



Alumni play a key role in the growth of an institution. We must provide a congenial, global exposure to our future brand ambassadors.



SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN

वासंतिक अंक - 50

SKIT TIMES 2022



BY RAJASTHAN TECHNICAL UNIVERSITY (RTU), KOTA



CONSECUTIVELY FOR 5th YEAR

<https://www.skit.ac.in/student-corner/skit-times.html>



EDITOR-IN-CHIEF

Dr. Anupriya Singh
Assistant Professor, Dept. of English

EDITOR

Dr. Sheeba Anjum
Assistant Professor, Dept. of English

CO-EDITORS

Prof. Krishna Dayal Sharma
(Professor, Dept. of English)

Dr. Manasvi Dixit
(Associate Professor, Dept. of Physics)

Ms. Deepika Jain
(Assistant Professor, Dept. of Mathematics)

Dr. Pramila Kumawat
(Professor, Dept. of Mathematics)

STUDENT EDITORS

Nikita Singh (CSE, III Year)
Anshul Yadav (EE, III Year)
Kashish Sharma (ECE, II Year)

PUBLISHER

Prof. (Dr.) S.L. Surana
Director (Academics)

SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN

Ramnagar, Jagatpura, Jaipur-17 (Raj.) India
Tel.: 0141-2752165, 2752167 | Fax: 2759555
Website: www.skit.ac.in • Email: info@skit.ac.in

DISCLAIMER

The views expressed by the authors in the write-ups are their own.
THE SKIT TIMES is in no way responsible for any liability arising
out of the content of these.

VISION

To promote higher learning in advanced
technology and industrial research to make
our country a global player.

MISSION

To promote quality education, training and
research in the field of engineering by establishing
effective interface with industry and to encourage
faculty to undertake industry sponsored projects
for student.

CONTENT

1	COVER STORY	1
2	NEWS FLASH	3
3	ECA CELL ACTIVITIES	4-9
4	DEPARTMENTS OF CSE & IT	9-11
5	DEPARTMENT OF ME	12-13
6	DEPARTMENT OF ECE	14-18
7	DEPARTMENT OF EE	18-21
8	DEPARTMENT OF CE	22-24
9	DEPARTMENT OF MBA	24-25
10	DEPARTMENT OF SC. & HUM	25-29
11	PAPERS PUBLISHED	30-32
12	सृजन	36
13	POEM	37

THE EDITOR SPEAKS



RETHINKING THE CONCEPT OF CULTURE

Culture is a broad term. It not only includes certain tastes in food, art, and music, or beliefs about religion; but it is the totality of the mental and physical reactions and activities that characterize the behaviour of the individuals in relation to their natural environment, to other groups, to members of the group itself, and of each individual to himself. This view of culture is fraught with two major dilemmas: first, the insentient bond towards one's own culture, which inevitably bias our perceptions of and reaction to other cultures of the world, and second, the inability to make sense of an unfamiliar culture. In order to solve the quandaries, the principle of 'Cultural Relativism' was foregrounded by the anthropologists, which states that the norms and values of one culture should not be evaluated using the norms and values of another, rather a person's beliefs and practices should be understood based on that person's own culture.

Cultural Relativism was, in part, emerged as a response to Western 'ethnocentrism', in which one consciously believes that one's people's arts are the most beautiful, values the most virtuous, and beliefs the most truthful.

Cultural Relativism is a great doctrine to get solution of the problem that causes tyranny in a multicultural and multilingual liberal society. In a society with cultural pluralism, the dominating culture sometimes forces the minority to abide by the direction adopted by them, even if it goes contrary to the basic cultural teaching of the minority group. Hence, there is a dire need to make the people of dominating culture aware of the principle of 'Cultural Relativism', so that, a congenial environment may be created, where other cultures are free to exhibit their autonomy.

Let's develop tolerance towards other cultures and contribute in the process of global evolution.

Dr. Anupriya Singh
EDITOR-IN-CHIEF

THE LEGACY OF NURTURING MINDS

For any academic institution its alumni are like a sapling grown into a fruit laden tree that stands tall with pride and serves mankind with whatever it has developed over the years. Like every parent, the institute cherishes the pride and honour that its proud culminations bring home with their success stories. SKIT has been fortunate to place on record not just a few but uncountable names in this category of achievers. Today, SKIT alumni are spreading their glory in myriad fields and domains. Be it coveted government jobs or skill-based corporate titles; be it transforming brilliant ideas into entrepreneurial ventures or touching horizons of expertise with higher education at the globally recognized universities, the alumni of SKIT have left their indelible mark at all nooks and corners.

The best reward a teacher can get is the respect from his or her students. Our alumni have always shown their affection sparingly. Each time they visit the city, they visit the institute as well. The gleaming eyes after stepping into the premises of their alma mater are a testimony to the bonding that they share with every iota of this place. The bonding also reflects with the mentoring and guidance that they provide to their juniors. Over the years, thousands of budding engineers have been benefitted from their seniors who they had never met. The alumni shoulder this responsibility with diligence and gravity, no matter if it requires being awake at 3.00 AM at a foreign soil to deliver an online session in India at 10.00 AM.

The connect with our alumni is a source of an incessant delight. SKIT Alumni Association is connected with thousands of alumni with a dynamic portal that establishes a direct dialogue between the seniors and ongoing batches. The portal has been instrumental in enhancing the learning experience of the current students. The alumni portal connects the dots on employment opportunities, career growth and guidance on life management. We wish that the bond gets stronger in the years to come and the juniors proudly step into the shoes of their seniors who are no less than doyens of their respective fields.

Dr Neha Purohit
Head, Dept. of English

FREE COVID-19 VACCINATION CAMPS ORGANIZED

Free vaccination camps were organized jointly by the Medical and the Health Department, Govt. of Rajasthan at SKIT, Jaipur on 7 January and 23 February, 2022. These vaccination camps were open for all people in the age groups 15 to 18 and 18+. Shri Jaipal Meel (Director, SKIT) and Prof. Ramesh Pachar (Principal, SKIT) inaugurated the camps. Mr. Ankush Tandon and Mr. Avadesh Sharma were the faculty coordinators for these camps. People from Jagatpura, village Dantli and the students of SKIT got the first and the second doze of either Covishield or Covaxin. Dr. Hiteshika Mehar coordinated the team of doctors at these camps.

SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT



VACCINATION CAMP AT SKIT

WORKSHOP ON 'LEVERAGING SCIENCE DIRECT PLATFORM FOR MAXIMUM IMPACT' ORGANIZED

The Central Library, SKIT organized an online workshop on 'Leveraging Science Direct Platform for Maximum Impact' on 20 January, 2022. The workshop discussed on how to get maximum impact factor for the research papers by using science direct platform. Librarians from various colleges and institutes, research scholars and faculty of the college participated in the workshop and learnt the basics of publishing their research utilizing various research platforms.

DREAM IS NOT THAT YOU SEE IN SLEEP.
DREAM IS SOMETHING THAT
DOES NOT LET YOU SLEEP

-Dr. A.P.J ABDUL KALAM



The Government of India launched 'Azadi ka Amrit Mahotsav' to commemorate 75th year of Independence of India. The Ministry of AYUSH inaugurated various programs under its ambit. One such program involved large scale distribution of AYUSH prophylactic medicine and Homeopathy medicine 'Arsenic Album 30'. These medicines have been found effective as prophylactics against COVID-19. In this regard, Central Research Institute of Homeopathy, Sector- 26, Pratap Nagar, Jaipur, an autonomous body under Central Council for Research in Homeopathy, New Delhi (under Ministry of AYUSH) organized a free Homeopathy medicine distribution camp on January 19, 2022 at SKIT, Jaipur.

SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT



MEDICINE DISTRIBUTION CAMP AT SKIT



Ayushi Agarwal, CSE, 4th Sem

ECA CELL ACTIVITIES

QUIZ ON 'GANDHI JAYANTI' ORGANIZED

To mark the 152nd birth anniversary of Mahatma Gandhi, ECA Cell of SKIT hosted an online quiz competition - 'Do you know your Mahatma?' about Mahatma Gandhi, his life, works, ideology etc., on 2 October, 2021. The quiz was hosted on the platform <http://quizz.com>. E- certificates were issued to all the participants. The event was hosted by Vinit Kumar Shah, Mehak Jain, Yayati, Eshita Goyal, Vaibhav Jain, Aayushman Mishra, Hardik Sharma, Atishayee Singh, Akshat Surana, Chirag Sharma, Disha Tyagi and Trivi Jain and coordinated by Dr. Komal Sharma (Chief Coordinator, ECA Cell).

CLUB ORIENTATION ORGANIZED

ECA Cell conducted 'Club Orientation' on 21 November, 2021. SKIT offers 24 clubs and 10 student chapters. In order to make the newcomers aware of these clubs, ECA Cell conducted 'Club Orientation' for the session 2021-22. The event started with a welcome note followed by the introduction and contribution of ECA Cell by the student coordinators. Individual clubs were invited for their presentations with a brief introduction by the student coordinators of the respective clubs. The club presentations were followed by the introduction about student chapters. The event concluded with the vote of thanks by the student coordinator.



GLIMPSE OF CLUB ORIENTATION

'BITIYA': EVENTS ON NATIONAL GIRL CHILD DAY ORGANIZED

The National Girl Child Day is celebrated in India every year on 24 January. It was initiated in 2008 by the Ministry of Women and Child Development and the Government of India in order to spread public awareness about inequities that girls face in the Indian society.



GLIMPSE OF BITIYA EVENT

To support this great initiative, two online events under the title 'BITIYA' were organized by the ECA Cell on 24 January, 2022. The first online event was Poster -Making and Slogan -Writing competition. It was an opportunity for the students to showcase their talents by acknowledging and enlightening the rights a girl owns and to promote awareness about the inequalities that a girl child faces and to educate people about girl's education. Another event was organized for the faculty members of SKIT. They were asked to post their pictures with their daughters.

The objective of both the events was to celebrate this day as an auspicious day and to make everyone aware about the fact that we are the children of one God and all are equal. There was a considerable participation in both the activities.

'C PROGRAMMING BOOTCAMP' ORGANIZED BY SCIENCE & TECHNOLOGY CLUB

'C programming Bootcamp' was organized by the Science & Technology Club from 27 November to 27 December, 2021. More than 190 participants participated in the event. The bootcamp provided students with a basic knowledge of programming in C through live classes, assignments, practice questions and 24*7 doubt support on S&T Club's official discord server. The tutors for this bootcamp were Kush Vasaniya (2nd Year, CSE) and Keshav Pareek (2nd Year, CSE). They assisted the students to learn the core

'C programming Bootcamp' was organized by the Science & Technology Club from 27 November to 27 December, 2021. More

The videos were posted on the official Instagram page of Music Club, SKIT @musicclubskit. The event was of great success and each participant got a different learning experience.

EVENTS ORGANIZED BY SKIT GRAMOTHAN CLUB

EVENT 1: CLOTHES DONATION DRIVE-1

The donation collection began from 16 October, 2021 and continued for 7 days. Many people came forward to become a part of this noble cause. The donation drive was organized on 27 October, 2021 from 12:30 pm to 3:30 pm. All the student participants along with the faculty coordinators went to Baba Ramdev Kachhi Basti, Sultan Nagar; Gujar ki thadi, Jaipur and Sajal Prakhar School, Jagatpura, Jaipur for the distribution of clothes. It was a great experience filled with gratitude.

EVENT 2: CLOTHES DONATION DRIVE-2

The donation collection started from 21 November, 2021 and continued for 4 days. This donation drive was organized on 24 November, 2021 from 1:30 to 4:30 p.m. All the student participants along with the faculty coordinators went to Baba Ramdev Kachhi Basti, Sultan Nagar and Gujar ki thadi, Jaipur.

EVENT 3: 'MISSION HAPPINESS'

The event was organized on 25 December, 2021 from 10 a.m. to 12:00 p.m. All the participants along with the faculty coordinators went to Sajal Prakhar School, Jagatpura, Jaipur. The enthusiasm of the children rose when Christmas was celebrated with them by organizing various performances such as song and dance performances followed by the distribution of gifts and chocolates. It was truly a joyous and gratifying experience to celebrate Christmas with the children.

EVENTS ORGANIZED BY MUSIC CLUB

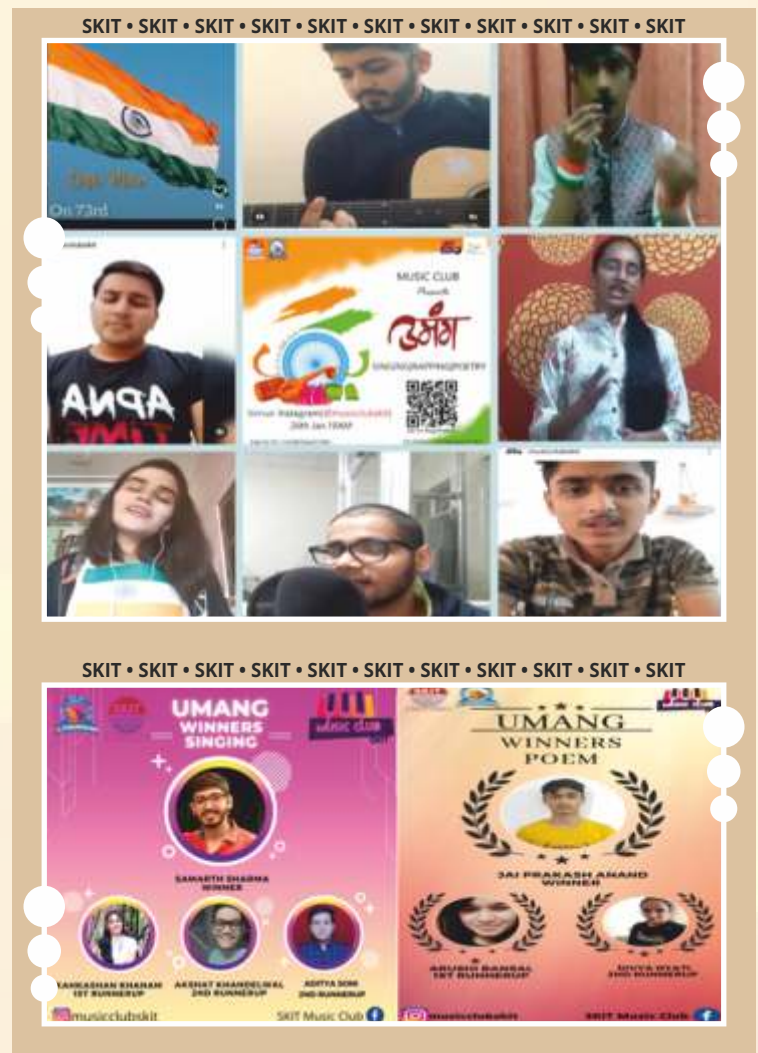
EVENT 1: 'BIGUL'-A TRAINING WORKSHOP

An offline group singing event 'BIGUL': A Training Workshop was organized by the Music Club from 30 November to 25 December, 2021. In this event, the club members were divided into five teams. Each team was under the supervision of two mentors, out of which one was vocalist and other one was instrumentalist and then they were given a song to present.



EVENT 2: 'UMANG'- INTRA COLLEGE SINGING & POETRY COMPETITION

An online music competition 'UMANG' on the theme of patriotism under the categories of Singing, Rapping and Poetry was organized by the Music Club on 26 January, 2022. The 18 short videos of the participants (solo singing and poetry) were posted on the official Instagram page of the Music Club, SKIT @musicclubskit. The best three videos were judged by the faculty coordinators of the Music Club and winners were announced under the categories of Singing and Poetry.



EVENTS ORGANIZED BY ECO FRIENDS CLUB

EVENT 1: POSTER-MAKING COMPETITION

The club organized a Poster -Making competition on 'India after Covid Impact' on 15 December, 2021. The objective was to know the

views of the students about the growth and development of India in covid time and also to test their creativity.

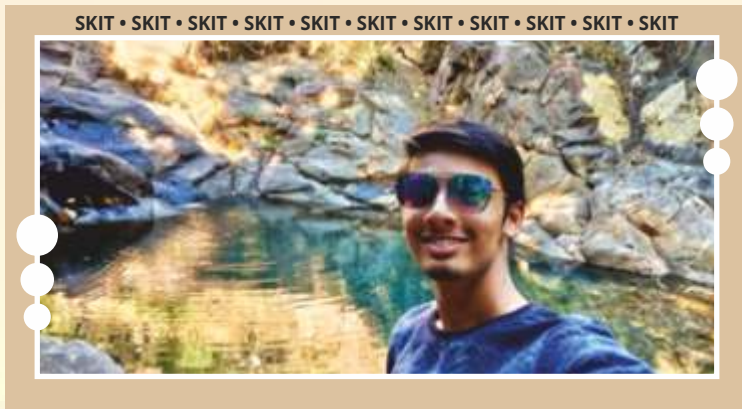


EVENT 2: SLOGAN WRITING COMPETITION

A Slogan Writing Competition on 'Energy Conservation' was held on 29 December, 2021. Slogans like 'Save Today, Survive Tomorrow', 'Switch Off the Light, It really Prevents Fight' etc. were received from the participants.

EVENT 3: AN ONLINE EVENT 'SELFIE WITH NATURE'

The club conducted an on-line event 'Selfie with Nature'. The students were asked to send their selfies with the natural scenery. The objective was to sensitize students towards nature.



EVENTS ORGANIZED BY EK BHARAT SHRESTHA BHARAT CLUB

EVENT 1: 'CHARCHA@EKTA' - AN ONLINE WEBINAR

On the occasion of 146th birth anniversary of Sardar Vallabhai Patel which is celebrated as 'National Unity Day', Ek Bharat Shreshtha Bharat Club of SKIT organized a webinar on 31 October, 2021 via Google Meet. Shri Somkant Ji Sharma (State Secretary, HSS Foundation Rajasthan) was invited as the chief guest of the event. He motivated the youth with his valuable words. He encouraged the students and make them aware of the lifestyle and thoughts of Sardar Vallabhai Patel.



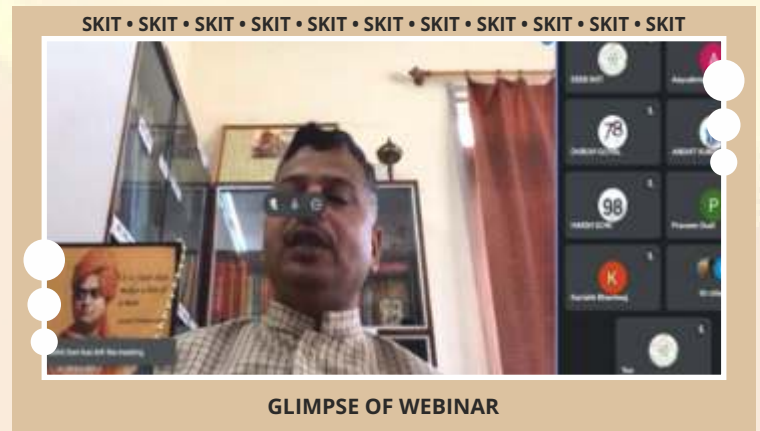
EVENT 2: 'HUNAR'- A TALENT SHOW

A talent show 'Hunar' was organized by Ek Bharat Shreshtha Bharat club on 22 December, 2021 at J.C. Bose Seminar Hall. Entries were invited from students to showcase their talents such as dancing, singing, poetry, or any other cultural activity. The theme was related to the cultures of Rajasthan and Assam. The event was a great success as great enthusiasm was seen in the students.



EVENT 3: WEBINAR ON 'NATIONAL YOUTH DAY'

An online webinar on 'National Youth Day' was conducted by EBSB Club on 12 January, 2022 on Google meet. Dr. Shailendra Ji (Social worker) was the guest speaker of the event. Dr. Shailendra began his talk with the words of Swami Vivekanand Ji- "Strength is Life, Weakness is Death/ Expansion is Life, Contraction is Death/ Love is Life, Hatred is Death". He also shared a small story of Swami Vivekanand Ji, when he went to Chicago and motivated the youth present in the webinar.



GLIMPSE OF WEBINAR

EVENT 3: 'TRIKला'

EBSB club organized an event named 'TRIKला' on the occasion of 73rd Republic Day on 26 January, 2022. The participants were to shoot a time-lapse/short video showing them preparing any kind of dish/cuisine, artwork, face/palm painting, handicraft etc. and upload it on the google form shared with them through WhatsApp groups and social media.

'SCRIPTWRITING AND PSEUDO PLAY' BY DOCU-DRAMA CLUB

Members of the Docu- Drama club wrote two plays namely 'Aao baatein kare' and 'Mohalle ka kissa' which were presented at a national level at the prelims of IIT Bombay's cultural Fest 'Mood Indigo' held in Delhi. Along with this, a Mime was also scripted and directed which was presented at the MI stage on 30 January, 2022. The plays and the Mime can also be seen at the official YouTube page of the club.

EVENTS ORGANIZED BY MATHS N RATES CLUB

EVENT 1: 'RAINBOW MOONSHINE'- A POSTER MAKING COMPETITION

An event 'Rainbow Moonshine' was conducted on 8 December, 2021. It was an activity of poster making. The event was conducted in physical mode. All the registered students were assigned to make posters based on Mathematics.



EVENT 2: 'BRAIN TUNER'- A QUIZ COMPETITION

An event 'Brain Tuner' was conducted on 15 December, 2021. It was a quiz competition. All the registered students were assigned a set of 25 questions randomly on Google form. The time limit was half an hour. The objective of this event was to help the students to think logically and critically in any given situation.

EVENT 3: 'MATHS SURVIVORS'- A SPEECH COMPETITION

The event 'Maths Survivors' was conducted on 24 January, 2022. It was a speech competition. Participants were asked to prepare a speech on 'Impact of Covid-19 Pandemic in India'. The event was conducted in an online mode.

EVENTS ORGANIZED BY CLUB OF KNOWLEDGE

EVENT 1: 'KYC' (KNOW YOUR COLLEGE)

To acquaint the newly admitted students of B.Tech. I Year with the college, an activity 'KYC' (Know Your College) was conducted on 29 November, 2021. Participants were asked to click their photographs at any place in the college followed by the identification and a brief description of the place. Entries were submitted via google form.



EVENT 2: SEMINAR ON 'ENGINEERING WITH THE HIGHEST POTENTIAL' ORGANIZED

A seminar on 'Engineering with the highest potential' was conducted in an online mode on 21 December, 2021. The guest speaker Shri Giridhari ji associated with Akshay Patra discussed about different principles of improving memory and focus. He also shared his views on the 'Power of Gratitude' and 'Ways of Living in Present'.



GLIMPSE OF THE SEMINAR

EVENT 3: QUIZ COMPETITION ON INDIAN CULTURE

An online quiz competition based on Indian Culture was conducted on 22 January, 2022. About 110 students participated in the event. Komal Kanwar Korawat of B.Tech. II Year was the winner of the event.

TRAINING PROGRAMME ON 'DRONE' ORGANIZED

Robotics Club conducted a 5- day online training programme on 'DRONE' from 1 to 5 February, 2022 under the SPICES scheme of AICTE. The event provided the students practical exposure in the field of robotics and hands on session on designing and fabrication and testing of drone for disaster management and many more applications.

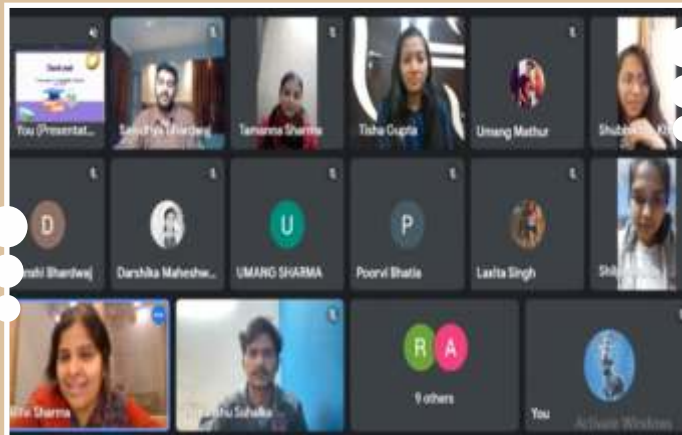


GLIMPSE OF THE TRAINING PROGRAMME

EVENTS ORGANIZED BY SKIT READERS' CLUB

EVENT 1: 'ROOBROO'- A RENDEZVOUS WITH THE ALCHEMIST BY PAULO COELHO

The first session of the talk show- 'Roobroo'- A Rendezvous with Books was conducted in an online mode on the book 'The Alchemist' by Paulo Coelho on 27 November, 2021 at 5 p.m. on Google meet. The event started with a brief introduction of the club and the participants by Darshika, the anchor of the event. Sanidhya Bharadwaj from II year, CS was the speaker, who gave an in-depth talk on the book. Tamanna Sharma from CS II year was the moderator of the event. Dr. Nidhi Sharma, the coordinator of the club congratulated the students on holding the first of its kind event in the college.



EVENT 2: 'ROOBROO'- A RENDEZVOUS WITH ALL THE BRIGHT PLACES BY JENNIFER NIVEN

The second session of the talk show- 'Roobroo'-A Rendezvous with Books was held on 31 October, 2021. Shubhiksha Khandelwal from II year, AI moderated the session which was anchored by Tisha Gupta from AI second year. Umang Sharma from II year ECE was the speaker of the session. She delivered her talk on the book 'All the Bright Places' authored by Jennifer Niven. The session ended with a formal vote of thanks by the faculty coordinator, Dr. Nidhi Sharma.



EVENT 3: 'ROOBROO'- A RENDEZVOUS WITH *THE LIFE OF LINEN* BY MARIA PRILEZVAYAEVA'

The third session of the talk show- 'Roobroo'-A Rendezvous with Books was organized on 11 December, 2021 at 5 p.m. on Google meet. Aayushman Mishra from II year, ME was the speaker of the session, who delivered the talk 'on the book The Life of Linen' authored by Maria Prilezvayaeva The talk show was moderated by Darshika Maheshwari from II year, AI. The programme was attended by students from all the branches of first and second year. The event was followed by an interesting interactive session. Dr. Nidhi Sharma, the faculty coordinator of the program concluded the event by proposing a formal vote of thanks and encouraged the students to motivate all their friends and classmates to participate in the talk show.



EVENT 4: 'ROOBROO'- A RENDEZVOUS WITH *THE BLUE UMBRELLA* BY RUSKIN BOND

The fourth session of the talk show-'Roobroo'-A Rendezvous with Books was conducted in an online mode on Google meet on 29 January, 2022. Harshita Paliwal from II year, AI was the speaker of the session. She delivered her talk on the very famous book by Ruskin Bond titled 'The Blue Umbrella'.

Moderation was done by Isha Tripathi from II year, AI and the whole programme was effectively anchored by Shilpi Shukla from II year, AI. The event concluded with a formal vote of thanks by the faculty coordinator, Dr. Nidhi Sharma.



Ayushi Agarwal, CSE, 4th Sem

DEPARTMENTS OF

COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY

INTERNATIONAL CONFERENCE ON 'EMERGING TECHNOLOGIES IN COMPUTER ENGINEERING: COGNITIVE COMPUTING AND INTELLIGENT IoT' ORGANIZED

An international conference on 'Emerging Technologies in Computer Engineering: Cognitive Computing and Intelligent IoT' was organized by the IoT-RC, RTU recognized Centre of Excellence of CSE and IT departments from 4 to 5 Feb, 2022. Prof C.M Choudhary and Prof Anil Chaudhary were the Organizing Chair. The Conference Chair was Prof. Arun K. Somani, Associate Dean for Research, College of Engineering, Iowa State University, USA and the General Chair was Prof. Seeram Ramakrishna, Vice President, Research Strategy. The Chief guest of the conference was Prof. R. A. Gupta, Hon'ble Vice-Chancellor, Rajasthan Technical University (RTU), Kota and the Guest of Honor was Dr Mani Madhukar, Program Manager, Global University Programs, IBM Research, India. Shri Jaipal Meel (Director, SKIT), Prof S.L. Surana (Director Academics, SKIT) and Prof. Ramesh Pachar (Principal, SKIT) were also present during the conference inaugural session.

Ms. Anjana Sangwan, Secretary, ICETCE-2022 presented the summary report of the conference. 229 Papers from 8 countries were received and with a 25% acceptance rate, 58 papers were selected for publication. Conference publication partner was Springer ICCIS series and contributors were IBM, Infosys Campus Connect and Naturals Group.



INTERNATIONAL FDP ON 'COMPUTER VISION AND IMAGE PROCESSING' ORGANIZED

With an objective to introduce participants with the fundamentals of 'Computer Vision & Image Processing and Scene Reconstruction', a one week international Faculty Development Program was organized by the Departments of CSE & IT under the aegis of IQAC & PAQIC at SKIT from 31 January to 4 February, 2022. Various topics like 'Object & Event Detection', 'Video Tracking', 'Object Recognition', '3D Pose Estimation', 'Learning', 'Indexing' etc. were discussed in the FDP. More than 400 participants from various educational institutes across India and outside India registered for the event. The coordinators of the FDP were Mr. Harpreet Singh Gill, Ms. Rubal Deep Gill, Ms. Nikhar Bhatnagar and Ms. Priyanka Sharma.



NATIONAL WORKSHOP FOR NON-TEACHING STAFF ORGANIZED

A one-week national workshop on 'Basics of Cyber Security, MS Office 365 & Work Etiquette' was organized by the Departments of CSE & IT under the aegis of IQAC and PAQIC from 20 to 24 Dec, 2021 for non-teaching staff. The workshop was technically supported by the Computer Society Chapter, IEEE, Delhi Section. The workshop aimed at introducing non-teaching staff with the recent

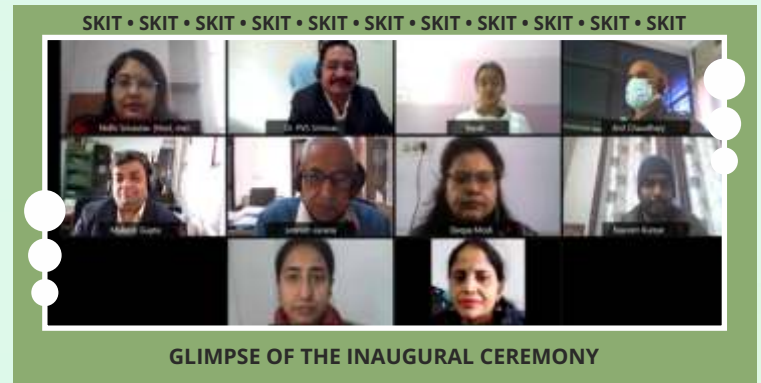


advancements in technological world and to enhance their presentation and documentation skills through training, performance and evaluation.

More than 100 participants from various educational institutes across India registered for the event. Various eminent speakers from industry and academia like Infosys, Microsoft, IBM and IEEE shared their technical knowledge in the workshop. The conveners of the workshop were Dr. Sunita Gupta, Ms. Nidhi Srivastav. The coordinators of the workshop were Dr. Meenakshi Nawal, Ms. Kajal Mathur.

INTERNATIONAL FDP ON 'RESEARCH APPLICATIONS IN THE FIELD OF ARTIFICIAL INTELLIGENCE' ORGANIZED

An online one-week international Faculty Development Program on 'Research Applications in the field of Artificial Intelligence' was organized by the Departments of CSE & IT under the aegis of IQAC & PAQIC from 4 to 8 January, 2022. The program intended to introduce the participants with the fundamentals of Artificial Intelligence, its applications, research opportunities and challenges associated with it. Dr. Saurabh Gupta (USA), Dr. Abdul Razak (UK), Dr Pramod Gaur (UAE) and various eminent speakers from reputed institutions and industries across the globe shared their technical knowledge with the participants. More than 200 participants from various educational institutes across India and outside India registered for the event. The coordinators of the FDP were Dr. Sunita Gupta, Ms. Nidhi Srivastav, Ms. Shanu Tripathi and Ms. Deepa Modi



BOOK CHAPTER PUBLISHED

- BOOK : Artificial Intelligence in Industrial Applications: Learning and Analytics in Intelligent Systems
- AUTHOR/S : Tapeshe Kumar, Mehul Mahrishi, Gaurav Meena
- BOOK CHAPTER : A Comprehensive Review of Recent Automatic Speech Summarization and Keyword Identification Techniques
- PUBLISHER : Springer, Singapore

PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

TITLE : Performance Comparison of Network Intrusion Detection System based on different Pre processing Methods and Deep Neural Network

AUTHOR/S : Gaurav Meena, Babita Dhanwal, Mehul Mahrishi, and Kamal Kant Hiran

PROCEEDING : ACM Proceedings of the International Conference on Data Science, Machine Learning and Artificial Intelligence, DSMLAI '21' (SCOPUS)

TITLE : A Formal Study of Shot Boundary Detection Approaches – Comparative Analysis

AUTHOR/S : Nankani Hanisha, Mahrishi Mehul, Morwal Sudha, Hiran Kamal

PROCEEDING : Proceedings of Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, Springer (SCOPUS)

FDPs ATTENDED

TITLE : Machine Learning Applications for Autonomous Driving

DATE : 24 to 28 January, 2022

ATTENDED BY : Nikhar Bhatnagar

ORGANIZED BY : KLE Technological University, Hubli, Karnataka

TITLE : Futuristic Trends in Modern Machine Learning & Data Analytics

DATE : 13 to 17 December, 2021

ATTENDED BY : Nikhar Bhatnagar

ORGANIZED BY : Lakshmi Narain College of Technology, Bhopal, Madhya Pradesh

TITLE : Research Applications in the field of Artificial Intelligence

DATE : 4 to 8 January, 2022

ATTENDED BY : Nikhar Bhatnagar, Priyanka Sharma

ORGANIZED BY : Departments of CSE & IT, SKIT, Jaipur

TITLE : Intellectual Property Rights

DATE : 18 to 22 January, 2022

ATTENDED BY : Nikhar Bhatnagar, Priyanka Sharma

ORGANIZED BY : IPR Cell & Department of Management Studies, SKIT, Jaipur

TITLE : Deep Learning and Computer Vision

DATE : 3 to 7 January, 2022.

ATTENDED BY : Priyanka

ORGANIZED BY : Manipal University, Jaipur

TITLE : Instructional Design for Online Course

DATE : 4 to 8 October, 2021.

ATTENDED BY : Priyanka

ORGANIZED BY : NITTR, Chennai

TITLE : Explainable Artificial Intelligence and the Future

DATE : 20 to 24 December, 2021

ATTENDED BY : Rubal Deep Gill, Harpreet Singh Gill

ORGANIZED BY : Indian Institute of Information Technology, Kota

TITLE : Cyber Security

DATE : 3 to 7 January, 2022

ATTENDED BY : Rubal Deep Gill, Harpreet Singh Gill

ORGANIZED BY : Babasaheb Ambedkar Technological University, Lonere

WORKSHOP ATTENDED

TITLE : Intellectual Property Rights and Patent Filing Process

DATE : 21 to 29 October, 2021

ATTENDED BY : Nikhar Bhatnagar

ORGANIZED BY : IPR Cell, SKIT & COE-IP, CDAC, Pune

COURSES MENTORED

MENTOR/S	COURSE/S
Nikhar Bhatnagar, Priyanka	Database Management System
Priyanka	Operating System Fundamentals

Ph.D. AWARDED

THESIS TITLE : Design and Analysis of Intelligent Image Classification Methods

Ph.D. AWARDED TO : Sushila Vishnoi

SUPERVISED BY : Dr. Ajit Kumar Jain

INSTITUTE : Banasthali Vidyapith, Jaipur, Rajasthan

YEAR : 18 October, 2021

STTPs ATTENDED

TITLE : Artificial Intelligence

DATE : 4 to 8 October, 2021

ATTENDED BY : Priyanka Sharma, Priyanka

ORGANIZED BY : NITTR, Kolkata

TITLE : NBA Accreditation for Engineering Colleges

DATE : 4 to 8 October, 2021

ATTENDED BY : Nikhar Bhatnagar, Mehul Mahrishi

ORGANIZED BY : NITTR, Kolkata

WEBINAR ATTENDED

TITLE : National Intellectual Property Awareness Mission

DATE : 24 December, 2021

ATTENDED BY : Priyanka Sharma

ORGANIZED BY : IPR Cell, SKIT Jaipur

DEPARTMENT OF MECHANICAL ENGINEERING

STUDENT WORKSHOP ON 'INTRODUCTION TO PYTHON PROGRAMMING'

The Department of Mechanical Engineering in association with the e-Yantra Lab, SKIT and the IETE Student Chapter of SKIT, Jaipur organized a student workshop on 'Introduction to Python Programming' from 27 to 29 January, 2022. In the inaugural ceremony, Prof. Dheeraj Joshi, Head, Mechanical Engineering welcomed all the guests, speakers and participants. Dr. Achin Srivastav, workshop coordinator gave a brief introduction about the workshop. More than 200 students participated in the workshop from all over the country. Mr. Aryan Singh, CTO, TensaX Innovation Lab, Jaipur was the Chief-guest of the workshop. He discussed the prospects of Python Programming in enhancing the career of students. He also explained about the application part of Python Programming in Block Chain, Artificial Intelligence and Data Analytics. The other topics discussed in the workshop included Basics of Python and Importance & Application of Python. Hands on Sessions and Minor Projects on Python Programming were also provided to the students. The coordinators of the workshop were Dr. Manoj Kumar Sain, Dr. Achin Srivastav, Dr. Chandan Kumar, Mr. Praveen Saraswat, Mr. Ankit Agarwal, Mr. Ankit Vijay and Ms. Namita Soni.

SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT



GLIMPSE OF THE INAUGURAL CEREMONY

EXPERT TALK ON 'STRATEGY TO CRACK GATE & OTHER COMPETITIVE EXAMS'

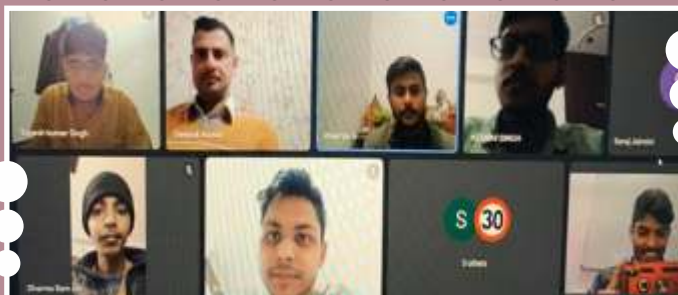
The Department of Mechanical Engineering, SKIT, Jaipur organized an online expert talk of Mr. Suneel Kumar Tiwari (Ex.-Assistant Engineer, Prasar Bharti, Govt. of India) on 'Strategy to Crack GATE & other Competitive Exams' on 11 February, 2022. In this talk, the

expert explained the importance of GATE exam for engineering students. He gave some tips for effective preparation planning for GATE and other competitive examinations (i.e., IES, J.En., etc.). He said that self-made notes are very effective for quick revision. He also suggested that students should refer standard books for mastering the knowledge on any subject. He further deliberated on various career opportunities, productive utilization of COVID period for academics & competitive exams, do's & don'ts to become a topper, art of making effective notes, and strategy for facing recruitment process (Written Test/GD/Interview). The vote of thanks was given by Dr. Chandan Kumar.

EXPERT TALK ON 'AWARENESS ABOUT CAD/CAM SOFTWARE'

The Department of Mechanical Engineering, SKIT, Jaipur organized an online expert talk on 'Awareness about CAD/CAM Software'. Mr. Ravi Kr. Swami, Director, CADEMATE, Jaipur discussed the importance of Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) for engineering students. He explained how the combination of the two terms CAD and CAM is used to describe the software and also talked about its application to software and also talked about its application to design and manufacture prototypes, finished products, and product runs. He elaborated how CAD/CAM offers design through manufacturing and is most often used with a Computer Numerical Control (CNC) machine, which is a motorized, manoeuvrable tool that is controlled by a computer according to specific instructions. Typical areas of concern discussed were about High-Speed Machining, Multi-function Machining, 5 Axis Machining, Feature Recognition and Machining and Automation of Machining Processes. The vote of thanks was delivered by Dr Deepak Kumar, Assistant Professor, Mechanical Engineering Department, SKIT.

SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT • SKIT



PAPER PRESENTED IN CONFERENCE

TITLE : An Experimental Analysis of Tensile Strength of Component in Fused Deposition Modelling Process
AUTHOR/S : Naveen Kumar Sain
CONFERENCE : International Conference on Intelligent Engineering and Management (ICIEM-2021), Amity University, Jaipur.

FDPs ATTENDED

- TITLE** : Research Applications in the Field of Artificial Intelligence
DATE : 4 to 8 January, 2022
ATTENDED BY : Arun Beniwal, Chandan Kumar, Monu Gupta, Deepak Kumar, Sanjay Bairwa, Prem Singh
ORGANIZED BY : Department of CSE & IT, SKIT, Jaipur
- TITLE** : Recent Trends of Robotics and Automation
DATE : 5 to 11 January, 2022
ATTENDED BY : Arun Beniwal, Sudesh Garg
ORGANIZED BY : Department of Electronics and Communication Engineering, SKIT, Jaipur
- TITLE** : Excellence in Higher Education: Perspective of NEP
DATE : 18 to 22 December, 2021
ATTENDED BY : Arun Beniwal, Dinesh Kumar Sharma, Manoj Kumar Sain, Praveen Saraswat, Vikash Gautam
ORGANIZED BY : Bhartiya Vidya Bhavan's Sardar Patel College of Engineering and FELA in collaboration with SAE India Western Section and IIIE SPCE Student Chapter under IQAC SPCE
- TITLE** : Effective Teaching and Research Skill in Science and Engineering
DATE : 6 to 10 December, 2021
ATTENDED BY : Raj Kumar
ORGANIZED BY : Department of Mechanical Engineering, RCERT, Jaipur
- TITLE** : Innovation in Materials for Advancements in Mechanical Industries
DATE : 17 to 21 January, 2022
ATTENDED BY : Sunil Kumar, Amit Kumar Bansal
ORGANIZED BY : Department of Mechanical Engineering, AICE, Jaipur
- TITLE** : Wearable Robotics Design, Sensing and Support
DATE : 24 to 28 December, 2021
ATTENDED BY : Vinay Singh Marwal
ORGANIZED BY : Indian Institute of Information Technology, Kota
- TITLE** : Intellectual Property Rights
DATE : 18 to 22 January, 2022
ATTENDED BY : Amit Kumar Bansal, Arun Beniwal
ORGANIZED BY : IPR Cell & Department of Management Studies, SKIT, Jaipur
- TITLE** : SCILAB and XCOS – FOSS Alternatives for MATLAB and SIMULINK
DATE : 7 to 11 February, 2022
ATTENDED BY : Arun Beniwal
ORGANIZED BY : CMR Institute of Technology, Bengaluru

WORKSHOPS ATTENDED

- TITLE** : Advanced Technology for Materials Physics and Engineering
DATE : 20 to 26 January, 2022
ATTENDED BY : Deepak Kumar
ORGANIZED BY : IIT, Indore
- TITLE** : Materials Fabrication & Characterization Techniques
DATE : 24 to 28 January, 2022
ATTENDED BY : Amit Kumar Bansal
ORGANIZED BY : Department of Physics, SKIT, Jaipur
- TITLE** : AICTE-Examination Reforms
DATE : 13 to 15 December, 2021
ATTENDED BY : Dinesh Kumar Sharma, Naveen Kumar Sain
ORGANIZED BY : Faculty Development Cell (AICTE) and NITTTR, Chennai

WEBINAR ATTENDED

- TITLE** : National Intellectual Property Awareness Mission
DATE : 24 December, 2021
ATTENDED BY : Ajay Kumar Dhanopia
ORGANIZED BY : IPR Cell, SKIT, Jaipur

EXPERT TALK DELIVERED

- TITLE** : Introduction of Factor Analysis, EFA and CFA
DATE&VENUE : 24 to 28 August, 2021. At SKIT, Jaipur
DELIVERED BY : Deepak Kumar



Photo by Ankit Gupta, CSE, 1 Year

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

STTP ON 'EMERGING TOOLS AND TECHNIQUES IN VLSI, MEMS & MOEMS' ORGANIZED

A Short Term Training Programme was organized by the ECE Department from 25 to 29 January, 2022. Mr. Shanmugaraj V., Scientist - F & Centre Head, CMTI, Bengaluru was the Chief guest. The STTP began with the welcome address by Prof. S.L.Surana, Director, Academics, SKIT. Mr. Shanmugaraj V., discussed the importance of VLSI, MEMS, MOEMS in the present time. In his talk, he emphasized on Smart Sensors and Controls. He explained different types of sensors to measure different parameters.

Day 2 began with an expert lecture of Prof. Ajay Agrawal from IIT Jodhpur. He enlightened the participants about the importance of Nano-technologies for healthcare sensors. He threw light on the significance of markers for early diagnosis of heart attack, cancer, covid, diabetes and other fatal diseases and also talked about the challenges in diagnosis at an early stage like cost, time, concentration, negligence of diseases etc. He discussed about the designing and testing of biosensors used in detection of diseases. Day 3 kicked off with the knowledge enriching session of Dr. Akshdeep Sharma, Senior Scientist, He talked about the paradigm shift from MEMS to NEMS along with the different domains of MEMS innovation. He also discussed about the manufacturing process of microsystems including FEM simulation on COMSOL. He explained about the complete fabrication flow related to the MEMS Bionic Sensor for Autonomous Underwater Vehicle. It was followed by another technical session by Dr. Vijaynath, Associate Professor, BIT Mesra Ranchi on 'Chip Design for Aerospace Applications'. He discussed about the impact of Microelectronics and VLSI design in human life. He also explained about the various applications of VLSI system design flow including CMOS based Temperature Sensor, Piezoresistive Pressure Sensor for aerospace applications.

Day 4 started with an expert talk on 'Design and Development of Electronic Devices for MEMS and Bio-sensing Applications' by Dr. C. Periasamy. He discussed about the development, characterization of ZnO nanoneedles as piezoelectric nanogenerators for energy harvesting application. He also discussed about the HEMT for

biosensing application. The next technical session was delivered by Dr. Gaurav Bharti, Chandigarh University. He talked about the applications of Photonics in Biosensing and Chemical sensing. The session was followed by the hands on experience on the designing of ring resonators and different photonic structures using FDTD tool. The last seventh technical session on day 5 was delivered by Dr. Chitrakant Sahu, from MNIT Jaipur. He discussed about the saturation of Moore's Law and evolution of new devices like FINFETs, Junction Less Transistors for future computing applications. He also talked about the TCAD simulation of JLFETs and their characteristics. The STTP enlightened the researchers, students and faculty to explore a new realm of technology and apprised them of the future prospects in research in this particular field.



ALUMNI INTERACTION PROGRAM ON 'CAREER OPPORTUNITY IN CYBER SECURITY' ORGANIZED

An alumni interaction program on 'Career Opportunity in Cyber Security' was organized jointly by the Department of Electronics and Communication Engineering and the Institution of Engineers (India) at SKIT, Jaipur. The guest of the event was Shri Nikhil Agarwal, Senior Solution Architect, Fortanix Inc. Prof. Mukesh Arora; Head, ECE welcomed all the guests. Dr Swati Arora introduced the students about the achievements of Student Chapter Institution of Engineers (India). It was followed by the talk of Mr. Nikhil Agarwal, an alumnus of SKIT. He shared his experiences from his college days and discussed about cyber security and companies related to it. He



An alumni interaction program on 'Career Opportunity in Cyber Security' was organized jointly by the Department of Electronics and Communication Engineering and the Institution of Engineers (India) at SKIT, Jaipur. The guest of the event was Shri Nikhil Agarwal, Senior Solution Architect, Fortanix Inc. Prof. Mukesh Arora; Head, ECE welcomed all the guests. Dr Swati Arora introduced the students

103 faculty members from various universities and institutes all over the country participated in the FIP. Mr. Pallav Rawal was the coordinator of FIP. The valedictory session was graced by Prof. R. S. Meena, Dean Research, RTU Kota and Dr. Anurag Gaur, J C Bose University of Science & Technology, Faridabad. The vote of thanks was given by Mr. Praveen Saraswat, co-coordinator FIP.

FACULTY INDUCTION PROGRAMME ON 'RECENT TRENDS OF ROBOTICS AND AUTOMATION'

The Department of Electronics and Communication Engineering, SKIT, Jaipur organized an AICTE-ISTE sponsored one-week Faculty Induction Programme on 'Recent Trends of Robotics and Automation' from 5 to 11 January, 2022. The FIP was inaugurated by the Chief Guest Dr. Pratapsinh Kakaso Desai, President ISTE and Guest of Honor Prof. Ashu Dehadani, Section Chairperson, Rajasthan section ISTE. Prof. Mukesh Arora, Head ECE welcomed the guests and the participants of the FIP. He talked about the importance of such type of induction programs for faculty. Prof. Rohit Mukherjee introduced the audience about SKIT and ISTE-Student Chapter.

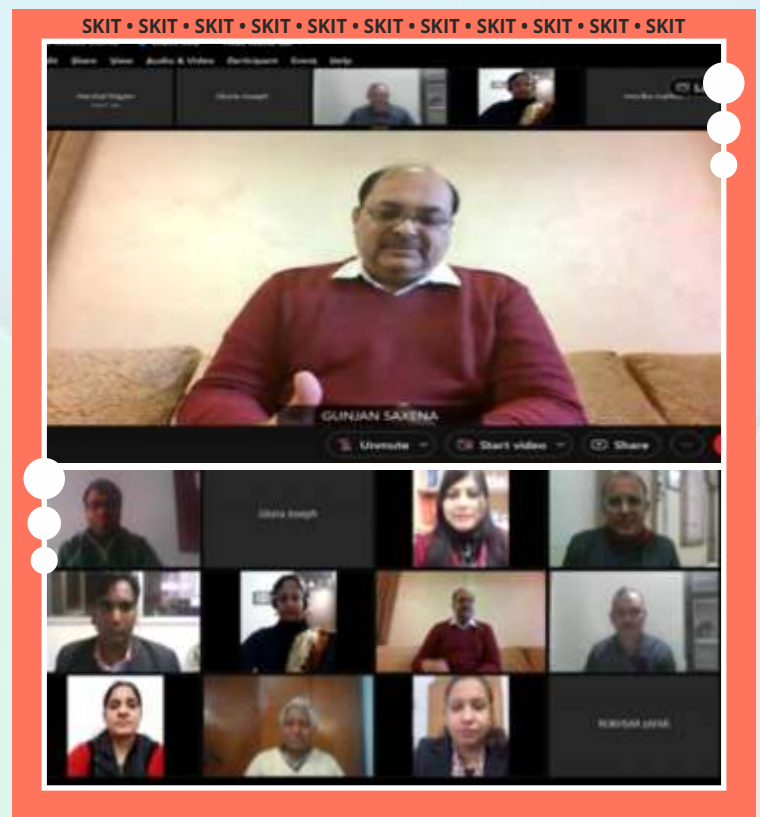
The FIP was comprised sixteen thoughtful informative sessions delivered by the experts from various reputed institutes. Prof. Asim Tewari, IIT, Bombay; Mr. Ajay Godara, NITTTR, Chandigarh; Dr. Rajeev Agarwal, Associate Professor, Department of Mechanical Engineering, MNIT, Jaipur; Dr. Ravi Kumar Mandava, NIT, Bhopal; Dr. Shruti Wadhwa, Chief Operating officer, Nidus Technologies private Ltd., Mr. Robin Singh, Project Engineer, Siemens Ltd. India; Dr Santhakumar Mohan, Associate Professor, Department of Mechanical Engineering, IIT, Palakkad were some of the experts who enlightened the participants on various aspects of Robotics and Automation.



SESSION ON 'THE IMPORTANCE OF ELECTRONICS AND COMMUNICATION ENGINEERING IN SOCIETAL DEVELOPMENT 3.0' ORGANIZED

A session on 'Importance of Electronics and Communication Engineering in Societal Development 3.0' was organized by OSA Student Chapter, Department of ECE, SKIT, Jaipur. The theme of the session was to highlight the importance of Electronics and Communication Engineering in society. The event was graced by the guests of the day, Prof. Manish Tiwari (Manipal University, Jaipur and OSA Ambassador 2020) and Mr. Gunjan Saxena (Dy. Director General, Department of Telecom, Rajasthan). Professor Mukesh Arora, Head, ECE department, SKIT welcomed the guests and explained the importance of this interaction to the participants.

Dr. Monika Mathur, Associate Professor, ECE proposed the vote of thanks and gave an overview of OSA. Prof. Manish Tiwari gave insight about the purpose of OSA and the benefits of the OSA Student Chapter. Mr. Gunjan Saxena shared his valuable experience about the importance of electronics in the industry.



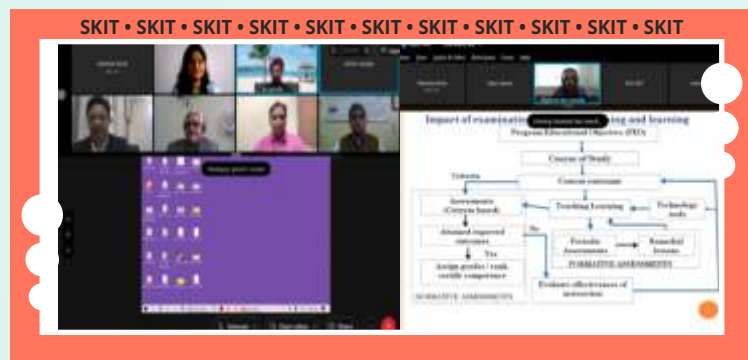
FDP ON 'NBA ACCREDITATION AND TEACHING -LEARNING PROCESS IN ENGINEERING' ORGANIZED

A five-day Faculty Development Programme on NBA Accreditation and Teaching -Learning process in Engineering (NBA-ATLPE, 2021) was organized by the Department of Electronics and Communication Engineering, SKIT, Jaipur from 15 to 19 November, 2021. About 297 participants from different institutes all over the world took part in this FDP.

The Chief guest of the program was Prof. P.S. Grover, Director General, Don Bosco Institute of Technology, New Delhi and Ex-Director, Delhi University. At the beginning of the inaugural ceremony, Prof. Ramesh Kumar Pachar, Principal, SKIT, Jaipur welcomed all the guests. Prof. Mukesh Arora, HOD -ECE, introduced all the dignitaries about the achievements of the organization. The program coordinator Ms. Suman Sharma shared the detailed draft of the FDP with all the participants. At the end of the inaugural ceremony, Dr. P.K.Jain proposed the vote of thanks.

The first session of day 1 was delivered by Prof. P.S. Grover. He explained how to meet the emerging challenges in the education system and what should be the current teaching-learning process. He discussed about the role of educator and student in current digital era. It was followed by the session of Dr. S. Das Mandal, Associate Professor, ATDC, IIT, Kharagpur. He highlighted the various challenges of accreditation and implementation in the classroom. He talked about the impact of examinations on teaching and learning. The consecutive days of the FDP observed the sessions by Prof. N. J Rao, Ex. Chairman CEDT, Ex. Chairman Dept. of MS, IISc Bangalore; Dr. Narendra Nath S., Professor, ME, NIT, Surathkal, Mangalore, Karnataka; Prof. Anil Choudhary, Head, Dept. of IT, SKIT, Jaipur; Prof. Dheeraj Joshi, Head, Dept. of ME, SKIT, Jaipur and Prof. Sanjeev Sofat, Professor, Dept. of CSE, PEC university of Technology.

The Guest of Honor for the valedictory session was Prof. Sanjeev Sofat. Prof. Mukesh Arora (HOD ECE), expressed his gratitude to Prof. Sofat, and appreciated the efforts of the organizing team. Ms. Suman Sharma, gave a brief summary of the events conducted during the FDP. Ms. Rajni Idawal gave the vote of thanks.



PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

- TITLE : Challenges and Application of Wireless Network after the COVID-19
- AUTHOR/S : Shubhi Jain, Tara Chad Soni , Kiran Rathi
- PROCEEDING : Proceedings of International Conference on Recent Advancements in Science, Engineering & Technology, and Management, 1 to 2 September, 2021
- TITLE : Phased Array Microstrip Antenna for 5G Applications with Enhanced Bandwidth
- AUTHOR/S : Harshal Nigam, Monika Mathur, Mukesh Arora
- PROCEEDING : Proceedings of Indian Conference on Antennas and Propagation, 13 to 16 December, 2021, INCAP- 2021, MNIT Jaipur
- TITLE : Dual Band Circular Patch Coplaner Microstrip Patch Antenna for X Band and Ku Band Applications
- AUTHOR/S : Suman Sharma, Harshal Nigam, Mukesh Arora, Monika Mathur
- PROCEEDING : Proceedings of Indian Conference on Antennas and Propagation, 13 to 16 December, 2021, INCAP- 2021, MNIT Jaipur

BOOK CHAPTER PUBLISHED

- BOOK : OWT International Conference 2020 Springer Proceeding
- AUTHOR/S : Monika Mathur, D. Mathur, G. Singh, S. K. Bhatnagar, Harshal Nigam, Mukesh Arora
- BOOK CHAPTER : Microwave Imaging Breast Cancer Detection Techniques: A Brief Review
- PUBLISHER : Springer

COURSES MENTORED

- | Mentor/s | Course/s |
|-----------------------------|--|
| Neeraj Jain, Vikas Pathak | : Digital Circuits |
| Kiran Rathi, Sunil Lakhawat | : Introduction to Semiconductor Device |
| Rahul Pandey, Pallav Rawal | : Control Engineering |
| Harshal Nigam | : Microwave Theory and Techniques |
| Praveen K Jain | : Electromagnetic Theory |
| Shubhi Jain | : Microwave Engineering |
| Manju Choudhary | : Computer architecture and organization |

NOT IN DOING WHAT YOU LIKE,
BUT IN LIKING WHAT YOU DO IS THE
SECRET OF HAPPINESS.

FDPs ATTENDED

TITLE : NBA Accreditation and Teaching-Learning Process in Engineering
DATE : 15 to 19 November, 2021
ATTENDED BY : Praveen Kumar Jain, Rajni Idiwai, Priyanka Sharma, Sunil Lakhawat, Vikas Pathak, Swati Arora, Suman Sharma, Shubhi Jain, Pooja Choudhary, Neeraj Jain, Monika Mathur, J.P.Vijay, Harshal Nigam, Abhinandan Jain
ORGANIZED BY : SKIT, Jaipur

TITLE : Machine Learning Application in Signal Processing and Communication Engineering
DATE : 3 to 8 January, 2022
ATTENDED BY : Priyanka Sharma
ORGANIZED BY : EICT, Academy, supported by MeitY, Govt. of India and IIT Guwahati

TITLE : Advanced Sensor Technology for Efficient Biomedical and Energy Management in Smart Cities
DATE : 3 to 7 January, 2022
ATTENDED BY : Rajni Idiwai, Priyanka Sharma
ORGANIZED BY : JECRC, Jaipur

TITLE : Research Applications in the field of Artificial Intelligence
DATE : 4 to 8 January, 2022
ATTENDED BY : Rajni Idiwai, Priyanka Sharma
ORGANIZED BY : SKIT, Jaipur

FACULTY INDUCTION PROGRAM (FIP) ATTENDED

TITLE : Recent Trends of Robotics & Automation
DATE : 5 to 11 January, 2022
ATTENDED BY : Shubhi Jain, Priyanka Sharma, Rajni Idiwai, Abhinandan Jain, Harshal Nigam, Rahul Pandey, Neeraj Jain, Sunil Lakhawat, Gloria Joseph, Suman Sharma.
ORGANIZED BY : SKIT, Jaipur

STTPs ATTENDED

TITLE : Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVM-2022)
DATE : 25 to 29 January, 2022
ATTENDED BY : Priyanka Sharma, Rajni Idiwai, Sunil Lakhawat
ORGANIZED BY : SKIT, Jaipur

NPTEL / mooKIT / IITBX / SWAYAM COURSES COMPLETED

COURSE/TOPIC : Principles of Communication Systems: Part - II
COMPLETED BY : Ankit Agarwal
DURATION & CATEGORY : July to October, 2021. Awarded Elite+Silver Certificate

COURSE/TOPIC : Computer Architecture & Organization
COMPLETED BY : Pooja Choudhary
DURATION & CATEGORY : July to October, 2021

COURSE/TOPIC : Computer Architecture & Organization
COMPLETED BY : Manju Choudhary
DURATION & CATEGORY : July to October, 2021

COURSE/TOPIC : Digital Circuits
COMPLETED BY : Mamta Jain
DURATION & CATEGORY : July to October, 2021. Awarded Elite+Silver Certificate

COURSE/TOPIC : Fabrication Techniques for MEMs based sensors: Clinical Perspective
COMPLETED BY : Namrata Saxena
DURATION & CATEGORY : July to October, 2021. Awarded Elite Certificate

COURSE/TOPIC : Accreditation for Undergraduate Engineering Programme
COMPLETED BY : Shubhi Jain
DURATION & CATEGORY : January to March, 2021 (3-Week).

COURSE/TOPIC : Microwave Engineering
COMPLETED BY : Shubhi Jain
DURATION & CATEGORY : July to October, 2021 (12-week).

EXPERT TALK / WEBINARS ATTENDED

TITLE : Intellectual Property Rights
DATE : 25 October, 2021
ATTENDED BY : Shubhi Jain
ORGANIZED BY : SKIT, Jaipur

TITLE : Intellectual Property Rights
DATE : 18 to 22 Jan, 2022
ATTENDED BY : Priyanka Sharma, Rajni Idiwai
ORGANIZED BY : SKIT, Jaipur

EXPERT TALK DELIVERED

TITLE : Solar Cell Devices
DATE & VENUE : 3 February, 2022. At G.B.Poddar College, Nawalgarh, Rajasthan.

DELIVERED BY : Praveen Kumar Jain

"Scientists dream about doing great things.
Engineers do them." ~ James A. Michener

TITLE : Resistive Random Access Memory Devices
DATE & VENUE : 11 February, 2022. At Anand International College of Engineering, Jaipur
DELIVERED BY : Praveen Kumar Jain

TITLE : Cyber Security
DATE & VENUE : 11 February, 2022. In the Webinar Series under Azadi ka Amrit Mahotsav organized by DOT, Govt. of Rajasthan, Jaipur
DELIVERED BY : Monika Mathur

TITLE : Plasmonics: Next Chip Scale Technology
DATE & VENUE : 17 October, 2021. At MNIT, Jaipur
DELIVERED BY : Rukhsar Zafar

SESSION CHAIRED

SESSION ON : Indian Conference on Antennas & Propagation (InCAP 2021)
CHAired BY : Monika Mathur
DATE & VENUE : 13 to 16 December, 2021. At MNIT, Jaipur

Ph.D. AWARDED

THESIS TITLE : Hardware Implementation of Digital Filtering Techniques for Genomic Sequence Analysis
Ph.D. AWARDED TO: Vikas Pathak
SUPERVISED BY : Dr. Satyasai Jagannath Nanda and Dr. Amit Mahesh Joshi
INSTITUTE : MNIT, Jaipur.
YEAR : January, 2022

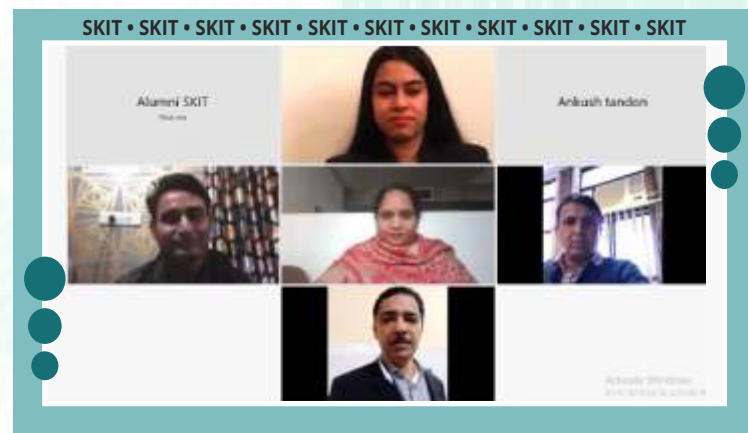
FACULTY ACHIEVEMENT

Dr. Monika Mathur was selected as Masters trainers for UKIERI program organized by AICTE and British India council, for the session 2021-22. She was also elected as SLATE executive member for IEEE-APS Jaipur Chapter for the session 2021-22 and Treasurer of IETE Rajasthan Subsection for the year 2021-22.

DEPARTMENT OF ELECTRICAL ENGINEERING

ALUMNI INTERACTION PROGRAM 'SYNERGY': INTERACTION WITH ALUMNI ORGANIZED

An alumni interaction program 'Synergy: Interaction with Alumni' was organized on 11 December, 2021. The key-note speaker of the session was Mr. Tauseef Akram, an alumnus of SKIT, Jaipur. Presently, he is working as an Application Development Specialist, Accenture. Mr. Tauseef Akram shared memories about his college days. He talked about his training days and shared his experiences about innovation and advancement in technology in every sector. He discussed about the challenges, struggles and adventures that he came across in his journey towards his career. He also clarified the misconception of students about the software companies and various divisions of work in companies and industries. Mr Akram also talked about the current scenario of software industries, importance of knowledge of technology, opportunities in it and new emerging technologies in the era

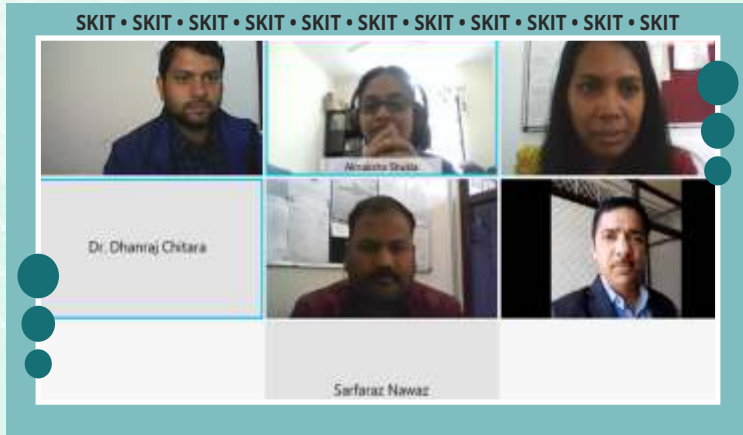


EXPERT TALK ON 'CHARGING INFRASTRUCTURE TO ENABLE ELECTRIFIED TRANSPORTATION'

An expert lecture on 'Charging Infrastructure to Enable Electrified Transportation' by Dr. Akanksha Shukla, Assistant Professor, SVNIT, Surat was organized by the Electrical Engineering Department on 5 February, 2022. Dr. Akanksha discussed about the adoption of EVs. She explained that EVs will not only benefit the environment but also

“A leader must have the courage to act against an expert’s advice.”

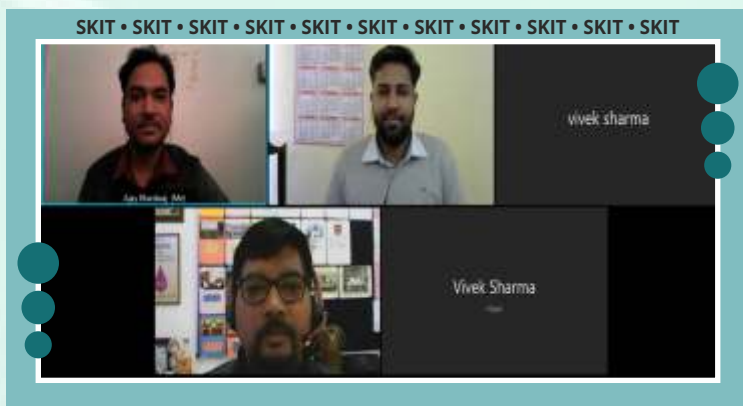
An expert lecture on 'Charging Infrastructure to Enable Electrified Transportation' by Dr. Akanksha Shukla, Assistant Professor, SVNIT, Surat was organized by the Electrical Engineering Department on 5 February, 2022. Dr. Akanksha discussed about the adoption of EVs. She explained that EVs will not only benefit the environment but also reduce reliance on oil markets, thus, coping with energy crisis. She explained how cost, driving range and charging time are major concerns of EV users and how proper planning of charging infrastructure can reduce the charging time and driving range anxiety. Challenges associated with the adoption of Electric Vehicle (EV), Charging Levels Current Scenario in India, Planning of Fast Charging Stations (FCSs) in Integrated Network (distribution



EXPERT LECTURE ON 'FUNDAMENTAL OF POWER ELECTRONICS'

An expert lecture on 'Fundamental of Power Electronics' by Dr. Ajay Kumar, Assistant Professor, Department of EE, BIT Mesra was organized by the Electrical Engineering Department on 10 February, 2022. The session was organized for all the higher semester students of Electrical Department. Dr. Kumar discussed about the fundamentals of power electronics. Keeping in tune with the spirit of the session, he explained some basic concepts related to the topic in order to make the things clearer.

The event was coordinated by Mr. Vivek Sharma and Mr. Ajay Bhardwaj. Dr Dhanraj Chitara (HOD, Dept of EE) delivered the vote of thanks.



BOOK CHAPTER PUBLISHED

BOOK : Algorithm for Intelligent System
 AUTHOR/S : Ravi Kant Sharma, Dhanraj Chitara, Shashi Raj, K.R.Niaji, Anil Swarnkar
 BOOK CHAPTER : Multi-machine Power System Stabilizer Design using Gray Wolf Optimization
 PUBLISHER : Springer

PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

TITLE : Optimal Allocation of Multiple Distributed Generation Units (Type I) in Radia Distribution Topology for Loss Minimization, 2022
 AUTHOR/S : Ankush Tandon, Sarfaraz Nawaz
 PROCEEDING : 6th IEEE International Conference on Computing, Communication and Automation, 17 to 19 December, 2021

TITLE : Forecasting of PM10 using Intelligent Crow Search Algorithm Tuned Feed-Forward Neural Network
 AUTHOR/S : Shalini Shekhawat, Akash Saxena, AK Dwivedi, Vishal Saxena
 PROCEEDING : International Conference on Innovative Computing and Communications, 19 to 20 February, 2022

TITLE : Application of Hybridized Whale Optimization for Protein Structure Prediction
 AUTHOR/S : Akash Saxena, Shalini Shekhawat, Ajay Sharma, Harish Sharma and Rajesh Kumar
 PROCEEDING : International Conference on Innovative Computing and Communications, 19 to 20 February, 2022

TITLE : Harmonic Estimator using Design Atom Search Optimization Algorithm
 AUTHOR/S : Aishwarya Mehta, Jitesh Jangid, Akash Saxena, Shalini Shekhawat, Rajesh Kumar
 PROCEEDING : International Conference on Communication and Computational Technologies, 27 to 28 February, 2021

TITLE : A Hybrid Forecasting Model based on Equilibrium Optimizer and Artificial Neural Network for Assessment of Pm10 Concentration
 AUTHOR/S : Shalini Shekhawat, Akash Saxena, AK Dwivedi, Rajesh Kumar
 PROCEEDING : Applications of Artificial Intelligence in Engineering, 8 to 10 September, 2020.

TITLE : A Novel Approach to Fractional Riccati Equations by Laplace Decomposition Method
 AUTHOR/S : Deepika Jain, Deepti Arela

PROCEEDING : International Conference on Recent Advancements in Science, Engineering & Technology, and Management, 1 to 2 September, 2021

AUTHOR/S : Ankush Tandon, Sarfaraz Nawaz
CONFERENCE : IEEE 6th International Conference on Computing, Communication Automation (ICCCA). Organized by University of ARAD (Romania), 17 to 19 December, 2021

PAPERS PRESENTED IN CONFERENCES

TITLE : Risk-Seeker Information Gap Decision Theory based Smart Grid Operation Encompassing Demand Response
AUTHOR/S : Tanuj Rawat, K. R. Niazi, Sachin Sharma, Jyotsna Singh
CONFERENCE : International Conference on Electrical and Electronics Engineering (ICEEE), 8 to 9 January, 2022.

TITLE : WD-EEMD based Voting Classifier for Hand Gestures Classification using sEMG Signals
AUTHOR/S : Puru Lokendra Singh, Samidha Verma, Ankit Vijayvargiya, Rajesh Kumar
CONFERENCE : IEEE 6th International Conference on Computing, Communication and Automation (ICCCA-2021), 17 to 19 December, 2021.

TITLE : Comparative Assessment among different Convolutional Neural Network Architectures for Alzheimer's Disease Detection
AUTHOR/S : Gaargi Sharma, Ankit Vijayvargiya, Rajesh Kumar
CONFERENCE : IEEE 8th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), 11 to 13 November, 2021.

TITLE : Evolutionary Neural Network based Hybrid Architecture for Strategic Bidding in Electricity Market
AUTHOR/S : Kavita Jain & Akash Saxena
CONFERENCE : IEEE International Conference on Smart Technologies for Power, Energy & Control (STPEC-2021), 19 to 22 December, 2021.

TITLE : An Opposition Theory inspired BAT Algorithm (OTIBA) for Profit Maximization of GENCOs in Day-ahead Power
AUTHOR/S : Pooja Jain, Akash Saxena, Rajesh Kumar
CONFERENCE : IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC 2021), 19 to 22 December, 2021.

TITLE : Optimal Allocation of Multiple Distributed Generation Units (Type I) in Radial Distribution Topology for Loss Minimization

FDPs ATTENDED

TITLE : Advances in Power Generation from Renewable Energy Sources
DATE : 6 to 11 December, 2021
ATTENDED BY : Sarfaraz Nawaz
ORGANIZED BY : PCE, Jaipur

TITLE : Effective Leadership and Excellence in Technical Education
DATE : 15 to 19 November, 2021
ATTENDED BY : Abhishek Gupta
ORGANIZED BY : Women Engineering College Ajmer & ATAL Academy

TITLE : Techno-economic Assessment of Flexibility Competency in Deregulated Power System (TEAFCDPS-2021)
DATE : 20 to 24 September, 2021
ATTENDED BY : Tanuj Rawat
ORGANIZED BY : SKIT, Jaipur

TITLE : Ecological and Eco-efficient Constructions Practices (EECP-2022)
DATE : 17 to 21 January, 2022
ATTENDED BY : Garvit Gupta
ORGANIZED BY : SKIT, Jaipur

TITLE : Application of different Computational Techniques in the Field of Engineering
DATE : 25 to 29 January, 2022
ATTENDED BY : Vivek Sharma
ORGANIZED BY : Gargi Memorial Institute of Technology

TITLE : Techno – Economic Assessment of Flexibility Competency in De-regulated Power System (TEAFCDPS- 2021)
DATE : 20 to 24 October, 2021
ATTENDED BY : Virendra Swaroop Sangtani
ORGANIZED BY : SKIT, Jaipur

TITLE : Recent Advancement in Power System with Renewable Energy Sources
DATE : 17 to 21 January, 2022
ATTENDED BY : Kavita Jain
ORGANIZED BY : AICTE Training and Learning (ATAL) Academy

TITLE : Deep Learning and Computer vision
DATE : 3 to 7 January, 2022
ATTENDED BY : Kavita Jain
ORGANIZED BY : AICTE Training and Learning (ATAL) Academy

WORKSHOPS ATTENDED

TITLE : Universal Human Values: A Step towards Holistic Development
DATE : 11 to 15 November, 2021
ATTENDED BY : Abhishek Gupta
ORGANIZED BY : UHV& EC, SKIT, Jaipur

TITLE : Materials Fabrication & Characterization Techniques
DATE : 24 to 25, January, 2022
ATTENDED BY : Kavita Jain
ORGANIZED BY : Department of Physics, SKIT, Jaipur

NPTEL / mooKIT / IITBX / SWAYAM

COURSES COMPLETED

COURSE/ TOPIC : Fundamental of Electrical engineering
COMPLETED BY : Kavita Jain
DURATION&CATEGORY : July to October, 2021 (12 -Week).

M.TECH. SUPERVISED

DISSERTATION TOPIC : Intelligent Harmonic Estimator Design by Atom Search Optimization
NAME OF STUDENT : Aishwarya Mehta
GUIDED BY : Akash Saxena

DISSERTATION TOPIC : A few Investigations on Transmission Expansion Planning by Teaching Learning based Optimization Algorithm
NAME OF STUDENT : Jitesh Jangid
GUIDED BY : Akash Saxena

DISSERTATION TOPIC : An Improved Loss Sensitivity Approach for Optimal Allocation of DG at different Penetration Level
NAME OF STUDENT : Gunjan Sharma
GUIDED BY : Sarfaraz Nawaz

DISSERTATION TOPIC : A Maximal Cost Saving Approach for Allocation of Capacitor Units in Distribution System using ICA
NAME OF STUDENT : Pramod Jat
GUIDED BY : Ankush Tandon and Sarfaraz Nawaz

STTPs ATTENDED

TITLE : Tomorrow's Electrical Power Grid: Challenges, Trends and Upcoming Paradigms
DATE : 3 to 7 January, 2022

ATTENDED BY : Jyotsna Singh
ORGANIZED BY : SKIT, Jaipur

TITLE : Student Learning Assessment – STTP-PARAKH
DATE : 22 November to 19 December, 2021
ATTENDED BY : Virendra Swaroop Sangtani
ORGANIZED BY : Construction Industry Development Council (CIDC)

PATENT PUBLISHED

TITLE : Multi Agent Systems for Intelligent Bidding Price Selection for Profit Accumulation.
NAME : Pooja Jain, Akash Saxena and Shalini Shekhawat
PATENT FILED DATE : Application No. 2021105548; 15 August, 2021
PATENT PUBLISHED DATE : 3 November, 2021

EXPERT TALK DELIVERED

TITLE : A Comprehensive Analysis of MCP Prediction Models
DATE & VENUE : 20 to 24 September, 2021. At SKIT, Jaipur
DELIVERED BY : Akash Saxena

TITLE : Covid-19: A Pandemic or Infodemic? (A Forecaster's Perspective)
DATE & VENUE : 25 to 26 September, 2021. At PSIT College of Engineering, Kanpur.
DELIVERED BY : Akash Saxena

TITLE : Covid Prediction Models based on Grey Machine Learning
DATE & VENUE : 4 January, 2022. At SKIT, Jaipur
DELIVERED BY : Akash Saxena

TITLE : OBE's Performance Indicators
DATE & VENUE : 11 January, 2022. At SKIT, Jaipur
DELIVERED BY : Akash Saxena

TITLE : Indian Energy Scenario with Energy Conservation and Energy Efficiency
DATE & VENUE : 10 December, 2021. At Vivekananda Institute of Technology, Jaipur
DELIVERED BY : Virendra Swaroop Sangtani

"Take the best that exists and make it better."

DEPARTMENT OF CIVIL ENGINEERING

FDP ON 'TRANSPORTATION GEOTECHNICS AND MATERIALS FOR SUSTAINABLE INFRASTRUCTURE'

A 5-day Faculty Development Programme on 'Transportation Geotechnics and Materials for Sustainable Infrastructure' was organized jointly by the Department of Civil Engineering and the Centre of Transportation Engineering at SKIT, Jaipur from 13 to 17 December, 2021. Mr. Pradeep Kumar Garg (Chief Engineer, RUDSICO, Jaipur) graced the event as the chief guest. Dr. Mukesh Arora (Head – Faculty Affairs) welcomed the guests and the participants. Prof. D. K. Sharma (Head – Dept. of Civil Engineering) briefed the audience about the FDP. Prof. B. L. Sharma delivered the vote of thanks for the inaugural ceremony. Ten eminent speakers from industry, academics and research institutions shared their knowledge and experiences during the course of the event. More than 370 faculty members from various educational institutes from India and abroad registered for the event. Mr. Nishant Sachdeva, Dr. Prachi Kushwaha and Prof. D. K. Sharma were the coordinators of the event.



GLIMPSE OF THE FDP

FDP ON 'ECOLOGICAL AND ECO - EFFICIENT CONSTRUCTION PRACTICES'

A 5-day Faculty Development Programme on 'Ecological and Eco-efficient Construction Practices' (EECP- 2022) was organized by the Department of Civil Engineering, SKIT M&G, Jaipur in collaboration with the Indian Green Building Council (IGBC) and the Indian Concrete Institute (ICI) from 17 to 21 January, 2022. Dr Nitin Goyal

(Principal Scientist and In-charge, CSIR-NEERI, Mumbai) was the chief guest. He explained the importance of sustainable construction practices. Mr. Anand Mishra (Co-Chair, IGBC Jaipur & Managing Director, Trimurti Colonizers Pvt. Ltd.) informed about the various initiatives of IGBC for sustainable construction. Mr. Mahesh Singhal (Chairman, ICI-RSC) discussed about the various steps taken by ICI for sustainable practices. Ten eminent speakers from industry, academics and research institutions shared their knowledge and experiences during the course of the event. More than 350 faculty members from various educational institutes across India registered for the event. Dr. Bharathi M. delivered the vote of thanks.



GLIMPSE OF THE FDP

'CONCRETE CUBE' COMPETITION FOR STUDENTS ORGANIZED

Concrete Cube Competition for the students of ICI – Student Chapter took place on 8 December, 2021. Cubes were cured for 28 days and tested on 5 January, 2022 in the Concrete Lab of Civil Engineering Department. Students were asked to cast concrete of strength 25 N/mm². Group obtaining strength nearest to 25 N/mm² was declared winner. Pulkit Agrawal of B.Tech VII semester got the first position.



GLIMPSE OF THE CONCRETE CUBE COMPETITION

INDUSTRIAL VISIT TO COACHING HUB OF RAJASTHAN HOUSING BOARD

A visit to the Coaching Hub of Rajasthan Housing Board was conducted under the aegis of ICI – Student Chapter on 13 December, 2021. Student members of ICI – Student Chapter visited the site under the supervision of the faculty coordinator Mr. Anirudh Mathur. Students learnt about the necessity of coaching hubs and were also explained about the civil engineering work which was being carried out at the site.



BOOK CHAPTER PUBLISHED

BOOK : Earthquake and Structures
AUTHOR/S : Bharathi M.
BOOK CHAPTER : Metro Train-Induced Vibration
Measurement on Buildings, pp 201 212,
20 November, 2021
PUBLISHER : Springer Link

PAPER PUBLISHED IN CONFERENCE PROCEEDING

TITLE : Effect of Slope Inclination on V-H and V
M Capacity Envelope of Strip Foundation
on Undrained Clay Slope
AUTHOR/S : Bharathi M.
PROCEEDING : Proceedings of Indian Geotechnical
Conference 2021, NIT Tiruchirappalli,
16 to 18 December, 2021

PAPERS PRESENTED IN CONFERENCES

TITLE : Utilization of Marble dust and Fly ash in
Composite Mortar as Partial Cement
Substitute
AUTHOR/S : Rakesh Choudhary

CONFERENCE : International Conference on Sustainable
Materials and Practices for Built
Environment (SMPBE-2021). Department
of Civil Engineering, Manipal University,
Jaipur, 25 to 26 November, 2021

TITLE : Webometric Study on usage of
Nanomaterials in Pavement Construction

AUTHOR/S : Prachi Kushwaha, Nishant Sachdeva,
Anirudh Mathur

CONFERENCE : International Conference on Advances in
Manufacturing Technologies and
Application of Artificial Intelligence
(ICAMTAAI 2021), October 2021

TITLE : Application of Value Stream Mapping for
Waste Elimination: A Case of Construction
Equipment Industry

AUTHOR/S : Prachi Kushwaha

CONFERENCE : International Conference on Advances in
Manufacturing Technologies and
Application of Artificial Intelligence
(ICAMTAAI 2021), October 2021

TITLE : Design and Enhancement of City Park
Transport Infrastructure Facilities

AUTHOR/S : Prachi Kushwaha, Anirudh Mathur

CONFERENCE : Recent Advances in Modelling and
Simulation Techniques in Engineering
and Sciences (RAMSTES-2021) Manipal
University, Jaipur, 8 to 10 December, 2021

FDPs ATTENDED

TITLE : Ecological and Eco-efficient Construction
Practices (EECP – 2022)

DATE : 17 to 22 January, 2022

ATTENDED BY : Nishant Sachdeva, Prachi Kushwaha,
Jetender Babulal Jangid, Bharathi M.

ORGANIZED BY : Department of Civil Engineering, SKIT M &
G, Jaipur

TITLE : Intellectual Property Rights

DATE : 18 to 22 January, 2022

ATTENDED BY : Jetender Babulal Jangid

ORGANIZED BY : IPR Cell & Department of Management
Studies, SKIT, Jaipur

TITLE : Transportation Geotechnics and
Materials for Sustainable Infrastructure
(TGMSI – 2021)

DATE : 13 to 17 December, 2021

ATTENDED BY : Jetender Babulal Jangid, Abhishek Jain

ORGANIZED BY : Department of Civil Engineering & Centre
for Transportation Engineering SKIT, Jaipur

TITLE : Recent Advances in Pavement Analysis, Design and Evaluation
 DATE : 20 to 24 September, 2021
 ATTENDED BY : Prachi Kushwaha
 ORGANIZED BY : Indian Institute of Technology Jodhpur, AICTE Training and Learning (ATAL) Academy

TITLE : Alternate Building Construction Materials towards Green Environment
 DATE : 25 to 29 October, 2021
 ATTENDED BY : Rakesh Choudhary
 ORGANIZED BY : Department of Civil Engineering, Government College of Engineering, Bodinayakanur

WORKSHOP ATTENDED

TITLE : Materials Fabrication & Characterization Techniques
 DATE : 24 to 28 January, 2022
 ATTENDED BY : Abhishek Jain
 ORGANIZED BY : Department of Physics, SKIT M & G Jaipur

M.TECH. SUPERVISED

DISSERTATION TOPIC : Bus Rapid Transit in Jaipur: An Evaluation of Performance, Design Features, Safety Audit and Impacts
 NAME OF STUDENT : Vipul Vikram Mathur
 GUIDED BY : Anirudh Mathur

DISSERTATION TOPIC : Safety Analysis and Design of Traffic Calming Plan: A Case Study of Jagatpura Mahal Road
 NAME OF STUDENT : Sanchi Rewar
 GUIDED BY : Anirudh Mathur & Prachi Kushwaha

Ph.D. AWARDED

THESIS TITLE : Sustainable Production of Self Compacted Concrete Utilizing Fly Ash and Granite Waste
 Ph.D. AWARDED TO : Abhishek Jain
 SUPERVISED BY : Dr. Rajesh Gupta & Dr. Sandeep Choudhary
 INSTITUTE : MNIT, Jaipur.
 YEAR : 11 October, 2021

DEPARTMENT OF MANAGEMENT STUDIES

FDP ON 'INTELLECTUAL PROPERTY RIGHTS' ORGANIZED

A five-day Faculty Development Program on 'Intellectual Property Rights' was organized jointly by IPR Cell & DMS, SKIT, from 18 to 22 January, 2022. The inaugural session began with the welcome address by Prof. Archana Saxena, who shared the success story of SKIT. Chief guest, Professor Prabuddha Ganguli, CEO, Vision – IPR, Mumbai, India threw light on various aspects of IPR. He is a leading international expert on IPR and a consultant to the World Intellectual Property Organization (WIPO) for IPR Capacity Building Programmes in developing countries. Dr. Savita Choudhary, Convener IPR Cell, SKIT briefed about the objectives of the Cell and shared the achievements of the Cell. Prof. Krishna Dayal Sharma of English Department proposed the vote of thanks.

Day 1 began with the session of Dr Harlal Singh Mali, Convener IPR Cell, Department of ME, MNIT, Jaipur. He explained the timeline, process and legal requirements of IPR and also covered various tangible and intangible advantages of IPR. On the second day, Dr Jitender Sharma, Assistant Controller of Patent and Design, NIPAM Office, Govt. of India, threw light on the origin and evolution of IPR and the process of applying for IPR in India. On the third day, Dr Puneet Bafna, Associate Professor, Amity Law School, Amity University, Jaipur, shared his knowledge on Trademarks and Brand Building. He also covered various ethical and non-ethical practices which we encounter in our daily lives with respect to the use of registered properties under IP Act.



"Strive for perfection in everything you do."

A five-day Faculty Development Program on 'Intellectual Property Rights' was organized jointly by IPR Cell & DMS, SKIT, from 18 to 22 January, 2022. The inaugural session began with the welcome address by Prof. Archana Saxena, who shared the success story of SKIT. Chief guest, Professor Prabuddha Ganguli, CEO, Vision – IPR, Mumbai, India threw light on various aspects of IPR. He is a leading international expert on IPR and a consultant to the World Intellectual Property Organization (WIPO) for IPR Capacity Building Programmes in developing countries. Dr. Savita Choudhary, Convener IPR Cell, SKIT briefed about the objectives of the Cell and shared the achievements of the Cell. Prof. Krishna Dayal Sharma of English

DEPARTMENT OF

BASIC SCIENCES & HUMANITIES

DEPARTMENT OF

ENGLISH

BOOK EDITED

TITLE : English Language Teaching: Past, Present & Future
 EDITOR/S : Nidhi Sharma & Prabhavathy
 PUBLISHER : Shanlax Publications, Madurai

BOOK CHAPTERS PUBLISHED

BOOK : English Language Teaching: Past, Present & Future
 AUTHOR/S : Nidhi Sharma
 BOOK CHAPTER : Novel Trends in English Language Teaching
 PUBLISHER : Shanlax Publications, Madurai

BOOK : English Language Teaching: Past, Present & Future
 AUTHOR/S : Sheeba Anjum
 BOOK CHAPTER : Techniques and Challenges for Teaching English as an Additional Language in India
 PUBLISHER : Shanlax Publications, Madurai

PAPERS PRESENTED IN CONFERENCE

TITLE : Monitoring the Study: Addressing Ethical Practices in Research
 AUTHOR/S : Nidhi Sharma
 CONFERENCE : International Conference on Research Skills for Research Impetus, VIT, Chennai

TITLE : A Critical Insight into the Role of Artificial Intelligence (AI) in Tourism and Hospitality Industries
 AUTHOR/S : Krishna Dayal Sharma, Priyanka Bhaskar
 CONFERENCE : Ninth International Conference in the Series of Youth 2025, on Envisioning India's Future Growth, Innovation, Sustainability, Happiness & Wellbeing, Jaipuria Institute of Management, Jaipur, February, 2022



Garima Gupta, CSE, 1 YEAR



Garima Gupta, CSE, 1 YEAR

WINTER SCHOOL ATTENDED

TITLE : Enhancing LSRW Skills in English
DATE : 1 to 15 February, 2022
ATTENDED BY : Nidhi Sharma, Neha Purohit, Krishna Sharma, Sheeba Anjum Divya Mathur, Anupriya Singh, Lalit Gehlot, Geetika Patni, Shikha Aggarwal
ORGANIZED BY : Department of English, SKIT, Jaipur

FDP ATTENDED

TITLE : Pedagogical Shift from Text to Hypertext: Language and Literature to the Digital Narratives
DATE : 13 to 17 September, 2021
ATTENDED BY : Nidhi Sharma
ORGANIZED BY : University of Malaysia

EXPERT TALK DELIVERED

TITLE : Common Errors in Dealing with English
DATE&VENUE : 7 March, 2022. CEG, Jaipur
DELIVERED BY : Nidhi Sharma

TITLE : Interview Techniques
DATE&VENUE : 9 March, 2022. CEG, Jaipur
DELIVERED BY : Nidhi Sharma

TITLE : Personality Development and Grooming
DATE&VENUE : 10 March, 2022. CEG, Jaipur
DELIVERED BY : Neha Purohit

TITLE : Confidence Building
DATE&VENUE : 11 March, 2022. CEG, Jaipur
DELIVERED BY : Neha Purohit

FACULTY ACHIEVEMENT

Dr. Krishna Dayal Sharma, Professor, Dept. of English was invited as a judge in the 'Declamation Contest on 28 December, 2021 in '13th Tribal Exchange Programme' by Nehru Yuva Kendra Sangathan, under the aegis of Ministry of Youth Affairs and Sports, Govt. of India.

Dr. Nidhi Sharma, Associate Professor, Dept. of English has been selected for the editorial board of a Scopus journal, 'Journal of Language and Linguistic Studies' in December 2021.

“Before software should be reusable, it should be usable.”

DEPARTMENT OF

CHEMISTRY

PAPERS PRESENTED IN CONFERENCES

TITLE : Bio-fuels: Indian Scenario
AUTHOR/S : Swati Joshi
CONFERENCE : International Conference on Environmental Pollution Abatement and Disaster Management, Department of Chemistry, SKIT, Jaipur, 18 to 20 October, 2021

TITLE : Green Chemical Methods for Reduction of Ethyl Levulinate
AUTHOR/S : Poonam Ojha
CONFERENCE : International Conference on Environmental Pollution Abatement and Disaster Management, Department of Chemistry, SKIT, Jaipur, 18 to 20 October, 2021

FDP ATTENDED

TITLE : Computational Mathematics and Recent Advances in Management Principles
DATE : 15 to 19 November, 2021
ATTENDED BY : Swati Joshi, Poonam Ojha
ORGANIZED BY : SKIT, Jaipur

WORKSHOP ATTENDED

TITLE : Train the Trainer Programme on Java Programming
DATE : 6 to 13 September, 2021
ATTENDED BY : Nidhi Srivastava, Sunita Gupta, Kajal Mathur
ORGANIZED BY : Infosys, Campus Connect

SESSION CHAIRED

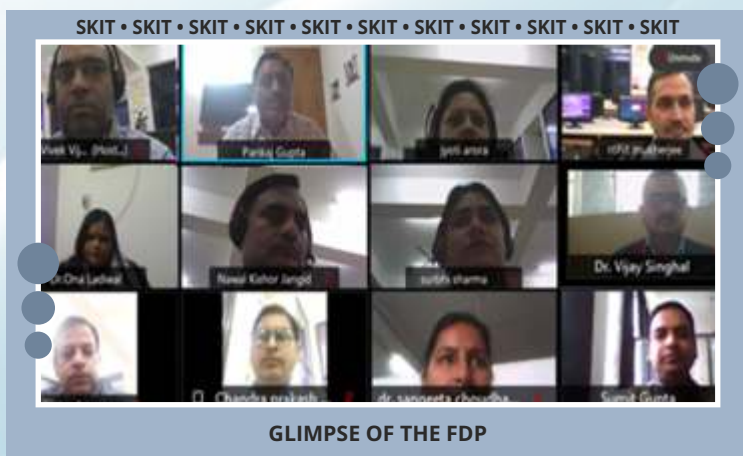
SESSION ON : International conference on Environmental Pollution Abatement and Disaster Management
CHAIRD BY : Swati Joshi, Sharda Soni, Vinita Sharma, Sangeeta Vyas, Archana Saxena
DATE&VENUE : 19 November, 2021 at SKIT, Jaipur

**BUT SCIENCE IS THE COLLECTION OF
NATURE'S
ANSWERS: THE HUMANITIES THE
COLLECTION OF MEN'S THOUGHTS.**

FDP ON 'COMPUTATIONAL MATHEMATICS & RECENT ADVANCES IN MANAGEMENT PRINCIPLES'

A five-day Faculty Development Programme on 'Computational Mathematics & Recent Advances in Management Principles' (CMRAMP-2021) was organized by the Department of Management Studies & the Department of Mathematics, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur from 15 to 19 November, 2021. The FDP focused on recent advances in managerial principles with modern computational techniques in various fields of Management Studies and Engineering & Technology. This five-day FDP comprised five informative sessions delivered by the experts from various reputed institutes. Many faculty members and research scholars from various Indian as well as foreign universities and institutes participated in this FDP.

The chief guest of the programme was Prof. Pankaj Gupta, Head, Department of Mathematics, Delhi University, Delhi. Dr Amber Srivastava, HOD-Mathematics and Dr. Rohit Mukherjee, In charge, B.Tech. I year, were part of the inaugural ceremony along with the participants and the organizing team. The FDP was convened by Dr. Ona Ladiwal, Dr. Jyoti Arora and Dr. Nawal Kishor Jangid.



PAPER PUBLISHED IN CONFERENCE PROCEEDING

TITLE : A Novel Approach to Fractional Riccati Equations by using Laplace Decomposition Method
AUTHOR/S : Deepika Jain, Deepti Arela

PROCEEDING : Proceedings of International Conference on Recent Advancement in Science, Engineering & Technology, and Management, 1 to 2 September, 2021

NPTEL / mooKIT / IITBX / SWAYAM COURSES COMPLETED

COURSE/TOPIC : Mathematics for Economics-I
COMPLETED BY : Chandra Prakash Jain, Nawal Kishor Jangid, Vivek Vijay, Vijay Kumar Singhal

DURATION & CATEGORY : 12-Week, FDP Course

COURSE/TOPIC : Enhancing Soft Skills and Personality
COMPLETED BY : Pramila Kumawat

DURATION & CATEGORY : 8-Week, FDP Course

CONFERENCE ATTENDED

TITLE : International Conference on Environmental Pollution Abatement and Disaster Management

DATE : 18 to 20 October, 2021

ATTENDED BY : Pramila Kumawat

ORGANIZED BY : SKIT, Jaipur

STTP ATTENDED

TITLE : Student Mentorship

DATE : 4 to 8 October, 2021

ATTENDED BY : Sangeeta Gupta

ORGANIZED BY : NITTR, Kolkata

FDP ATTENDED

TITLE : Computational Mathematics and Recent Advances in Management Principles

DATE : 15 to 19 November, 2021

ATTENDED BY : Amber Srivastava, Rohit Mukherjee, Pramila Kumawat, Surbhi Sharma, Jyoti Arora, Nawal Kishor Jangid, Shalini Shekhawat, Chandra Prakash Jain, Sangeeta Gupta, Vivek Vijay, Vijay Singhal, Deepika Jain, Sumit Gupta

ORGANIZED BY : Department of Management Studies and Department of Mathematics, SKIT, Jaipur

WORKSHOP ATTENDED

TITLE	:	Materials Fabrication and Characterization Techniques
DATE	:	24 to 28 January, 2022
ATTENDED BY	:	Pramila Kumawat
ORGANIZED BY	:	Department of Physics, SKIT, Jaipur

NPTEL COURSES MENTORED

MENTOR/S		COURSE/S
Jyoti Arora	:	Problem Solving through Programming in C
Vijay Singhal	:	Enhancing Soft Skills and Personality
Deepika Jain	:	Speaking Effectively
Surbhi Sharma	:	Enhancing Soft skills and Personality

explained the role of simulation in experimental technique and demonstrated the method of computer simulation. On the final day of the workshop, Dr. Syed Minhaz Hossain (Associate Professor, IEST, Shibpur) talked about the simulation tool to track the motion of particle. The workshop was convened by Mr. Pawan Kumar Jain, Mr. Rajiv Kumar, Dr. Ajay Kumar Sharma and Dr. Rishi Vyas.



DEPARTMENT OF

PHYSICS

STUDENT WORKSHOP ON 'LEARNING PHYSICS THROUGH SIMULATION AND EXPERIMENT'

A five -day student workshop on 'Learning Physics through Simulation and Experiment' (LPSE-2021) was successfully organized by the Department of Physics, SKIT, Jaipur in association with the Indian Association of Physics Teachers (IAPT) from 6 to 10 December, 2021. The workshop comprised five thoughtful informative and interactive sessions delivered by the experts from various reputed institutes. The workshop made the students aware about the importance of the effectiveness of scientific measurement while developing a conceptual understanding of measurement and uncertainty.

The workshop was inaugurated on December 6, 2021. Prof. Y.K. Vijay (Director, CIST, IIS University, Jaipur & President IAPT) was the Chief guest and Keynote Speaker of the inaugural session. In this session, Prof. Y.K. Vijay explained the basic concepts related to fundamental forces and their effects with an online demonstration of various experimental setups. On the second day, Prof. R. K. Khanna (Former Dean, VGU, Jaipur) discussed about non-ionizing radiations such as the role of microwaves in mobile communication and explained the concept of electromagnetic pollution and their biological effects. Dr. G. S Menaria (Regional Coordinator, ANVESHKA_IAPT) discussed and demonstrated the basic concepts of physics especially related to Optics and Electromagnetism. The session on the third day was delivered by Prof. O.S.K.S. Sastri (Head, Department of Physics, Central University, Himachal Pradesh). He

WORKSHOP ON 'MATERIALS FABRICATION & CHARACTERIZATION TECHNIQUES'

A five -day workshop on 'Materials Fabrication & Characterization Techniques' was successfully organized by the Department of Physics, SKIT, Jaipur from 24 to 28 January, 2022. The aim of the workshop was to provide an opportunity to the students, young researchers, engineers, and academicians to sharpen their research skills and to gain knowledge related to major analytical techniques for materials characterization like SEM, TEM, XRD, XPS, etc. with emphasis on practical applications in Engineering, Physical and Life Sciences. Also, this workshop provided an in-depth knowledge of advancements in materials, their fundamental characteristics, synthesis, and applications in different domains of Science and Technology.

The workshop comprised five sessions. Dr. Govind Gupta, Senior Principal & Professor (AcSIR), National Physical Laboratory, New Delhi was the Chief guest of the inaugural session. He explained the importance of material fabrication and need of characterization techniques and delivered an expert talk on 'Fabrication of Nitride Heterostructures for Efficient Photodetection'. The second day of the workshop began with an expert lecture by Dr. Balram Tripathi, Associate Professor, S.S. Jain Subodh College, Jaipur. He talked about solid state sulfur batteries which is an alternate of Li-ion battery. On the third day, Dr. Ambesh Dixit, Associate Professor, Department of Physics, IIT, Jodhpur, discussed about the need of materials characterization and optical spectroscopy characterization technique. Day four began with an interactive session by Dr. Pawan Kumar Kulriya, Associate Professor, School of Physical Sciences, JNU, New Delhi. He delivered his session on 'X-ray Diffractometer: Technique for Structural Analysis of Materials from bulk to Nano

A five -day workshop on 'Materials Fabrication & Characterization Techniques' was successfully organized by the Department of Physics, SKIT, Jaipur from 24 to 28 January, 2022. The aim of the workshop was to provide an opportunity to the students, young researchers, engineers, and academicians to sharpen their research skills and to gain knowledge related to major analytical techniques for materials characterization like SEM, TEM, XRD, XPS, etc. with

COURSE/TOPIC : Refresher Course on Teacher and Teaching in Higher Education (Swayam ARPIT Online Course)
 COMPLETED BY : Brajraj Sharma, Komal Sharma, Manasvi Dixit, Rishi Vyas
 DURATION & CATEGORY : 1 Dec 2020 to 31 March, 2021 (Certified on 27 Oct., 2021)



Ph.D. AWARDED

THESIS TITLE : Synthesis of Carbon Nanostructure based Polymer Composites and their Electrical and Physicochemical Characterization
 Ph.D AWARDED TO : Ajay Kumar Sharma
 SUPERVISED BY : Dr. Vipin Kumar Jain
 INSTITUTE : JK Lakshmipat University, Jaipur
 YEAR : 27 December, 2021

FDPs ATTENDED

TITLE : NBA Accreditation and Teaching-Learning Process in Engineering
 DATE : 15 to 19 November, 2021
 ATTENDED BY : Komal Sharma
 ORGANIZED BY : Department of ECE, SKIT

TITLE : Computational Mathematics and Recent Advances in Management Principles
 DATE : 15 to 19 November, 2021
 ATTENDED BY : Manasvi Dixit, Ajay Kumar Sharma
 ORGANIZED BY : SKIT, Jaipur

TITLE : Intellectual Property Rights
 DATE : 18 to 22 January, 2022
 ATTENDED BY : Manasvi Dixit, Komal Sharma, Rajiv Kumar
 ORGANIZED BY : IPR Cell & Department of Management Studies, SKIT, Jaipur

NPTEL / MOOKIT / IITBX / SWAYAM COURSES COMPLETED

COURSE/TOPIC : Physics of Renewable Energy Systems
 COMPLETED BY : Komal Sharma, Manasvi Dixit, Ajay Kumar Sharma
 DURATION & CATEGORY : July to October, 2021(12-Week), Awarded Elite certificate

COURSE/TOPIC : Wastewater Treatment and Recycling
 COMPLETED BY : Ajay Kumar Sharma
 DURATION & CATEGORY : July to October, 2021 (12-Week), Awarded Elite and Silver certificate

WORKSHOPS ATTENDED

TITLE : Intellectual Property Rights and Patent Filing Process
 DATE : 21 to 29 October, 2021
 ATTENDED BY : Brajraj Sharma, Komal Sharma, Rishi Vyas, Rajiv Kumar, Ajay Kumar Sharma

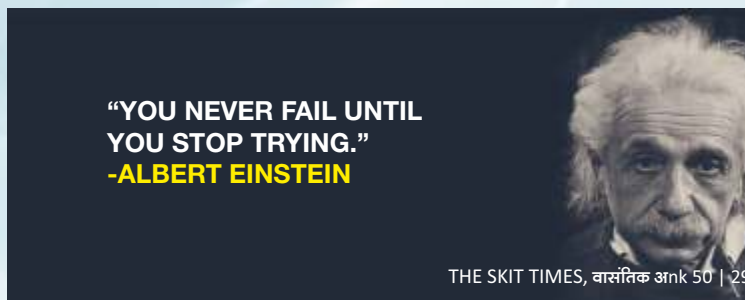
ORGANIZED BY : IPR Cell, SKIT, Jaipur & COE-IP, CDAC, Pune

TITLE : National Intellectual Property Awareness Mission
 DATE : 24 December, 2021
 ATTENDED BY : Rishi Vyas, Komal Sharma, Manasvi Dixit
 ORGANIZED BY : Intellectual Property Office, India

TITLE : Molecular Beam Epitaxy
 DATE : 17 to 18 November, 2021
 ATTENDED BY : Rajiv Kumar
 ORGANIZED BY : CCT, University of Rajasthan

WEBINAR ATTENDED

TITLE : Intellectual Property Rights
 DATE : 25 October, 2021
 ATTENDED BY : Brajraj Sharma, Komal Sharma, Manasvi Dixit, Rishi Vyas
 ORGANIZED BY : IPR Cell, SKIT, Jaipur



PAPERS PUBLISHED

DEPARTMENTS OF CS & IT

- TITLE : Assimilation of Blockchain over Cloud Computing
AUTHOR/S : Priyanka, Bright Keswani
JOURNAL : Journal of Discrete Mathematical Sciences and Cryptography (Scopus-Q2)
- TITLE : Blockchain-based Cryptography Model to Preserve Privacy for Smart Contracts
AUTHOR/S : Priyanka, Bright Keswani
JOURNAL : Journal of Discrete Mathematical Sciences and Cryptography (Scopus-Q2)
- TITLE : Automatic Index Point Detection and Semantic Indexing of Educational Videos
AUTHOR/S : Mehul Mahrishi, Sudha Morwal
JOURNAL : Design Engineering (SCOPUS)
- TITLE : Video Index Point Detection and Extraction Framework using Custom YoloV4 Darknet Object Detection Model
AUTHOR/S : Mehul Mahrishi, Sudha Morwal, Surbhi Bhatia, Pankaj Dadheech
JOURNAL : IEEE Access (SCIE)

DEPARTMENT OF MECHANICAL ENGINEERING

- TITLE : A Building Bio-climatic Design Tool Incorporating Passive Strategies in Residential Dwellings Design of Composite Climate of India.
AUTHOR/S : Sanjay Kumar, Anuj Mathur, Kunj Bihari Rana, Chandan Kumar
JOURNAL : International Journal of Environment and Sustainable Development, Vol. 21, Nos. 1/2, pp. 175-205, 2022 (Published Online: Nov 16, 2021)
- TITLE : A Comprehensive Review on Low Temperature Combustion Technologies for Emission Reduction in Diesel Engines
AUTHOR/S : Amit Jhalani, Dilip Sharma, Pushpendra Kumar Sharma, Digambar Singh, Sumit Jhalani and Jay Prakash Dubey

- JOURNAL : International Journal of Automotive and Mechanical Engineering, vol. 18(4), pp.9230 – 9243, Published online 21 Dec 2021
- TITLE : A Mini Review on The Design Modifications in Evacuated Tube Solar Collectors to Improve the Performance and Productivity
AUTHOR/S : Naman choudhary, Dinesh Kumar Sharma, Ashish Nayyar
JOURNAL : SKIT Research Journal, vol. 11(2), pp. 66-70, 2022
- TITLE : An Experimental Study Carried on Rotary Ultrasonic Machining on Fiber Reinforced Polymer Composites
AUTHOR/S : Vikash Gautam, Rounak Nuwal
JOURNAL : SKIT Research Journal, vol. 11(2), pp. 71-76, 2022
- TITLE : Enhancement of Quality of Polypropylene by Optimisation of Injection Moulding Parameters with Genetic Algorithm
AUTHOR/S : Deepak Kumar, G.S. Dangayach, P.N. Rao
JOURNAL : International Journal of Environment and Sustainable Development, Vol. 21, Nos. 1/2, pp. 206-217, 2022 (Published Online: Nov 16, 2021)
- TITLE : Optimization of Parameters for MRR in Drilling Operation using Jaya Algorithm
AUTHOR/S : Sudesh Garg, Prem Singh, Md. Suhaib Ansari
JOURNAL : SKIT Research Journal, vol. 11(2), pp. 63-65, 2022
- TITLE : Organizational Enablers for Sustainable Manufacturing and Industrial Ecology
AUTHOR/S : Dharmendra Hariyani, Sanjeev Mishra
JOURNAL : Cleaner Engineering and Technology, vol.6, Feb 2022, (Available online 29 December 2021)

DEPARTMENT OF ELECTRONICS & COMMUNICATION

- TITLE : Simulation , Design & Development of a 5G Wireless Communication System Model of the FBMC SET UP of Specific Type of Antennas Tx's & Rx's for Wireless Sensor Network.
AUTHOR/S : Shubhi Jain, P.K Singhal, Deepak Bhatnagar
JOURNAL : Design Engineering, Vol. 1; Issue 7 (2021) pp. 7588—7608
- TITLE : Effect of SiO₂ Thickness Variation on Threshold Voltage and Trans-Conductance of TFT
AUTHOR/S : Archana Jain, Lalit Kumar Lata, Abhinandan Jain, Praveen Kumar Jain
JOURNAL : SKIT Research Journal, Vol 11 Issue 2 (2021), pp-pp-37-39

DEPARTMENT OF ELECTRICAL ENGINEERING

- TITLE : Grey Forecasting Models based on Internal Optimization for Novel Corona Virus (COVID-19)
AUTHOR/S : Akash Saxena
JOURNAL : Applied Soft Computing Journal, Elsevier (Q1 SCI Indexed), November 2021
- TITLE : Supervised Learning based Demand Response Simulator with Incorporation of Real Time Pricing and Peak Time Rebate
AUTHOR/S : Ankit Kumar Sharma, Akash Saxena, and D. K. Palwalia
JOURNAL : International Transactions on Electrical Energy Systems (Willey) (Q2-SCI Indexed), December 2021.
- TITLE : Transmission Expansion Planning using Composite Teaching Learning based Optimisation Algorithm
AUTHOR/S : Jitesh Jangid, Akash Saxena, Vishu Gupta and Rajesh Kumar
JOURNAL : Evolutionary Intelligence, (Q2-ESCI Indexed) Springer.
- TITLE : Kinematic Modeling for Biped Robot Gait Trajectory using Machine Learning Techniques
AUTHOR/S : Bharat Singh, Ankit Vijayvargiya, Rajesh Kumar
JOURNAL : Journal of Bionic Engineering
- TITLE : Voting-Based 1D CNN Model for Human Lower Limb Activity Recognition using SemeG Signal
AUTHOR/S : Ankit Vijayvargiya, Khimraj, Rajesh Kumar, Nilanjan Dey
JOURNAL : Physical and Engineering Science in Medicine
- TITLE : Amended Firefly Algorithm for the Application of Congestion Management in Deregulated Environment
AUTHOR/S : Sneha Sharma & Kavita Jain
JOURNAL : International Journal for Research in Engineering Application & Management

DEPARTMENT OF CIVIL ENGINEERING

- TITLE : Experimental Investigation on Stabilization of Subgrade Soil using Bio-enzymatic Additive for Pavement Construction
AUTHOR/S : Prachi Kushwaha
JOURNAL : Innovative Infrastructure Solutions, Springer, 20 January, 2022. DOI: 10.1007/s41062-022-00752-9
- TITLE : Dynamic Response of Underreamed Batter Piles Subjected to Vertical Vibration
AUTHOR/S : M. Bharathi
JOURNAL : International Journal of Geotechnical Engineering 10 January, 2022. pp 1-1. DOI: 10.1080/19386362.2021.2025304.

- TITLE : A Study on Safety Regains of BRTS Corridor Intersection
AUTHOR/S : Anirudh Mathur, Nishant Sachdeva
JOURNAL : SKIT Research Journal, Vol 11 Issue 2 (2021) pp 01-05, ISSN 2278-2508 (P) 2454-9673(O)
- TITLE : Use of Demolished Recycled Aggregate for Pavement Construction: A Review
AUTHOR/S : Prachi Kushwaha, Nishant Sachdeva
JOURNAL : SKIT Research Journal, Vol 11, Issue 2 (2021) pp 22-26, ISSN 2278-2508 (P) 2454-9673(O)
- TITLE : Evaluation of Existing Pedestrian Facilities and its Potential Improvements
AUTHOR/S : Anirudh Mathur, Nikhil Kumar Sharma
JOURNAL : SKIT Research Journal, Vol 11, Issue 2 (2021) pp 16-21, ISSN 2278-2508 (P) 2454-9673(O)
- TITLE : Introduction to Traffic Calming Measures & Analysing the Level of Service of an Urban Street: A Stakeholder Survey
AUTHOR/S : Anirudh Mathur, Prachi Kushwaha
JOURNAL : SKIT Research Journal, Vol 11, Issue 2 (2021) pp 11-15, ISSN 2278-2508 (P) 2454-9673(O)
- TITLE : Comparative Study of Physical Properties on Conventional and Modified Binder
AUTHOR/S : Prachi Kushwaha, Anirudh Mathur
JOURNAL : SKIT Research Journal, Vol 11, Issue 2 (2021) pp 27-30, ISSN 2278-2508 (P) 2454-9673(O)
- TITLE : Effect of Fiber Volume Fraction of Waste Originated Tire Fiber and w/c Ratio on Mechanical Properties of Functionally Graded Concrete
AUTHOR/S : Abhishek Jain
JOURNAL : Iranian Journal of Science and Technology, Transactions of Civil Engineering, 12 November 2021, DOI: 10.1007/s40996-021-00778-6
- TITLE : Valorization of Bone-China Ceramic Powder Waste along with Granite Waste in Self Compacting Concrete
AUTHOR/S : Abhishek Jain
JOURNAL : Construction and Building Materials 315 (2022) 125730 23 November 2021, <https://doi.org/10.1016/j.conbuildmat.2021.125730>
- TITLE : Mechanical and Microstructural Characterization of Fly Ash Blended Self Compacting Concrete Containing Granite Waste
AUTHOR/S : Abhishek Jain
JOURNAL : Construction and Building Materials 314 (2022) 125480 13 November 2021, DOI: <https://doi.org/10.1016/j.conbuildmat.2021.125480>

TITLE : Recycling of Bone China Ceramic Waste as Cement Replacement to Produce Sustainable Self-Compacting Concrete
AUTHOR/S : Abhishek Jain
JOURNAL : Structures 37 (2022) 364–378 15 January 2022 pp 364-378, <https://doi.org/10.1016/j.istruc.2022.01.019>

TITLE : Utilization of Marble Dust and Fly Ash in Composite Mortar as Partial Cement Substitute
AUTHOR/S : Rakesh Choudhary
JOURNAL : Materials Today ISSN: 2214-7853, PP 01-06, <https://doi.org/10.1016/j.matpr.2021.12.301>

DEPARTMENT OF PHYSICS

TITLE : Comparative Study of Thermal and Optical Properties of PANI based Binary Nanocomposites
AUTHOR/S : Ajay Kumar Sharma, Manasvi Dixit
JOURNAL : Journal of Nano- and Electronic Physics, ISSN:2306-4277 (Dec. 2021)

DEPARTMENT OF MATHEMATICS

TITLE : Adomian Decomposition Method for a class of Fractional Nonlinear Programming Problem
AUTHOR/S : Jyoti Arora
JOURNAL : International Journal of Research Publication and Reviews

TITLE : Some Unified Integrals pertaining to Srivastava Polynomials
AUTHOR/S : Vijay Kumar Singhal, Nawal Kishore Jangid and Amber Srivastava
JOURNAL : SKIT Research Journal

DEPARTMENT OF ENGLISH

TITLE : Using Films as a Teaching Device for Non Native Speakers of English
AUTHOR/S : Nidhi Sharma
JOURNAL : International Journal of English and Studies, Volume 4, Issue-2, pgs-83-86

TITLE : New Directions in Culture Preservation using Folklore as a Tool: A Study of Selected African Novels
AUTHOR/S : Nidhi Sharma
JOURNAL : International Journal of English and Studies, Volume 4, Issue-2, pgs-67-70

TITLE : How to Mind a Map: Learner-Centric Tool for Enhancing Creativity
AUTHOR/S : Nidhi Sharma
JOURNAL : International Journal of English and Studies, Volume 3, Issue-12, pgs-61-65

TITLE : The Effective Manager: Few Strategies for Taking Charge
AUTHOR/S : Nidhi Sharma
JOURNAL : International Journal of English and Studies, Volume 4, Issue-2, pgs-28-32

TITLE : Madness in the Attic: Foregrounding Psychopathology in the Short Stories of Amanda Lee Koe
AUTHOR/S : Nidhi Sharma
JOURNAL : International Journal of English and Studies, Volume 4, Issue-2, pgs-33-39

TITLE : Who's Keeping the Score? Social Impact & Pedagogical Implications of Sports Unraveled through a Case-Study
AUTHOR/S : Nidhi Sharma
JOURNAL : International Journal of English and Studies, Volume 3, Issue-10, pgs-199-209



Garima Gupta, CSE, 1 YEAR



TERAHERTZ COMMUNICATION

Terahertz Radiation — also known as sub millimeter radiation, terahertz waves, Tremendously High Frequency (THF), T-rays, T-waves, T-light, T-lux or THz — consists of electromagnetic waves within the ITU-designated band of frequencies from 0.3 to 3 terahertz and wavelengths of radiation in the terahertz band correspondingly range from 1 mm to 0.1 mm (or 100 μm).

Advantages:

- THz communications have the potential for increased bandwidth and capacity compared to microwave systems
- THz communications are inherently more directional than microwave or millimeter wave links due to less free-space diffraction of the waves.
- THz communications can be implemented as a secure communication link. THz can support ultra-high bandwidth spread spectrum systems, which can enable secure communication and protection against channel jamming attacks.
- There is lower attenuation of THz radiation compared to IR under certain atmospheric conditions, for example, fog.
- Time varying fluctuations in the real refractive index of the atmospheric path leads to scintillation effects in wireless communications. For THz radiation, these scintillation effects are smaller than IR radiation allowing THz

Disadvantages:

The obvious disadvantages of communications at THz frequencies arise from the strong absorption through the atmosphere caused by water vapor and also the low efficiency and relatively low power available from currently available sources.

Harshal Nigam
Assistant Professor, ECE

Applications:

It can be used by:

Pharma Industry: THz imaging can be quite useful in performing 3D analysis on tablets. It can determine the coating integrity and thickness, detect and identify cracks

Security: THz can penetrate into clothes and plastics without damaging it, so it can be quite useful in detecting any objects of concern

Quality Control: THz cameras tech are quite effective in finding defects in sealed packages food products under various enclosures.

Terahertz Wireless Communication: THz is quite suitable to develop a current generation wireless telecommunication system which can fire at a very fast speed of 100 Gb/sec.



ANKIT GUPTA, CSE, SEM I



PARI MANOJ SARASWAT, CSE, I YEAR



ANKIT GUPTA, CSE, SEM I



AYUSHI AGARWAL, CSE, IV SEM



AYUSHI AGARWAL, CSE, IV SEM



ANKIT GUPTA, CSE, SEM I



AYUSHI AGARWAL, CSE, IV SEM



AYUSHI AGARWAL, CSE, IV SEM



वसुधैव कुटुम्बकम्

कौन अकेला है सृष्टि में, बंधु बान्धव हैं सारे,
जीव-निर्जीव, चर-अचर, दृश्य-अदृश्य अलग-अलग दिखते सारे।।

नदी-नाले, पर्वत-खाई, ग्रह-नक्षत्र, वन-उपवन,
कहाँ दिखती है कोई समता इनमें,
मानव जाति ने पृथकता बतलाई है इनमें।।

जो बिन डोर बंधे इक-दूजे से, वही बांधव हैं प्यारे,
आओ! सबके सुख का आधार "वसुधैव कुटुम्बकम्" को जाने।।

आकाशगंगा बनी है सुंदर, धरती-चंदा घूमे सूरज के संग,
बने दिन-रात, मौसम बदले, फिर उपजा जीवन,
लिए स्वभाविकता के रंग।।

मिट्टी-पानी, पशु-पक्षी, जीवन-मृत्यु, लोक-परलोक,
अभिन्न अंग सृष्टि के हैं, अस्तित्व इन सब के होने से है।।

कड़ी-कड़ी से जुड़कर, मेला लगा है ब्रह्मांडों का,
एक भी ढीली होने पर, प्रलय का तांडव देखा होगा।।

यह मंच है ऐसा, छोटा-बड़ा कोई नहीं यहां होता,
सब की भूमिका है, यह खेल है ऐसा।।

ज्ञानी सभी हैं, सारे भारी-भरकम शब्द हैं जाने,
फिर क्यों लगते, मुझसे अलग यह चांद-सितारे।।

जानने भर से ना होगा, भाईचारे का संचार,
जीना होगा बन्धुत्व भाव को, सपना तब होगा साकार।।

डॉ. प्रमिला कुमावत
प्रोफेसर गणित विभाग

जिंदगी

मोड़ पर मोड़ ले रही है जिंदगी,
लगता है बदलने वाली है।
मौत का कुछ पता नहीं कब आएगी,
मुझे तो जिंदगी से डर लग रहा है,
लगता बिखरने वाली है।
शीशे की तरह साफ थी मेरी कहानी,
अब पानी के दाग से धुंधली लग रही है।
किरदार भी गिरगिट की तरह रंग बदल रहे हैं,
लगता है कहानी बहकने वाली है।
कभी जख्म, कभी दर्द का आभास दे रही है जिंदगी,
लगता है सँवरने वाली है।

निखिल गर्ग, प्रथम वर्ष
सिविल अभियांत्रिकी

POEM

BACK BENCHER

It's been a while that my bench mate left,
 With a thousand thoughts to left.
 Almost uninterested in what the class is all
 about,
 Voices emerge, they scream, they shout.
 A blank expression, unblinking,
 Deep down the mind was sinking.
 Into a whole endless thinking,
 Wondering how this lifeless chair has left me.
 This over-thinking will do no good,
 Mourning for the lost childhood.
 The sun-kissed days, playing in the hays,
 No heed to what the world said.
 And our dream made of clay,
 When everyday had its own excitement.
 Dirt, bruises and sweaty scent,
 Yawning and mashing the eyeball vain.
 As I snap back to reality,
 Growing up was insanity,
 The natural process is a teacher,
 Who taunts and leaves you in haunts.
 Everyday you hit a low,
 But then you can rise from the ashes,
 and a new better, faster you for the world to
 show.

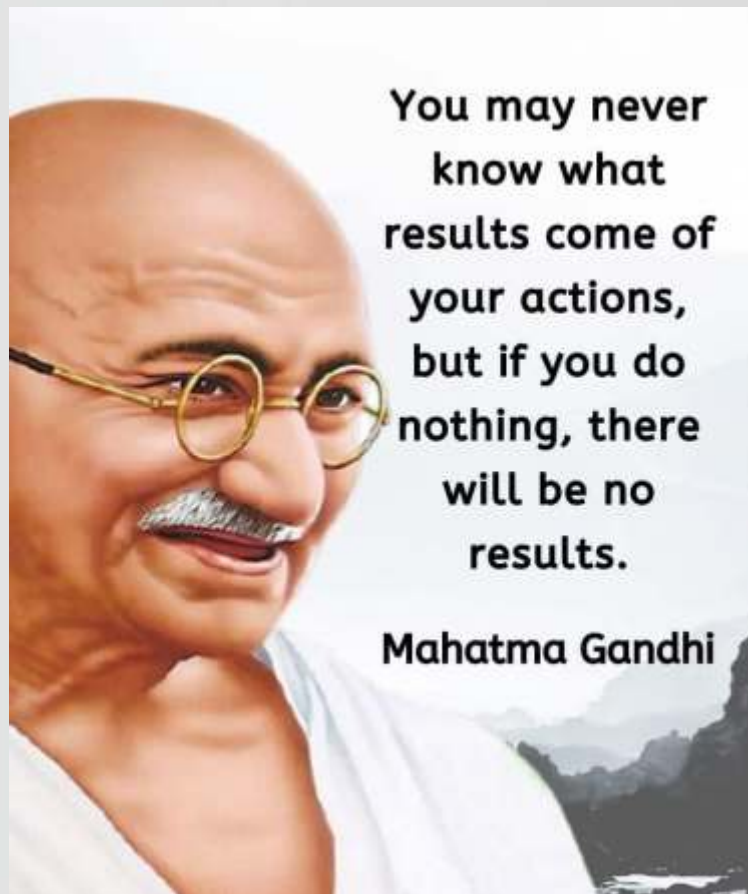
MADHUR AGRAWAL, CSE, 1 YEAR

Life of a science student is full of care
 They meet only books and books everywhere
 They have no time to stand and stare
 Gases revolve in their mind everywhere.

There is no place of poetry in their world
 The chirping of birds they have never heard
 No soul to hear what nature does say
 They think only of marks night and day.

In their heart there is no room for sentiments
 They have become busy people of experiments
 From a distance, the book of Chemistry shines
 Numerical of Physics have stolen their smiles
 Scriptures of Zoology and Botany are in front of
 the poor child
 Still their family thinks their life is full of joy.

SHAILI BANSAL, CSE, 1 YEAR



**You may never
 know what
 results come of
 your actions,
 but if you do
 nothing, there
 will be no
 results.**

Mahatma Gandhi



**SWAMI KESHVANAND INSTITUTE OF
TECHNOLOGY, MANAGEMENT & GRAMOTHAN**

Approved by AICTE, New Delhi | Engineering Branches Accredited by NBA & IE(I)

Affiliated to Rajasthan Technical University, Kota

Ramnagaria, Jagatpura, Jaipur - 302 017, Rajasthan, India
Phone No : +91 141 516 0400, 275 2165, 275 2167, 275 9609
Fax : +91 141 275 9555 | Email : info@skit.ac.in

www.skit.ac.in



SWAMI KESHVANAND INSTITUTE OF PHARMACY

*(Approved by Pharmacy Council of India (PCI), AICTE New Delhi & Affiliated by
Rajasthan University of Health Sciences, (RUHS) Jaipur)*

Phone: +91 141 5160495 | Email: skipjaipur@gmail.com

www.skipjpr.org