



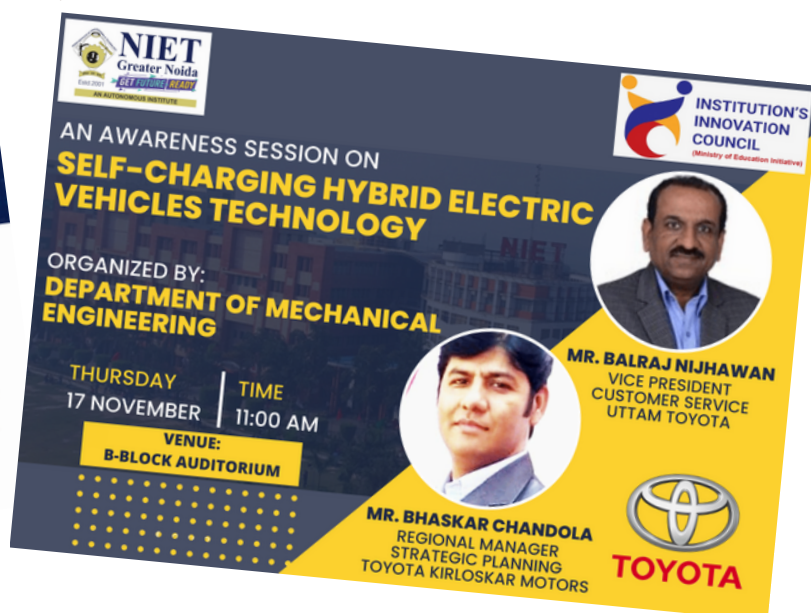
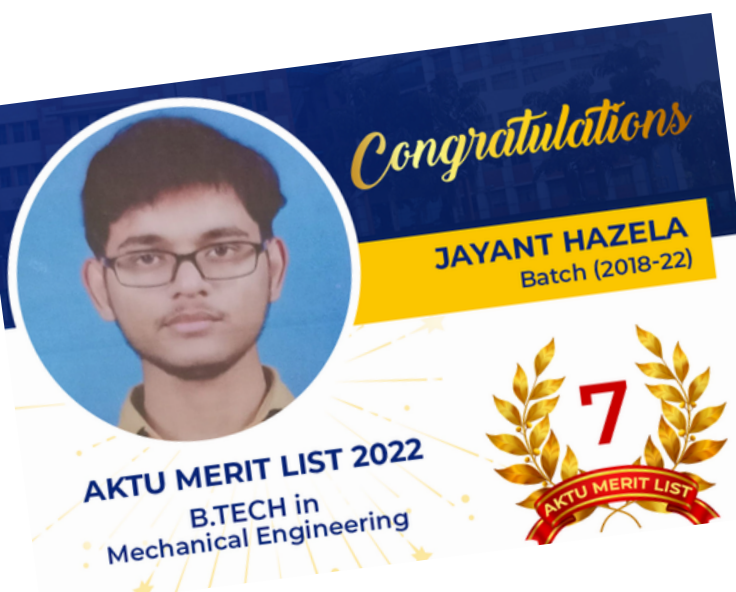
MECHANOTOMY

यांत्रिकी सोपान



THE NEWS LETTER

THE SCHOOL OF MECHANICAL ENGINEERING IS CONTINUOUSLY STRIVING TO ACHIEVE EXCELLENCE IN EDUCATION, INNOVATION, R&D AND OVERALL DEVELOPMENT OF THE SOCIETY. THE NEWSLETTER MECHANOTOMY HIGHLIGHTS THE RECENT ACHIEVEMENTS AND DEVELOPMENTS OF THE DEPARTMENT.



VISION

The department envisions to be recognized globally for its outstanding technical education and research & consultancy capabilities to ethically address the ever-changing Socio-Global issues.

MISSION

M1 To develop state-of-the-art industry aligned research facilities to provide opportunities to interpret, apply, disseminate and create knowledge.

M2 To inculcate a culture of upgrading the knowledge and skills of human resources through Self-learning, E-learning and Training activities

M3 To equip the students with academic, corporate and entrepreneurial leadership, communication skill and global awareness as required by the engineering profession and society in general.

M4 To establish an environment that encourages and builds an exemplary degree of citizenship, professional and personal integrity and ethical behavior.

EDITORIAL TEAM



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(Innovation Labs & MOOCs)



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INSIDE

- Toyota Self-Charging Hybrid Electric Vehicles Technology Awareness
- NIET UTSAV - Founder's Day Celebrations
- Faculty Development Programs
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- Technical Trainings
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- Latest Placements
- Latest Research Publications
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Success is not a one-shot process. It is the result of a continuous improvement after each failure.

**"कर्म ही दीन है। कर्म ही ईमान है।
कर्म ही पूजा है। कर्म ही धर्म है।"**

Dr. O. P. Agarwal
MANAGING DIRECTOR

We believe in valuing the 21st century education system. Today when education is going through a sea change, we leave no stone unturned to match our pace with emerging trends & newer technologies. My best wishes to the Department of Mechanical Engineering for the 2nd issue of "Mechanotomy", the newsletter.



Dr. Neema Agarwal
ADDITIONAL MANAGING DIRECTOR



NIET has been helping its students to write their own stories since its inception. Committed in providing the best jobs by creating life-changing educational opportunities and collaborative learning environments. I congratulate the Mechanical Engineering Department for publishing their newsletter with a great enthusiasm.

Er. Raman Batra
EXECUTIVE VICE PRESIDENT

Proactive scanning of the recent development in technology space, early identification of upcoming needs of the industries and curriculum designed for holistic development of the students and meticulous execution of teaching and learning process are the hallmark of our value chain to deliver "Industry ready professionals".



Er. Praveen Soneja
DIRECTOR GENERAL



We motivate our students to dream big and ensure that right spirit and necessary talent are inculcated in the students to help them realize their objectives. We also continuously strive to instil ethical values in our wards so that they become responsible citizens of the future.

Dr. Vinod Mansiram Kapse
DIRECTOR

A person without vision is similar to a sailor without a compass. Have a vision, plan your goals, accept new challenges, work hard to achieve them and make your life worthwhile. ME Department is continuously making efforts in updating skills, organizing technical and cultural events in line with latest trends in Teaching Learning process.



Dr. D.R. SOMASHEKAR
DEAN (ADMIN.)

According to Toyota Kirloskar Pvt, Ltd, education is the backbone of any growing economy and Knowledge is the best fuel to accelerate growth. They tried to give their gratitude towards contribution for the nation by nurturing the young generation and creating the "Change Leaders of tomorrow". Toyota took pride to Begin the new- era in automotive industry, the BIG Shift towards the Technology of a Sustainable FUTURE-Toyota Self Charging Hybrid Electric Vehicle.

A Green and Pollution free Environment is the best Gift we can present to our future generations. The impact of this shift to Self-Charging Hybrid Electric Vehicles will be massive to reach the above stated goal.

Thus a hands on awareness session was conducted by TOYOTA MOTORS at NIET in which around 300+ students and 25 Faculties experienced the new technology.



NIET celebrated it's Founder's day alongwith Pre Diwali celebrations on 15th October 2022 - **NIET UTSAV**. Many cultural performances followed by **FASHION FIESTA** added charm and sparkle to bring the enthusiasm at a new height.

School of Mechanical Engineering faculty members stole the hearts of audience by performing **group singing** and also marshalled on the ramp in Indo-Western outfits @Fashion Fiesta.





National Institute of Technical Teachers Training & Research, Chandigarh
(Ministry of Education, Government of India)
राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण एवं अनुसंधान संस्थान, चंडीगढ़
(शिक्षा मंत्रालय, भारत सरकार)

NITTTR Chandigarh (MoE, Govt. of India) is a premier institute committed to provide high quality and customized education, training, research and development and extension services to technical and vocational education system, industry and community. The institute aims to develop leadership in technical teachers' training and provide educational products and services to enable the technical education system to achieve excellence internationally.

Faculty Development Programmes Conducted by NITTTR Chandigarh

| Sr. No. | Name of FDP | No. of Faculties Participated | Date of FDP |
|---------|---|-------------------------------|--------------------------|
| 1 | Nanosensors and Devices | FDP | 22.08.2022 to 26.08.2022 |
| 2 | CAD using SolidWorks | FDP | 12.09.2022 to 16.09.2022 |
| 3 | Business and Soft Skills Management (ICT Based) | FDP | 19.09.2022 to 23.09.2022 |
| 4 | FEA using ANSYS (ICT Based) | FDP | 26.09.2022 to 30.09.2022 |
| 5 | Data Science using Python | FDP | 10.10.2022 to 14.10.2022 |



Online

Industrial Visits are part of Academic curricula as well as important for the enriching the practical knowledge of the students.

School of Mechanical Engineering organized an Industrial visit for its students at HAIER Appliances Pvt Ltd., Greater Noida and provided them an opportunity to see the work culture and operations of a world class manufacturing industry.

The visit was planned on 16 September 2022 and around 100+ students grabbed the opportunity to explore the "Industrial Knowledge" over production of air conditioners, televisions, refrigerators, washing machines and smart home technology.



Students of **Mechanical Engineering** actively participates in the various sports events, no matter whether in house or at inter-college level or even at AKTU Zonals level, and they do win to keep the name of department on SKY HIGH.

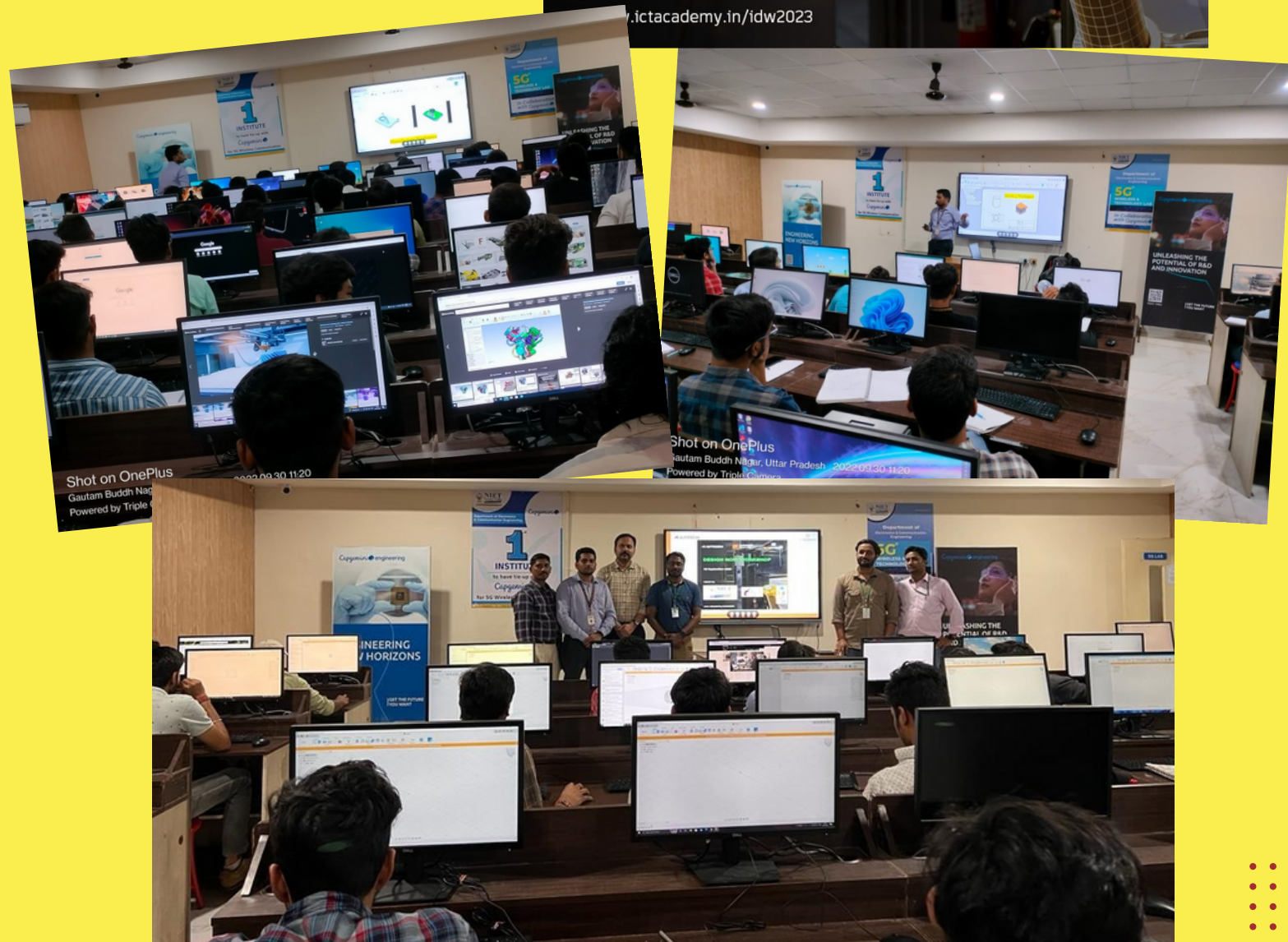
Summary of Students Achievements

| Sr. No. | Roll No. of Student | Name of Student | Status | Name of Achievements |
|---------|---------------------|------------------|-------------|---------------------------|
| 1 | 1901330400037 | Chirag Deol | 1st Runner | Volleyball at AKTU Zonals |
| 2 | 2201330409018 | Jatin Mehra | 1st Runner | Volleyball at AKTU Zonals |
| 3 | 2101330409023 | Shikha Kesarwani | Winner | Tug of War (IIMT College) |
| 4 | 2201330409018 | Jatin Mehra | Winner | Volleyball (IIMT College) |
| 5 | 1901330400037 | Chirag Deol | Winner | Volleyball (IIMT College) |
| 6 | 1901330400043 | Gagan Chaudhary | Participant | Kho Kho at AKTU Zonals |
| 7 | 2101330400010 | Kalash Tyagi | Participant | Kho Kho at AKTU Zonals |
| 8 | 1901330400037 | Chirag Deol | Participant | Kabaddi at AKTU Zonals |
| 9 | 1901330400051 | Indra Prakash | Participant | Kabaddi at AKTU Zonals |
| 10 | 2001330400048 | Yugal Upadhyay | Participant | Kabaddi at AKTU Zonals |



AUTODESK FUSION 360™ TRAINING BY ICT ACADEMY

DATE :
30-09-22
&
11-11-22



INNOVATION AWARENESS SESSION



DATE:
17-11-22



KPIT SPARKLE PROGRAMME

DATE: 23-09-22



Mechanotomy – January 2023



LEADERSHIP TRAINING AND PERSONALITY DEVELOPMENT PROGRAMME (LTPD)

DATE :
12-09-22
TO
17-11-22



The importance of Vishwakarma Puja is to remember Lord Vishwakarma for acquiring career success or obtaining movable assets. This day is memorialized in recognition of God Vishwakarma, who is known as the creator and architect of the entire world. He is also known as the son of Lord Brahma.

Vishwakarma Puja is performed on 17th September of every year in the Workshop of NIET, as a part of holy ritual in an engineering insitution.



Summary of Students Placements

| Sr. No. | Roll No. of Student | Name of Student | Name of Company |
|---------|---------------------|--------------------------------|-----------------|
| 1 | 1901330400008 | ADITYA SRIVASTAVA | Capgemini |
| 2 | 1901330400024 | ANURAG KUMAR | Capgemini |
| 3 | 1901330400031 | ATUL KUMAR GAURAV | Capgemini |
| 4 | 1901330400040 | DEEPAK MISHRA | Capgemini |
| 5 | 1901330400042 | DHEERAJ KUMAR JHA | Capgemini |
| 6 | 1901330400043 | GAGAN CHAUDHARY | Capgemini |
| 7 | 1901330400045 | GURSHARAN SINGH (PMSSS) | Capgemini |
| 8 | 1901330400047 | HARSH VARDHAN SINGH | Capgemini |
| 9 | 1901330400048 | HARSH KUMAR SINGH | Capgemini |
| 10 | 1901330400059 | MD ADIL KHAN | Capgemini |
| 11 | 1901330400068 | NILOY CHAKRABORTY | Capgemini |
| 12 | 1901330400076 | RADHA KRISHNA YADAV | Capgemini |
| 13 | 1901330400077 | RAHUL BHADANA (FW) | Capgemini |
| 14 | 1901330400085 | SAHIL SHRIVASTAV | Capgemini |
| 15 | 1901330400088 | SATVIK SHARMA | Capgemini |
| 16 | 1901330400091 | SAURABH SHARMA | Capgemini |
| 17 | 1901330400095 | SUSHIL SINGH BISHT | Capgemini |
| 18 | 1901330400098 | TARA PHOUGAT (FW) | Capgemini |
| 19 | 1901330400102 | VISHAL SINGH GAUR | Capgemini |
| 20 | 2001330409002 | ABU BAKAR KHAN | Capgemini |
| 21 | 2001330409003 | ADARSH RANJAN | Capgemini |
| 22 | 2001330409006 | ANUJ KUMAR | Capgemini |
| 23 | 2001330409008 | AYUSH KUMAR | Capgemini |
| 24 | 2001330409012 | DHRUB KUMAR MAHATO | Capgemini |
| 25 | 2001330409014 | DISHANT NAAGAR | Capgemini |
| 26 | 2001330409023 | MOHAMMAD ZOHRAN | Capgemini |
| 27 | 2001330409026 | PRADHYUMAN KUMAR | Capgemini |
| 28 | 2001330409034 | SHIVANSHU TIWARI | Capgemini |
| 29 | 1901330400006 | ADARSH KUMAR ANAND | DXC Technology |
| 30 | 1901330400007 | ADITYA GARG | DXC Technology |
| 31 | 1901330400008 | ADITYA SRIVASTAVA | DXC Technology |
| 32 | 1901330400032 | ATULYA KUMAR | DXC Technology |
| 33 | 1901330400036 | CHETAN SHARMA | DXC Technology |
| 34 | 1901330400045 | GURSHARAN SINGH (PMSSS) | DXC Technology |
| 35 | 1901330400051 | INDRA PRAKASH | DXC Technology |
| 36 | 2001330409004 | ADITYA KUMAR | DXC Technology |
| 37 | 2001330409005 | ANKIT SHARMA | DXC Technology |
| 38 | 2001330409017 | HIMANSHU MISHRA (DIPLOMA) (FW) | DXC Technology |
| 39 | 2001330409019 | KRISHNA VALLABH KUMAR | DXC Technology |
| 40 | 2001330409039 | VIVEK SONI | DXC Technology |
| 41 | 1813340073 | SAMRIDDH MISHRA (Re-2019) | Cognizant |
| 42 | 1901330400008 | ADITYA SRIVASTAVA | Cognizant |
| 43 | 1901330400037 | CHIRAG DEOL | Cognizant |
| 44 | 1901330400043 | GAGAN CHAUDHARY | Cognizant |
| 45 | 1901330400066 | MONAL SLATHIA (PMSSS) | Cognizant |
| 46 | 1901330400090 | SAURABH GOSWAMI | Cognizant |
| 47 | 1901330400095 | SUSHIL SINGH BISHT | Cognizant |
| 48 | 2001330409026 | PRADHYUMAN KUMAR | Cognizant |
| 49 | 2001330409040 | YUSUF SHAKIL | Cognizant |
| 50 | 1901330400067 | MONU KUMAR | Mutitex |
| 51 | 1901330400071 | PRADUMN KUMAR MADDHESIYA (FW) | Mutitex |
| 52 | 2001330409014 | DISHANT NAAGAR | Mutitex |
| 53 | 2001330409027 | RAHUL PAL (Diploma) | Mutitex |
| 54 | 1901330400102 | VISHAL SINGH GAUR | TCS Ninja |
| 55 | 1901330400102 | VISHAL SINGH GAUR | Newgen |

OUR PROUD RECRUITERS

Capgemini

DXC
TECHNOLOGY

Cognizant

M-E MULTITEX

iON
TATA CONSULTANCY SERVICES

TCS Ninja

NEWGEN

Summary of Research Paper Publication

| Sr. No. | Name of Faculty | SCI/Scopus/Other | Status | Name of Journal/Conference |
|---------|------------------------|------------------|-----------|--|
| 1 | Mr. Rakesh Kumar Singh | SCI | Published | Coatings (MDPI) |
| 2 | Mr. Rakesh Kumar Singh | Scopus | Published | Journal of the Institution of Engineers (India) |
| 3 | Mr. Rakesh Kumar Singh | Scopus | Published | Elsevier Composites |
| 4 | Mr. Rakesh Kumar Singh | Scopus | Published | Scientific and Technical Journal of Information Technologies, Mechanics and Optics |
| 5 | Dr. Ankit Manral | Scopus | Published | Elsevier Composites |
| 6 | Dr. Ankit Manral | SCI | Published | Polymer Composite |
| 7 | Mr. Pulkit Srivastava | Scopus | Published | Elsevier Composites |
| 8 | Mr. Swastik Soni | Scopus | Published | Materials Today Proceedings |



Multi-objective optimization of mechanical properties of chemically treated bio-based composites using response surface methodology

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Rahul Joshi^e, Pulkit Srivastava^f

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ARTICLE INFO

Keywords:
Kenaf fiber mats
Sodium acetate
Response
RSM (CCD)
Optimization

ABSTRACT

Eco-friendly surface treatment of natural fibers using sodium acetate (CH_3COONa) affects the mechanical properties of the developed composites in many ways. In present study, geometrically different kenaf fiber mats (bidirectional (BC), unidirectional (UD) and randomly oriented (RO)) were treated at different concentration (10, 15 and 20 percentage w/w) of sodium acetate aqueous solution for varying time (24, 48 and 72 hr.) at room temperature. PLA (Poly-Lactic Acid) was used for the fabrication of treated fiber reinforced bio-degradable composites. The influence of above parameters on mechanical properties were studied. Response surface methodology (RSM) module face centered central composite design was employed for the development of regression models. The relationship between chemical treatment parameters and mechanical responses were predicted by quadratic model. In this study, predicted model was developed for two numerical factors (chemical concentration (CC) and treatment time (TT)) and one categorical factor (type of mat (TOM)). Tensile strength (TS), flexural strength (FS) and impact strength (IS) are considered as response variables. The statistical analysis showed that chemical concentration, treatment time and kenaf mat type have individually and interactively influenced the response of experiments. Chemical concentration was found to be the most influencing factor among all for the changes in mechanical properties. Optimization of input variables was done based on predicted



RESEARCH ARTICLE

Environmentally sustainable chemical treatment of plant fibers for improved performance of polymeric composites

Partha Pratim Das, Ankit Manral✉, Furkan Ahmad, Bhasha Sharma, Vijay Chaudhary✉, Sumit Gupta, Pallav Gupta

First published: 17 June 2022 | <https://doi.org/10.1002/pc.26779>

SKILL DEVELOPMENT PROGRAMME (SDP) STARTED

w.e.f. 17-01-2023



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coursera

STATUS OF CERTIFICATIONS

STUDENTS

No. of Certificates:

248

FACULTIES

No. of Certificates:

75

“When learning is purposeful, creativity blossoms.
When creativity blossoms, thinking emanates.
When thinking emanates, knowledge is fully lit.
When knowledge is lit, economy flourishes.”

— Dr. A.P.J. Abdul Kalam



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145th rank in NIET Engg. Institute



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