kumari,Rrachita Gupta, Rahul, Rahul, Rahul Guleria, Rahul Thakur, Rajatsen, Rohit Chandel, Rohit Thakur, Ruchit Chauhan, Sahil Mehra, Sahil Sharma, Saurabh, Shagun Sharma, Shivangi Choudhary, Shivansh Bhardwaj, Siman, Chandel,Sourav Kumar Rana, Subham Kaushal, Sumit Pathak, Sunidhi Thakur, Tanam Swarup Mahajan, Yashwant Singh, Sachin Sharma, Akshay Gautam, Amit Kumar, Devshrivats, Harshlata Sharma, Khushal Raj, Nikhil, Priya, Rajeshwar Prashar, Rohit Sharma, Rohit Sharma, Sunaina Kumari, Sunny Kumar, Sakshi Gautam

DEPARTMENT
OF
MECHANICAL ENGINEERING

2017 - 2021

Abhishek raghuvanshi, Aman Kumar, Aman Thakur, Amit Sharma, Amran Gupta, Anish Dhiman, Anmol Kaplish, Anshul Angira, Arpit Jamalta, Ashutosh, Ashutosh Nadda, Ayush Singh, Dishant, Divyansh, Gaurav Sandhu, Gaurav Sharma, Gulshan Kumar, Hardeepak Singh, Harish Kumar, Himanshu Negi, Himanshu Sharma, Himanshu Sharma, Himanshu Thakur, Karan Chaudhary, Kartik Parashar, Kartik Singh Kanwar, Kundan Kumar, Manish Chauhan, Manish Kumar, Manish Kumar, Mohit Kumar, Vohit Verma, Navneet Thakur, Neeraj Thakur, Nishant, Nitin Sharma, Onkar, Chand Sharma, Prateek Rao, Pushkal Negi, Rahul Thakur, Saurav, Shagun Kirmani, Shashwat Sharma, Shivam sharma,Shivam Thakur, Shivank Singh Thakur, Sidharth Sharma, sourabh rana, Tanzin Lundup, Updesh Kumar, Vinod Kumar, Vishal, Vishal, Vishal Dhiman, Vivek Chadhary, Armaan Katoch, Kritika, Aadarsh Sharma, Aman Sethi, Amit Kumar, Harish Kumar, Mukesh Kumar, Pankaj Choudhary, Puneet Parmar, Sachin Sharma, Sunil Kumar, Vijay Kumar, Vishal Patyal, Yash Karan Sodhi.

DEPARTMENT
OF
TEXTILE ENGINEERING

2017 - 2021

Aakriti, Abhishek Chadda, Aaditya Chauhan, Ajay Kumar, Akhil Bhatia, Anjali, Anshul, Ashish Chauhan,Deepali, Divya Prakash, Himadri Chatterjee,Jjagriti Thakur, Jahanvi Gupta, Jasmine Kaur, Karan Badoga, Pallavi, Ritika Panwar, Sakshi Sharma, Shveta Singh Thakur, Ankit Kumar Suman, Rijaz Ahmad Dar, Rrohit Singh, Shubham , Sourav Bhardawaj

DEPARTMENT
OF
ELECTRONICS & COMMUNICATION

2018 - 2022

Aditi, Ajijmohammad, Akib Khan, Aman Gautam, Aniket Verma, Animesh, Anirudh Thakur, Anjali, Ankit Dhiman, Ankit Sharma, Anshika, Anshul Sharma, Anshul Thakur, Ashish, Atul Dhiman, Chirag Sharma, Diksha Thakur, Dikshant Gautam, Divya Bharti, Gulshan Kumar, Happy Rana, Harshit, Kanchan Saini, Lalit Kumar, Manish Kumar, Monika, Nidhi Narin, Nikhil Chauhan, Prikshit Sharma, Pushkar, Raksham, Rishita, Ritik Dogra, Ritika Thakur, Riya Kaundal, Sachin Sahotra, Sahil Dhiman, Sahil Karswal, Sahil Sharma, Saksham Katwal, Sakshi Sharma, Sarthak Saphia, Shagun Pandit, Shakshi Soni, Shivansh Gautam Shobhit Sharma, Shreyanshi, Sumit Kumar, sumit tandon, surjeet kumar, tabbu choudhary, tamanna, tarun kumar, tushar parmar, Vishal, Vivek Sharma, Anchal Sharma, Himanshu, Madhu Bala, Neeraj Chandel, Sahil Choudhary, Vandana.

DEPARTMENT
OF
CIVIL ENGINEERING

2018 - 2022

Aadarsh, Aakanksha, Aarti, Abhinav Minhas, Abhishek Thakur, Akshat Gupta, Amandeep, Aniket Jamwal, Anshuman Sharma, Arju, Aryan Attri, Chander Sen, Chetan Kumar, Deepak, Divyansh, Jagriti Arora, Jatan Thakur, Karan Kumar, Krantiveer Singh, lovepulkit, Madhusudan, Manish Kumar, Manish Kumar, Muskan, Nitin Thakur, Pankaj Dhalaria, Piyush Kaundal, Prashant Chambyal, Prashant Dhiman, Prerna Chauhan, Prince Kumar, Pritam Kumar, Rahul Sharma, Rahul Thakur, Rahul Thakur, Raksha Sharma, Rishav, Ritin Dogra, Ritish Choudhary, Ritulesh Mohan, Rohit Thakur, Rubeen Kumar, Sahil Kumar, Saksham Rana, Saksham Thakur, Saurabh, Shivang Rattan, Shubham Kheuta, Shubham Sharma, Sonam Rohaun, Sourav Kumar, Tamnna, Tanvi Chauhan, Tanya Thakur, Trannum, Vaibhav Sharma, Vaibhav Thakur, Vibhu Mahluwalia, Vijender Singh, Vishal Sharma, Mridul, PINKY DEVI, ROOP KUMAR, Sandeep, Suman Sharma, Vinay Kumar.

DEPARTMENT
OF
MECHANICAL ENGINEERING

2018 - 2022

Abhay Singh Thakur, Abhinav, Abhishek Bharti, Abhishek Jamwal, Abhishek Mahajan, Akhil Garg, Akhil Mahajan, Alokik Rana, Aman Kumar, Ankit Sharma, Anshul Mishra, Anurag Verma, Artika Bansal, Ayush Kapoor, Chirag Gautam, Chirag Sharma, Deepak Koundal, Hitesh Paul, Ishan Thakur, Jahnavi Thakur, Jatin, Jatin Kumar, Jatin Thakur, Jyoti, Kamlesh Saini, Kanika Thakur, Ketan Kapil, Kulshreshth, Manit Sharma, Mohit Sharma, Mukesh Kumar, Nikhil Kumar, Nishant Thakur, Nitish Bhardwaj, Pankaj, Rahul Sharma, Ranjodh Singh, Rishik, Ritik, Rohit Kumar, Sahil, Sahil Dhiman, Sahil Dogra, Sahil Jadwal, Sangam Kashyap, Sarthak Sharma, Satyam Thakur, Shagun Singh, Shashikant, Shivam Bhardwaj, Shubham Thakur, Sumit Sharma, vaibhav Sethi, Vishal, Vishal Verma, Yugal Thakur, Deepanshu Sharma, Mohdazeem, Amit Kumar, Anoop Singh, Ayush Thakur, Dharmender Thakur, Manjeet Singh, Nitesh, Paramjeet Singh, Vijay Kumar

DEPARTMENT
OF
TEXTILE ENGINEERING

2018 - 2022

Ajay Kumar, Arpit Sandal, Aryan Shahi Waesie, Chirag Thakur, Gourav Thakur, Kumari Shikha, Palvi Bhatia, Pankaj Kumari, Priya Choudhary,Rraman, Ridham, Ritish Rana, Savana Jamta, Shagun Rana, Shubham Gupta, Vijya Bhatia, Vikramjeet Singh, Dikhsha Dhiman, Aakrati Gupta, Atul, Avinash Bhagat, Lobzang Khashut, Prince Saxena, Saloni Chadha, Shubham Kumar, Shubham Pal.

ALUMNI MESSAGE

Jasmine
TE (2017-2021)

Every year, we bring out our college magazine, to share our efforts, thoughts, ideas and achievements together with our voice in the form of articles, poems, reports etc. The magazine has tried not only to mirror the creative talents of the contributors but also their analytical thinking. There we are, caught up in the euphoria at the publication of college magazine "Reflexia" for the academic year 2021-2022. I am thankful to our respected faculty coordinators for entrusting us with the opportunity. Further, I am thankful for the entire magazine team who dipped their oars into the turbulent water of magazine and have sailed it to the shore of publication. I take this opportunity to thank all the dignitaries for sparing their valuable time to send their ideas. I hope this magazine will leave an impression on readers and will solve its purpose.

Anshul Angira
ME (2017-2021)

For all the hours spent scouring every nook and corner of the college for stories and content, perfecting every font size, each paragraph spacing, every colour palette, each background, every boundary layer and optimising on countless other details, I would like to congratulate team Reflexia for completing the annual college magazine.

They write when the world goes to sleep and when it wakes up, they write some more.

The above statement truly describes the spirit of how team Reflexia operates balancing college life with the Herculean task of publishing the magazine. I was fortunate enough to be a part of this coveted team, this motley crew of speakers, writers, artists, poets and singers consisting of the most polite and patient seniors to the most enthusiastic and insightful juniors.

Putting a stereotypical cheesy television quote as my message,

"I wish there was a way to know that you're in the good old days before you've already left them. "

Wishing all the students and especially the cool gang of team Reflexia, the best of everything.

Godspeed!

PS

To the handful few who actually made it this far reading this.

Congratulations, here's a cookie 🍪

ALUMNI MESSAGE

Yash Karan Sodhi
ME (2017-2021)

My name is Yash Karan Sodhi and I graduated in 2021. This college has played a huge part in my growth not only academically but personally too. The teachers supported me throughout this journey and helped me discover my interests and strengths as a student. As a part of various clubs, I witnessed the power of team work which has left a huge impact on me. The professors were supportive throughout my college life and helped me gain exposure in the field of research which I plan on pursuing further. This college shaped me not only as student but as a human too. The people I grew up with here have become a permanent part of my life and the friendships that I fostered here are going to stay forever. The only thing I want to say to the juniors and those graduating this year is that don't be afraid to experiment. Never shy away from asking for help from your peers and professors. The only way to learn is by accepting that we might not know everything and everyone has something to offer. I too have learnt this way and the growth I witnessed has been impeccable. This college has given me a lot of memories to take with me as I step into the new journey of my life. This college has a lot to offer and one must be willing to accept . I am amazed at how simply it has left a mark on my life and I am grateful that I got to be a part of this beautiful college

Sachin Himalyan
ECE (2017-2021)

I feel elated that Reflexia is coming back after 3 years. It is not only a college magazine but also a beautiful collage of collective efforts. This year's edition can also be called an heirloom since it is a journey which was started by our seniors, continued by us and is finally being completed by this year's team. This is a perfect example of coherence and teaches us a great lesson, that people will come and go but the show must go on.

The last two years affected every one of us in one way or the other, but one thing that was not affected was the creativity of people. It remained and nurtured with us in the times of absolute solitude. I would like to congratulate all the contributors who are great assets to Reflexia. It is a matter of immense rejoice that the commendable efforts of the whole Reflexia team are finally going to take shape.

"May this Journey Never End"
Happy Reading!!

ALUMNI MESSAGE

Vishal Pun
CE (2016-2020)

Hello JNGECIANS
This word JNGEC will look normal to everyone until you get graduated from this place. And after that, like seriously whenever and wherever you'll hear this word, some sort of pride, happiness and millions of nostalgic memories will hit you the hardest, and at some point, you'll think of living this college life again.
So to all the students out there in JNGEC, you all are fortunate enough to return back here after all this pandemic, so live this phase of College to the fullest, enjoy every single moment and make thousands of beautiful memories, So that when you'll look back into time you should feel happy and satisfied with your performance.
Best wishes to all of you.

Shveta Thakur
Textile Engineering (2017-21)

Hello everyone,
I think the main purpose of publishing this magazine is to give students a platform where they can share emotions of their college life, so many life-long experiences, unforgettable memories and unbreakable bonds, learnings and lessons. And the most amazing thing about this college life is that when we were living that moment, we actually didn't realise how we were changing, learning, exploring and knowing. But when we step into actual life challenges, then only at that point do we know the value of living those wonderful 4 years of college life and realise how precious they were. I thank JNGEC for everything.

ALUMNI MESSAGE

Akhilesh
ME (2016-2020)

Life is all about experiences ,we experience love, hate, anger ,affection ,sometimes we win and sometimes we fail but the most important thing is that we keep on moving forward .In college we learn life through all these experiences ,we learn to negotiate ,express and co-ordinate. In year 2020 we had to face lockdown ,we lived a life which we couldn't have even imagined in our dreadiest dreams but this was also an experience .So my only message for all JNGECians is that learn from experiences and never hesitate in experiencing new things and I am thankful to Team Reflexia for giving me a chance to express myself.
Keep Shining

Oorja
ECE (2016-2020)

चार साल डिग्री के
उस पर कोविड की मार,
अपनी दुनिया में गुम हम सब
नहीं थे इस विपदा के लिए तैयार।
दुख - खुशियां साथ में देखी थी
मौज जिदंगी की हमने भी उठाई थी,
साथ रहते थे झल्ले से हम सब
शैतानी खुद कर डांट दूसरे को खिलाई थी।
फैस्ट में अपना दायित्व भी निभाया था
और अटैंडेंस के लिए रोना भी रोया था,
किताबों की जगह ख्वावों ने तब घर बनाया था।
जिदंगी कितनी खूबसूरत थी आज समझ आता है
अब तो बस दायित्व का बोझ नज़र आता है,
कुछ चंद लोग बन गए थे हमारा परिवार
कॉलेज की एक याद से ही आज दिन बन जाता है।

ALUMNI MESSAGE

Ajay Kumar
Civil (2017-2021))

YES, YOU CAN!

Nowadays life has become very hectic. Everyday life feels like a performance podium. Sometimes we feel satisfied and sometimes we feel low. Somehow this behaviour pattern develops a feeling of self-doubt and we start doubting our potential. In this article, I will be sharing my experiences of college life and the lessons I learned. I am sure it will make an impact on your college life and everything will look meaningful.

I was one of the most energetic students in my college. My vision was to level myself in every field. But I was dependent on the external environment. I must say I used to complain about almost everything. But I will not blame myself for this attitude. This is something which is developed through the spoon-feeding ideology of schools.

"There is nothing good or bad,
But thinking makes it so. "
– William Shakespeare

Let's go one step ahead with this expression of self-exploration and let's prioritize the resources we have in these 4 years of engineering. And in the end, we will conclude, that are these resources sufficient to reach our goals?

Time duration of 4 years.
Mentorship, Teachers and college infrastructure.
Productive environment.
Family support and stability of thoughts.
Good and lots of friends.

Friends, we all must agree here that such opportunities we get in college are unmatchable. We need a problem-solving attitude here which is the key to this casual approach towards everything.

I would like to end this article by mentioning that we must feel blessed for what we have and we should respect our teachers.

"Just take a short break and think for a second, you will realize that everything you want is achievable."

FORMER MEMBERS OF TEAM REFLEXIA

Without whose motivation and support Reflexia 2022 was impossible.

Aditya sharma
Mechanical Engineering
2016-20

Manik Chaudhary
Mechanical Engineering
2016-20

Anshul
Mechanical Engineering
2017-21

Jasmine Kaur
Textile Engineering
2017-21

Yash Karan Sodhi
Mechanical Engineering
2017-21

TEAM REFLEXIA 2022

Aakanksha
Managing Editor
CE 4th Year

Aarti Rangray
Managing Editor
CE 4th Year

Artika Bansal
Head Designer
ME 4th Year

Arundhati Jasta
Executive Editor
ECE 3rd Year

Sarika
Executive Editor
ECE 3rd Year

Jyoti
Executive Editor
CE 3rd Year

Rittul Mamta
Executive Designer
CE 3rd Year

Ananya Sharma
Executive Member
(Editor)
ECE 2nd Year

Akshit Sharma
Executive Member
(Editor)
CE 2nd Year

Dheeraj Kumar
Executive Member
(Designer)
CE 2nd Year

Aryan Doher
Executive Member
(Designer)
ME 2nd Year

REFLEXIA

MAGAZINE "The best thing about memories is making them."

#5

Jawaharlal Nehru Government
Engineering College,
Sundernagar, Mandi H.P. – 175018
Phone: +91 (0) 1907267688
Email: jngechp@yahoo.co.in
Website: www.jngec.ac.in

/_reflexia_jngec /_reflexiajngec