



**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA**

माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत

**DEEMED UNIVERSITY**

(Declared under Distinct Category by Ministry of Education, Government of India)

**NAAC ACCREDITED WITH A++ GRADE**

**DEPARTMENT OF MECHANICAL ENGINEERING**

# SUMMER 2024 E-NEWSLETTER

दर्पणम्

*Darpanam*

آرسی

## INSIDE

<b>VISION AND MISSION</b>	<b>1</b>
<b>CHAIR'S LETTER</b>	<b>2</b>
<b>EVENTS &amp; ACTIVITIES</b>	<b>3</b>
<b>FACULTY NEWS</b>	<b>11</b>
<b>STUDENTS NEWS</b>	<b>15</b>
<b>ALUMNI NEWS</b>	<b>20</b>
<b>STUDENT WRITINGS</b>	<b>22</b>
<b>PROGRAM OUTCOMES</b>	<b>27</b>

**Dr. Surendra Kumar  
Chourasiya**  
Faculty Incharge

**Harsh Bhardwaj**  
Student Editor

**Khushi Kumari**  
Student Editor

**Mansi Verma**  
Student Editor

## Vision

*"To develop innovative and creative Mechanical Engineers catering the global industrial requirements and social needs"*

## Mission

- To prepare effective and responsible graduate engineers for global requirements by providing quality education.
- To enhance knowledge through project and internship in the field of Mechanical and allied engineering.
- To guide students in acquiring career-oriented jobs in the field of Mechanical engineering.
- To provide academic environment of excellence, leadership, ethical values and lifelong learning to cater the need of society by sustainable solutions.

**“विद्या ददाति विनयं, विनयाद् याति पात्रताम् ।  
पात्रत्वात् धनमाप्नोति, धनात् धर्मं ततः सुखम् ॥”**

# CHAIR'S LETTER

I am happy to note that the Department of **Mechanical Engineering** is releasing its Newsletter for **Summer 2024 (April - June)** enumerating the various activities and achievements of our faculty and students. Department of Mechanical Engineering is one of the oldest departments established in 1957 at **MITS Gwalior**. The department endeavors to produce confident professionals tuned to real time working environment. The department offers excellent academic environment with a team of highly qualified faculty members to inspire the students to develop their technical skills and inculcate the spirit of team work in them. The department has been steadily growing into an impressive dimension, which strives to encourage excellence in academic and co-curricular activities. I congratulate the entire Mechanical Engineering department faculties, staff and students for their contribution to department activities and look forward for future developments. The department focuses on the holistic development of the students and to engage them in creativity, innovation, entrepreneurial/start up activities.



**Dr. Chandra Shekhar Malvi**  
(Head of the Department)

I wish a good learning to all the students!  
Warm Regards.

– **Dr. Chandra Shekhar Malvi**  
Head of the Department  
Mechanical Engineering  
MITS Gwalior



## **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute, Affiliated to R.G.P.V. Bhopal)

### **Vision & Mission of Department of Mechanical Engineering**

#### **VISION**

“To develop innovative and creative Mechanical Engineers catering the global industrial requirements and social needs”

#### **MISSION**

- M1** To prepare effective and responsible graduate engineers for global requirements by providing quality education.
- M2** To enhance knowledge through project and internship in the field of Mechanical and allied engineering.
- M3** To guide students in acquiring career-oriented jobs in the field of Mechanical engineering.
- M4** To provide academic environment of excellence, leadership, ethical values and lifelong learning to cater the need of society by sustainable solutions.

# EVENTS AND ACTIVITIES

## Indian Super Karting Series Season 3

Team Scavengers from Mechanical Engineering department has represented Madhav Institute of Technology and Science deemed University in Indian Super Karting series season 3 held at Mahakal Institute of Technology group of institute Ujjain, Madhya Pradesh which held between 3rd July to 4 July 2024 where we won the title of best aesthetics. The event was organised by Hindustan Motors.



They made the electric Go Kart on their own in college workshop and tested it in college.

scavengers Club is known for designing, producing and manufacturing great automobile, especially electric vehicles such as Go Kart.

### TECHNICAL SPECIFICATIONS OF THE GO KART

**Battery** - 82 volt lithium ion battery

**Motor** - 5 kW BLDC motor

**Max Speed** - 90 Kmph

**Max Torque Output** - 40 Nm

‘ हम से पहले भी मुसाफ़िर कई गुज़रे होंगे  
कम से कम राह के पत्थर तो हटाते जाते ’

- Dr. Rahat Indori



# EVENTS AND ACTIVITIES

## Colloquium 2024

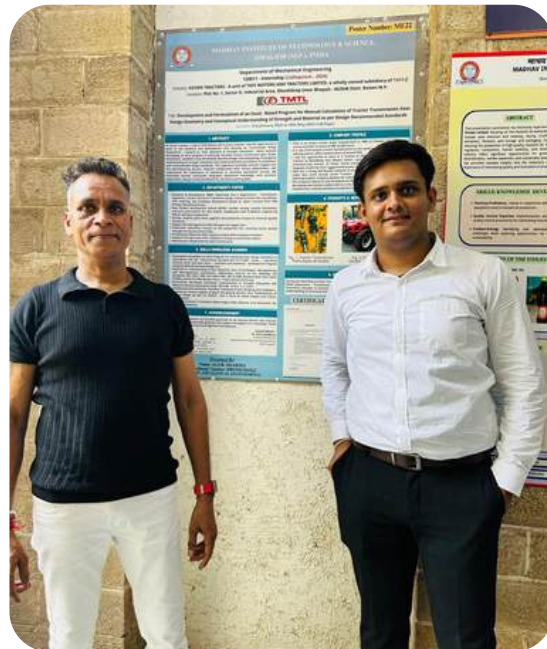
June 2024  
Colloquium  
MITS Gwalior

The Colloquium 2024 was an internship presentation program for 4th Year mechanical students which helps the professional learning experiences that offers meaningful, practical work related to student field of study and career interest.

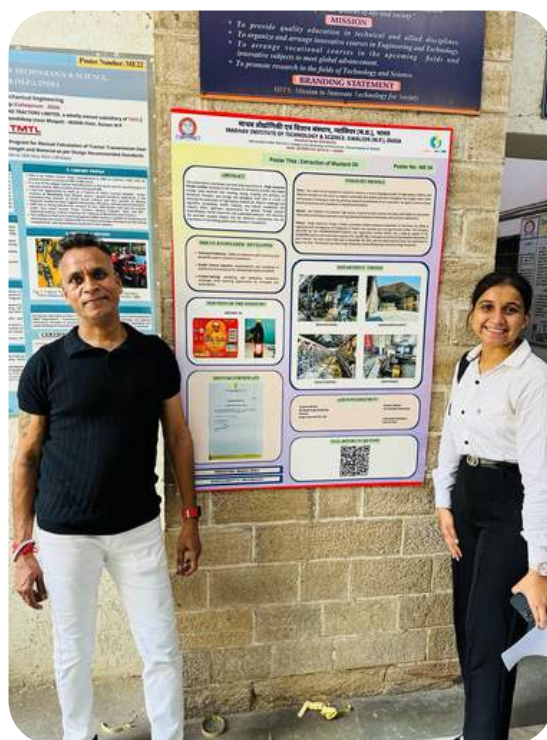


In our department, colloquium represents the pinnacle of best practices. To ensure its success, we should all actively engage and participate in these events. Additionally, it's important to evaluate our efforts continuously and share our achievements with other departments to foster broader collaboration and improvement.

**'Success is not the result of spontaneous combustion. You must set yourself on fire.'**  
— Arnold H. Glasow. **4**



It gives students the opportunity for career exploration and development and to learn new skills.



# EVENTS AND ACTIVITIES

## Hanging out with Mirzapur Actor: Ayaz Khan

Dr. Chandra Shekhar Malvi HOD of mechanical engineering department, Dr. Surendra Kumar Chourasiya and Dr. Neeraj Mishra engaged in direct interaction with Ayaz Khan, acclaimed for his portrayal of Munawwar Niyazi in Mirzapur season-3. This engagement offered a valuable opportunity to delve into his broader experiences and insights, extending beyond his acclaimed acting role.



Ayaz Khan portrayed the character of Munawwar Niazzi, who was introduced as a pivotal new figure in the third season of Mirzapur 3. Niaz's role as mediator among the formidable dons of Purvanchal added a complex layer to the narrative. His character, initially positioned as a crucial intermediary, played a significant part in the unfolding power of dynamics. However, his arc was abruptly concluded when he was killed off by the season's end, leaving a lasting impact on storyline and altering the balance of power in the series.

‘जीत की गारंटी तभी होती है  
जब जीत और हार दोनो तुम्हारे कंट्रोल में हो’

# EVENTS AND ACTIVITIES

राष्ट्रीय हिन्दी दैनिक

## हिन्दुस्तान एक्सप्रेस

कार्यक्रम में उमाशंकर पंचारा ने कहा प्रदर्शन डॉ. दीपक शर्मा द्वारा किया गया।

### एमआईटीएस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव

ग्वालियर। एमआईटीएस डीम्ड यूनिवर्सिटी में गुरु पूर्णिमा का उत्सव बड़े धूमधाम से मनाया गया। इस उपलक्ष्य में छात्रों ने विभिन्न सांस्कृतिक कार्यक्रमों की प्रस्तुति द्वारा दी गई। संस्थान के जनसंपर्क अधिकारी मुकेश मौर्य ने बताया कि कार्यक्रम में विवेकानंद नीडम के संस्थापक वरिष्ठ समाजसेवी अनिल कुमार सरोदे मुख्य

कार्यक्रम के वक्ता चंद्रशेखर महत्व बताया। तत्पश्चात मनोज कुमार



के अनुभव साझा किए। कार्यक्रम के मुख्य वक्ता अनिल कुमार सरोदे ने छात्रों से गुरु शिष्य परम्परा पर चर्चा करते हुए उन्हें पांच प्रकार के गुरुजनों का बोध कराया जिसमें प्रथम गुरु मां, द्वितीय गुरु पृथ्वी मां, तृतीय गुरु पिता, चतुर्थ गुरु शिक्षक और अंतिम पंचम गुरु आध्यात्मिक गुरु बताएं। कार्यक्रम के अंत में छात्रों द्वारा उपस्थित मुख्य अतिथि एवं अन्य अतिथि जानो और शिक्षकों को स्मृति चिन्ह प्रदान किए गए। अंत में संस्थान के डीन स्टूडेंट वेलफेयर डॉ. राजीव

#### Media coverage

#### Guru Purnima

22 July 2024

College Campus

MITS Gwalior

An event on **गुरु पूर्णिमा** was organised in MITS Gwalior at 11:45 AM on 22 July 2024. Various cultural fests were organised. Students participated in Singing, Dancing, Speech and other activities. विवेकानंद नीडम के संस्थापक वरिष्ठ समाजसेवी अनिल कुमार सरोदे जी मुख्य अतिथि के रूप में उपस्थित रहे। The program was started by reciting Saraswati Vandana and Lamp Lightening. Then Manoj Kumar told about Yog and specialities of Ayurvedic and shared his experience he got from his Guru with the students. मुख्य वक्ता अनिल कुमार सरोदे ने छात्रों से गुरु शिष्य परंपरा पर चर्चा करते हुए उन्हें पाँच प्रकार के गुरुजनों का बोध कराया।

"गुरुः शिष्यस्य जीवनस्य दीपः, अज्ञानस्य अन्धकारे ज्ञानस्य सूर्यः। गुरु पूर्णिमा तिथौ सर्वेभ्यः गुरुजनस्य नमः, तेषां आशीर्वादः जीवनस्य मार्गं प्रकाशयेत्।"



### एमआईटीएस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव



सत्ता सुधार ■ ग्वालियर

एमआईटीएस डीम्ड यूनिवर्सिटी में गुरु पूर्णिमा का उत्सव बड़े धूमधाम से मनाया गया। इस उपलक्ष्य में छात्रों ने विभिन्न सांस्कृतिक कार्यक्रमों जैसे नृत्य, गायन और भाषण की प्रस्तुति छात्रों द्वारा दी गई। संस्थान के जनसंपर्क अधिकारी मुकेश मौर्य ने बताया कि कार्यक्रम में विवेकानंद नीडम के संस्थापक वरिष्ठ समाजसेवी अनिल कुमार सरोदे जी मुख्य अतिथि के रूप में उपस्थित रहे। कार्यक्रम की शुरुआत सरस्वती वंदना एवं दीप प्रज्वलन से की गई। इसके पश्चात कार्यक्रम की अतिथि श्रीमती सूनता ने गुरु वंदना

आंतरिक विकास के लिए गुरु के महत्व को साझा किया। तत्पश्चात मनोज कुमार ने योग और आयुर्वेद की विशेषताओं को बताते हुए उनके गुरु ज्ञान से प्राप्त उपलब्धियों के अनुभव साझा किए। कार्यक्रम के मुख्य वक्ता अनिल कुमार सरोदे ने छात्रों से गुरु शिष्य परम्परा पर चर्चा करते हुए उन्हें पांच प्रकार के गुरुजनों का बोध कराया जिसमें प्रथम गुरु मां, द्वितीय गुरु पृथ्वी मां, तृतीय गुरु पिता, चतुर्थ गुरु शिक्षक और अंतिम पंचम गुरु आध्यात्मिक गुरु बताएं। श्री सरोदे ने राजा भरतहरी एवं उनके गुरु गोरखनाथ की कहानी सुनते हुए छात्रों को उत्कृष्ट वैभव बनाने के लिए

# EVENTS AND ACTIVITIES

## एमआईटीएस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव



**गवालियर**  
 एमआईटीएस डीम्ड यूनिवर्सिटी में गुरु पूर्णिमा का उत्सव बड़े भूभाग से मनाया गया। इस उपलक्ष्य में छात्रों ने विभिन्न सांस्कृतिक कार्यक्रमों जैसे नृत्य, गायन और भाषण की प्रस्तुति छात्रों द्वारा दी गई। संस्थान के जनसंपर्क अधिकारी मुकेश मौर्य ने बताया कि कार्यक्रम में विवेकानंद नीडम के संस्थापक वरिष्ठ समाजसेवी श्री अनिल कुमार सररोदे जी मुख्य अतिथि के रूप में उपस्थित रहे।

कार्यक्रम की शुरुआत सरस्वती वंदना एवं दीप प्रज्वलन से की गई। इसके पश्चात कार्यक्रम की अतिथि श्रीमती सुनीता जी ने गुरु वंदना के माध्यम से छात्रों को गुरु के महत्व के बारे में बताया। तत्पश्चात संस्थान की डीन एकेडमिक डॉ. मंजरी पांडे ने संस्थान के बारे में विस्तृत चर्चा करते हुए छात्रों को गुरु शिष्य परंपरा का बोध कराया। कार्यक्रम के वक्ता श्री चंद्रशेखर मालवीय ने भगवत गीता के ज्ञान के माध्यम से छात्रों को उनके आंतरिक

## शौर्य टाईम्स

## एम आई टी एस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव

**दैनिक शौर्य टाईम्स** समाजसेवी अनिल कुमार सररोदे मुख

कार्यक्रम के लिए गुरु के महत्व को सझा किया। तत्पश्चात श्री मनोज कुमार जी ने योग और आयुर्वेद की विशेषताओं को बताते हुए उनके गुरु ज्ञान से प्राप्त उपलब्धियों के अनुभव साझा किए। कार्यक्रम के मुख्य वक्ता श्री अनिल कुमार सररोदे जी ने छात्रों से गुरु शिष्य परंपरा पर चर्चा करते हुए उन्हें पांच प्रकार के गुरुजनों का बोध कराया जिसमें प्रथम गुरु मां, द्वितीय गुरु पृथ्वी मां, तृतीय गुरु पिता, चतुर्थ गुरु शिक्षक और अंतिम पंचम गुरु आध्यात्मिक गुरु बताए। श्री सररोदे ने राजा भरतृही एवं उनके गुरु श्री गोरखनाथ जी की कहानी सुनते हुए छात्रों को उत्कृष्ट वैभव बनाने के लिए प्रोत्साहित किया। कार्यक्रम के अंत में छात्रों द्वारा उर्वरित मुख्य अतिथि एवं अन्य अतिथि जानी और शिक्षकों को स्मृति चिह्न प्रदान किए गए। अंत में संस्थान के डीन स्टूडेंट वेलफेयर डॉ. राजीव कंसल ने विभिन्न अतिथियों का कार्यक्रम में उपस्थित होने के लिए धन्यवाद दिया।

## नगर चिंगारी हर पल आपके लिए

## एमआईटीएस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव

**नगर चिंगारी | गवालियर**  
 एमआईटीएस डीम्ड यूनिवर्सिटी में गुरु पूर्णिमा का उत्सव बड़े भूभाग से मनाया गया। इस उपलक्ष्य में छात्रों ने विभिन्न सांस्कृतिक कार्यक्रमों जैसे नृत्य, गायन और भाषण की प्रस्तुति छात्रों द्वारा दी गई। संस्थान के जनसंपर्क अधिकारी मुकेश मौर्य ने बताया कि कार्यक्रम में विवेकानंद नीडम के संस्थापक वरिष्ठ समाजसेवी अनिल कुमार सररोदे जी मुख्य अतिथि के रूप में उपस्थित रहे। कार्यक्रम की शुरुआत सरस्वती वंदना एवं दीप प्रज्वलन से की गई। इसके पश्चात कार्यक्रम की अतिथि श्रीमती सुनीता जी ने गुरु वंदना के माध्यम से छात्रों को गुरु के महत्व के बारे में बताया। तत्पश्चात संस्थान की डीन एकेडमिक डॉ. मंजरी पांडे ने संस्थान के बारे में विस्तृत चर्चा करते हुए छात्रों को गुरु शिष्य परंपरा का बोध कराया। कार्यक्रम के वक्ता चंद्रशेखर मालवीय ने भगवत गीता के ज्ञान के माध्यम से छात्रों को उनके आंतरिक विकास के लिए गुरु के महत्व को साझा किया। तत्पश्चात मनोज कुमार ने योग और आयुर्वेद की विशेषताओं को बताते हुए उनके गुरु ज्ञान से प्राप्त उपलब्धियों के अनुभव साझा किए। कार्यक्रम के मुख्य वक्ता अनिल कुमार

## द संघर्ष न्यूज गवालियर

## एमआईटीएस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव



**द संघर्ष न्यूज गवालियर** मोबा-9425717394

कार्यक्रम की अतिथि श्रीमती सुनीता जी ने गुरु वंदना के माध्यम से छात्रों को गुरु के महत्व के बारे में बताया। तत्पश्चात संस्थान की डीन एकेडमिक डॉ. मंजरी पांडे ने संस्थान के बारे में विस्तृत चर्चा करते हुए छात्रों को गुरु शिष्य परंपरा का बोध कराया। कार्यक्रम के वक्ता श्री चंद्रशेखर मालवीय ने भगवत गीता के ज्ञान के माध्यम से छात्रों को उनके आंतरिक विकास के लिए गुरु के महत्व को साझा किया। तत्पश्चात श्री मनोज कुमार ने योग और आयुर्वेद की विशेषताओं को बताते हुए उनके गुरु ज्ञान से प्राप्त उपलब्धियों के अनुभव साझा किए। कार्यक्रम के मुख्य वक्ता श्री अनिल कुमार सररोदे जी ने छात्रों से गुरु शिष्य परंपरा पर चर्चा करते हुए उन्हें पांच प्रकार के गुरुजनों का बोध कराया जिसमें प्रथम गुरु मां, द्वितीय गुरु पृथ्वी मां, तृतीय गुरु पिता, चतुर्थ गुरु शिक्षक और अंतिम पंचम गुरु आध्यात्मिक गुरु बताए। श्री सररोदे ने राजा भरतृही एवं उनके गुरु श्री गोरखनाथ जी की कहानी सुनते हुए छात्रों को उत्कृष्ट वैभव बनाने के लिए प्रोत्साहित किया। कार्यक्रम के अंत में छात्रों द्वारा उर्वरित मुख्य अतिथि एवं अन्य अतिथि जानी और शिक्षकों को स्मृति चिह्न प्रदान किए गए। अंत में संस्थान के डीन स्टूडेंट वेलफेयर डॉ. राजीव कंसल ने विभिन्न अतिथियों का कार्यक्रम में उपस्थित होने के लिए धन्यवाद दिया।

## मध्यराज्य

## एमआईटीएस डीम्ड यूनिवर्सिटी में मना गुरु पूर्णिमा उत्सव



## नईदुनिया

## पांच प्रकार के गुरुजनों का कराया बोध



एमआईटीएस में आयोजन **गवालियर: एमआईटीएस डीम्ड यूनिवर्सिटी में गुरु पूर्णिमा पर विभिन्न सांस्कृतिक कार्यक्रम हुए, जिसमें गायन और भाषण की प्रस्तुति छात्रों द्वारा दी गई। कार्यक्रम में विवेकानंद नीडम के संस्थापक वरिष्ठ समाजसेवी अनिल कुमार सररोदे जी मुख्य अतिथि के रूप में उपस्थित रहे। कार्यक्रम की अतिथि**

परंपरा का बोध कराया। कार्यक्रम के वक्ता चंद्रशेखर मालवीय ने भगवत गीता के ज्ञान के माध्यम से छात्रों को उनके आंतरिक विकास के लिए गुरु के महत्व को साझा किया। मनोज कुमार ने योग और आयुर्वेद की विशेषताओं को बताया। मुख्य वक्ता अनिल सररोदे ने छात्रों को पांच प्रकार के गुरुजनों का बोध कराया, जिसमें

# EVENTS AND ACTIVITIES

## 10th-12th Students.

### *visit* **MITS**

On April 2, 2024, at Seminar Hall 4, MITS Gwalior, the Mechanical Engineering faculty hosted an insightful seminar for 10th and 12th-grade students from Gwalior. The event seamlessly blended theoretical knowledge with practical experience, featuring in-depth presentations on mechanical engineering fundamentals and interactive workshops. Students engaged with engineering tools, participated in live demonstrations, and explored real-world applications.



Career pathways and educational guidance were discussed, enhanced by inspiring success stories from alumni. The seminar aimed to ignite interest in mechanical engineering, offering valuable hands-on exposure and personalized advice. Resource materials and ongoing support were provided to assist students in further exploration.





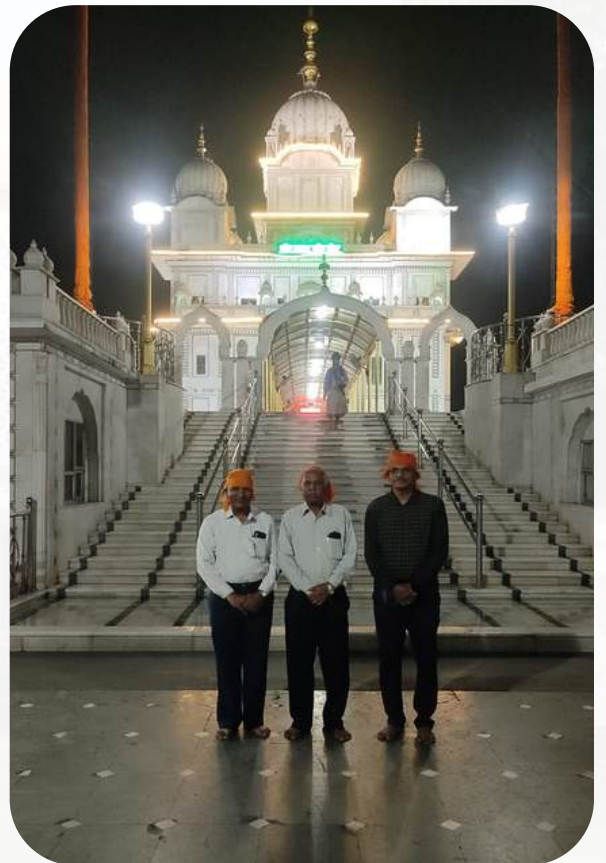
# EVENTS AND ACTIVITIES

## NBA Accreditation



The Mechanical Department has achieved NBA accreditation for the next three years, validating our commitment to excellence and quality in engineering education and practices.

The NBA accreditation aims to advance and acknowledge exceptional standards in technical education at colleges and universities. It covers both undergraduate and postgraduate programs, ensuring they meet rigorous quality benchmarks and contribute significantly to the academic and professional growth of students.



The NBA experts visited Gwalior and had an engaging and productive meeting with Dr. Surendra Kumar Chourasiya, Dr. Nitin Upadhyay, and Dr. Gavendra Norkey. Their discussions were insightful, contributing significantly to the evaluation and accreditation process.



# EVENTS AND ACTIVITIES

## International Student Conference

Khushi Chauhan made a significant contribution to the 2nd International Student Conference on Multidisciplinary and Current Technical Research (ISCMCTR\_2024), held at Madhav Institute of Technology and Science (MITS), Gwalior, MP. At this prestigious event, she presented her paper titled "Advancement in Application of Phase Change Materials for Enhanced Thermal Comfort: A Comprehensive Review." The paper delved into recent advancements in phase change materials (PCMs) and their effectiveness in improving thermal comfort across different applications. Chauhan's research provided a thorough review of current technologies, their practical implementations,



and the potential for future development in this evolving field.

Her presentation underscored the growing importance of PCMs in optimizing thermal management, highlighting how these materials can significantly enhance comfort and energy efficiency. As a representative of MITS, Chauhan's work not only showcased the institute's commitment to

cutting-edge research but also contributed valuable insights to the broader academic and technical community. Her comprehensive review is poised to influence future research directions and practical applications in thermal comfort technologies.



## Faculty Publications

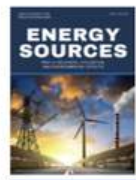
### Assesment of a hybrid solar water heating system: environmental impact and economic visibility

12 May 2024

Energy Sources

Taylor & Francis

Dr. Manoj Kumar Gaur faculty member of Mechanical Engineering department Madhav Institute of Engineering and Technology (MITS) deemed University Gwalior, Madhya Pradesh. published a research paper on the topic Assesment of a hybrid and solar water heating system in the Journal Energy Sources, Part A: Recovery, Utilization, and Environmental Effects by Taylor and Francis.



Energy Sources, Part A: Recovery, Utilization, and Environmental Effects



ISSN: (Print) (Online) Journal homepage: [www.tandfonline.com/journals/ueso20](http://www.tandfonline.com/journals/ueso20)

Assesment of a hybrid solar water heating system: environmental impact and economic viability

Amit Shrivastava & Manoj Kumar Gaur

To cite this article: Amit Shrivastava & Manoj Kumar Gaur (2024) Assesment of a hybrid solar water heating system: environmental impact and economic viability, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 46:1, 6496-6512, DOI: 10.1080/15567036.2024.2346162

To link to this article: <https://doi.org/10.1080/15567036.2024.2346162>

Published online: 12 May 2024.

Submit your article to this journal [↗](#)

View related articles [↗](#)

View Crossmark data [↗](#)



A hybrid solar water heating system, developed at Madhav Institute of Technology and Science, Gwalior, India, demonstrates significant benefits over conventional methods. Tested from November 2022 to February 2023, the system achieved an effective solar heat collection of 2.85 kWh per day and a collector efficiency of 45.5%. It has a 1.2-year energy payback time, reduces CO<sub>2</sub> emissions by 127.9 tonnes, and offers a favorable benefit-to-cost ratio of 3.13 to 3.36 with a payback period of 4.47 to 5.03 years.

# FACULTY NEWS

## Faculty Publications

### Phase Change Materials for Enhancing Heat Transfer in Latent Heat Storage Systems

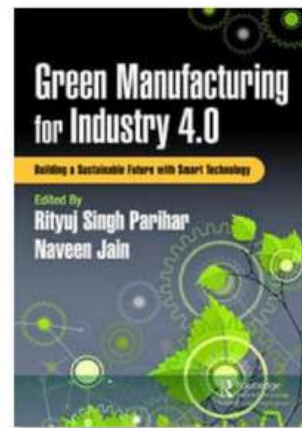
June 2024

Green Manufacturing

Taylor and Francis

Prof. Nitin Upadhyay of the Mechanical Engineering Department Madhav Institute of Technology has authored a comprehensive book titled Phase Change Materials for Enhancing Heat Transfer in Latent Heat Storage Systems. This book explores the use of phase change materials (PCMs) to improve heat transfer efficiency in latent heat storage systems, offering valuable insights into their applications and performance.

The book delves into various types of PCMs, their thermal properties, and their impact on system efficiency. It provides detailed analyses and case studies, making it a crucial resource for engineers and researchers working on energy storage solutions and thermal management technologies. Prof. Upadhyay's work contributes significantly to advancing knowledge in this field.



### Phase Change Materials for Enhancing Heat Transfer in Latent Heat Storage Systems

By [Agnivesh Kumar Sinha](#) , [Harendra Kumar Narang](#) ,  
[Somnath Bhattacharya](#), [Ram Krishna Rathore](#) ,  
[Nitin Upadhyay](#) , [Gulab Pamnani](#) , [Shashikant Verma](#) 

Book [Green Manufacturing for Industry 4.0](#)

Edition	1st Edition
First Published	2024
Imprint	Productivity Press
Pages	10
eBook ISBN	9781003439684

Phase Change Materials (PCMs) enhance heat transfer in latent heat storage systems by absorbing or releasing heat during phase changes, improving energy efficiency and stability. They store and release thermal energy at specific temperatures, optimizing thermal management.

# FACULTY NEWS

## Media Coverage

डॉ. एमके गौर, माधव इंस्टीट्यूट ऑफ टेक्नोलॉजी एंड साइंस (डीम्ड टू बी यूनिवर्सिटी) के प्रोफेसर, ने समाचार पत्र में बताया कि क्लोज़्ड एरिया में संकुचित होने के कारण विस्फोट हुआ और इसका समाधान भी प्रस्तुत किया।

डॉ. एमके गौर, जो माधव इंस्टीट्यूट ऑफ टेक्नोलॉजी एंड साइंस (डीम्ड टू बी यूनिवर्सिटी) में एक प्रोफेसर हैं, ने हाल ही में एक समाचार पत्र में एक महत्वपूर्ण मुद्दे पर प्रकाश डाला। उन्होंने बताया कि क्लोज़्ड एरिया में संकुचन की वजह से एक विस्फोट की घटना हुई थी। इस संकुचन का कारण कुछ तकनीकी और संरचनात्मक समस्याएँ थीं, जिन्होंने क्लोज़्ड एरिया में अत्यधिक दबाव उत्पन्न कर दिया।

डॉ. गौर ने इस समस्या का विस्तृत विश्लेषण किया और इसके समाधान के लिए कुछ सुझाव दिए। उन्होंने सुझाव दिया कि क्लोज़्ड एरिया को सही तरीके से डिज़ाइन और मॉनिटर किया जाए ताकि दबाव को नियंत्रित किया जा सके। इसके साथ ही, नियमित निरीक्षण और उचित रखरखाव की आवश्यकता पर भी जोर दिया गया ताकि भविष्य में ऐसी घटनाओं से बचा जा सके। डॉ. गौर का यह विवरण और सुझाव इस क्षेत्र में सुधार और सुरक्षा के लिए महत्वपूर्ण कदम साबित हो सकते हैं।



ग्वालियर 26-06-2024



Compressors in open environments benefit from natural ventilation, which aids in heat dissipation and efficient operation. However, they are exposed to dust, moisture, and varying temperatures, which can affect their performance and longevity, necessitating regular maintenance.

In closed spaces, compressors encounter limited airflow and higher temperatures, increasing the risk of overheating. Effective cooling systems and proper ventilation are essential to manage these conditions and ensure reliable performance. Each environment requires tailored solutions to maintain optimal compressor function.

‘कोई दीवाना कहता है, कोई पागल समझता है मगर धरती की बेचैनी को बस बादल समझता है मैं तुझसे दूर कैसा हूँ, तू मुझसे दूर कैसी है ये तेरा दिल समझता है या मेरा दिल समझता है’

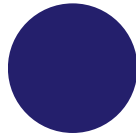
- डॉ. कुमार विश्वास

# FACULTY NEWS

## Call for book chapters

The Taylor & Francis Group, with Amit Aherwar from the Mechanical Engineering Department at Madhav Institute of Technology & Science (Deemed to be University) serving as series editor, is inviting contributions for a book titled "Advanced Technology for Sustainable Biomedical Applications." This volume aims to address a wide array of innovative topics, including the integration of 4D printing technologies in biomedical solutions and the application of nanomaterials. Contributors are encouraged to explore the potential and challenges of these materials, as well as to discuss key issues like tribochemistry and tribocorrosion within the biomedical field.

The book will also delve into advancements in nano manufacturing, functionally graded materials, and the latest trends in bio-tribology. Topics such as surface engineering, coatings for biomedical applications, and the mechanisms driving micro and nano-tribology will be covered. Additionally, it will feature discussions on Ti6Al4V 3D printed lattice structures and future emerging technologies in the sustainable biomedical sector. This call aims to gather cutting-edge research and insights to advance the field of sustainable biomedical applications.



**CRC Press**  
Taylor & Francis Group

**Scopus**

**Taylor & Francis**

**Series Editors**  
Amit Aherwar and Catalin Pruncu

# CALL FOR BOOK CHAPTERS

## Advanced Technologies for Sustainable Biomedical Applications

### SUB-TOPICS

Following are the recommended chapters, but not limited to:

- Integration of Latest Technologies for Sustainable Bio-Medical Solutions
- Nanomaterials and their challenges for biomedical applications
- Nano Manufacturing within biomedical field
- Functionally Graded Materials for biomedical applicants: Fabrication and Processing
- Recent Bio-Medical Innovations in Biomechanics sector
- Mechanism that drives the micro and nanotribology within biomedical field
- Ti6Al4V 3D printed lattice structures for biomedical applications
- 3D Bioprinting of Biopolymer Based Scaffolds for Tissue Engineering
- Medical device designed and manufactured with 4D printing technologies
- Latest trends into Biomaterials Science and Technology for a sustainable world
- Tribochemistry and tribocorrosion in key application of biomedical engineering
- Advancements in bio-tribology for a sustainable biomedical world
- Characterization of surface engineering and coatings for biomedical applications
- Advanced Materials trends within Sustainable Bio-Tribology
- Future Trends and Emerging Sustainable Technologies in Biomedical Field

### IMPORTANT DATES

15TH OCT, 2024	25TH OCT, 2024	31ST DEC, 2024	5TH FEB, 2025	25TH APR, 2025	25TH MAY, 2025
Brief draft abstract (Corresponding to 2800 characters including blanks) with Table of contents	Acceptance notification	Full Chapter submission	Review Results	Revised Chapter Submission	Final Acceptance Notification

### Editors

#### More Information:

amit.aherwar05@mitsgwalior.in  
catalin.pruncu@gmail.com  
bzeybek@yildiz.edu.tr  
luciano.lamberti@poliba.it



Dr. Amit Aherwar  
Madhav Institute of Technology and Science, Gwalior, India



Dr. Catalin Pruncu  
Politecnico di Bari Italy



Dr. Binnur Sagbas  
Yildiz Technical University, Turkey



Dr. Luciano Lamberti  
Politecnico di Bari Italy

Note: No publication fee for accepted chapters

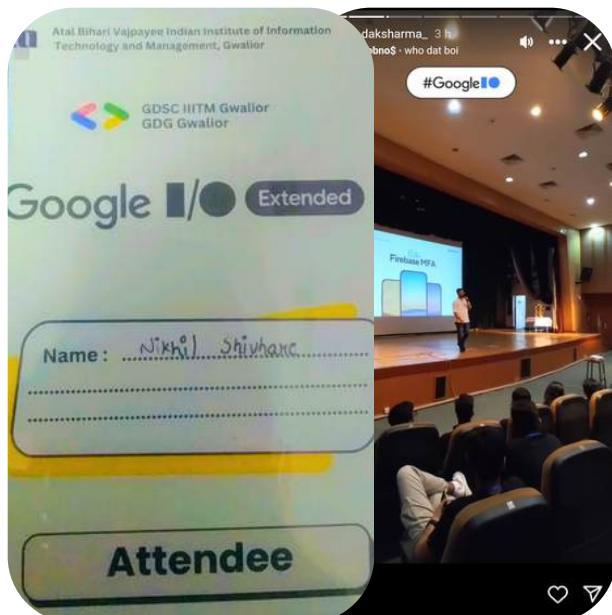


# STUDENTS NEWS

## Outreach Activities

### Google I/O Extended

ABV-IIITM Gwalior, a prestigious Indian institution, recently hosted an insightful webinar as part of the Google I/O Extended series, centered on the topics of Flutter and artificial intelligence (AI). This event, held on the IIITM campus, was organized by GDG Gwalior and GDSC IIITM Gwalior. The webinar offered an in-depth exploration of Flutter, a toolkit for creating natively compiled applications, and the latest advancements in AI technologies. It provided participants with a comprehensive understanding of how these innovations are shaping the future of software development and technology.



Nikhil Shivre, a student from the Mechanical Engineering department, actively engaged in the webinar, demonstrating the interdisciplinary approach fostered at ABV-IIITM. His participation highlights the institute's emphasis on integrating emerging technological trends across various fields of study. By bridging the gap between mechanical engineering and advanced digital technologies, the event underscored the importance of cross-disciplinary learning and the broadening scope of technical expertise among students at IIITM.

# STUDENTS NEWS

## NSS Awareness Program

NSS awareness program was organized in MITS Gwalior on 30-july-2024. Dr. Manoj Awasthi, the district director of Gwalior, Dr. Hari Shankar Kansana, Dean Student welfare Dr. Rajiv Kansana, program officer, Manish Dubey from Amity University were invited to guide and promote volunteerism about NSS among teachers from different schools and colleges.



The broad objective of NSS are to understand the community in which they work, identify the needs and problem of the community and involve them in problem solving process. Also develop a sense social and civil responsibility. The exposure of diverse social issues and the opportunity to contribute positively to society.



Khushi Kumari and Mansi Verma from the Mechanical Engineering Department expertly hosted the event, overseeing all aspects including coordination with speakers, managing the schedule, and handling logistics. Their organizational skills ensured a well-executed and successful event.

‘अपने देश के प्रति सच्ची भक्ति वही है, जब हम उसकी सेवा में अपने आप को समर्पित कर दें।’

- सुभाष चंद्र बोस





# STUDENTS NEWS



## Accomplishments. Certificates

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR(M.P.), INDIA  
Deemed University  
NAAC ACCREDITED WITH A++ GRADE

Certificate ID MITS/SD/HJGBDM-CE000514

**CERTIFICATE** 

This is to certify that  
**Nikhil Shivhare**  
Madhav Institute of Technology and Science, 9269403327

has successfully participated in National Space QUIZ conducted from 15th August to 23rd August 2024 by Aerospace Club on the occasion of National Space Day.

  
Dr CS Malvi  
Professor & Head, Mechanical Engineering Department

  
Dr Rajeev Kansal  
Dean Students Welfare Professor, Civil Engineering Department

Madhav Institute of Technology and Science Gwalior (M.P.), India  
Deemed to be University  
Declared Under Distinct Category By Ministry of Education, Government of India  
NAAC ACCREDITED WITH A++ GRADE

**CERTIFICATE OF PARTICIPATION**

PROUDLY PRESENTED TO  
**Nikhil Shivhare**

For Participation in "GATEway: A GATE preparation guidance seminar" organised by MITS Alumni Community on 8th April,2024. We congratulate the participant for their achievement.

  
Prof. Neha Bhardwaj  
Faculty Coordinator

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA  
माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत  
A GOVT. AIDED UGC AUTONOMOUS & NAAC ACCREDITED INSTITUTE, AFFILIATED TO K.O.P.V. BHOPAL (M.P.)  
NAAC Accredited with A++ Grade

**CERTIFICATE OF APPRECIATION**

This certificate is proudly awarded to  
**Nikhil Shivhare**

FOR PARTICIPATING IN THE EVENT "CRACKING OFF CAMPUS" ORGANIZED BY ACM.

  
Prof. Neha Bhardwaj  
Faculty Coordinator



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA  
माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत  
A GOVT. AIDED UGC AUTONOMOUS INSTITUTE, AFFILIATED TO K.O.P.V. BHOPAL (M.P.), INDIA  
NAAC ACCREDITED WITH A++ GRADE

**CERTIFICATE OF PARTICIPATION**

This certificate is proudly presented to  
**NIKHIL SHIVHARE**

for attending CONTENT WRITING MASTERCLASS conducted by SCIENCE CLUB MITS featuring the expertise of HIMANSHI GUPTA (Content Marketing and Writing Expert) on 26th January 2024.

  
Dr. Anshu Gaur  
Faculty Coordinator, Science Club

  
Dr. Rajeev Kansal  
Dean Student Welfare, MITS

# STUDENTS NEWS

## Certificates



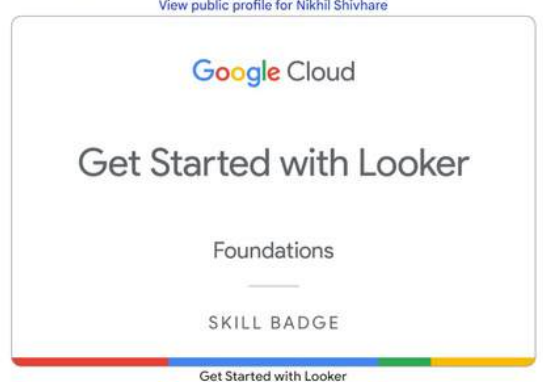
Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)

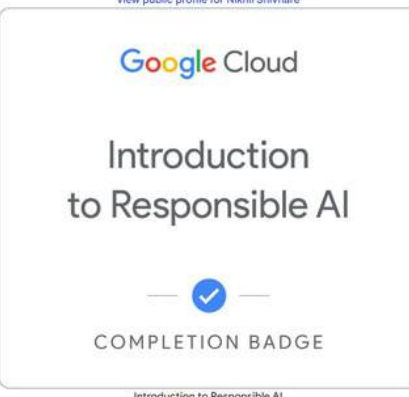


**Nikhil Shivhare**  
Member since 2022

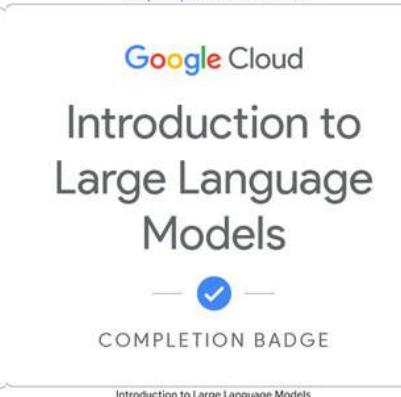
**Gold League**  
9540 points



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



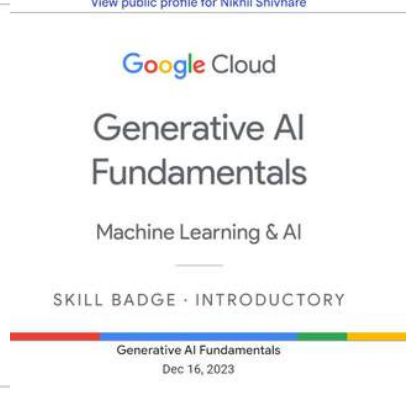
Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



Nikhil Shivhare has earned this award!  
[View public profile for Nikhil Shivhare](#)



# STUDENTS NEWS

## Certificates



### Certificate OF PARTICIPATION

MyGov congratulates

*Nikhilshivhare*

for successfully completing  
**Sardar Unity Trinity Quiz  
- Samridh Bharat.**

We acknowledge your efforts.

Keep participating!

Shri Akash Tripathi  
CEO, MyGov



*Congratulations  
and best wishes!*

# ALUMNI NEWS

## Paramarsh 2.0

MITS Gwalior recently hosted Paramarsh 2.0 on May 4th, a distinguished event organized by the Alumni Cell of the Mechanical Engineering Department. The seminar centered on alumni perspectives regarding the Graduate Aptitude Test in Engineering (GATE). Anil Kumar Choudhary, an esteemed alumni with M.Tech from IISc Bangalore, provided expert guidance on GATE preparation, sharing valuable insights into effective study strategies, examination techniques, and essential skills for success.



MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR (M.P.)  
DEEMED TO BE UNIVERSITY  
NAAC ACCREDITED WITH A++ GRADE

ALUMNI  
Mechanical Department

ALUMNI CELL, MECHANICAL DEPARTMENT  
PRESENTS

## PARAMARSH 2.0

"Alumni opinion over GATE"

**Meet our Expert:**



MR. ANIL KUMAR CHOUDHARY  
M.Tech, IISc Bangalore

**What you'll get?**

- Expert Guidance about GATE
- Interactive Q&A Session
- Perks of ME branch
- Networking Opportunities

**Event Details:**  
Join Us on:  
4th May, 2024  
At: 4:00 pm onwards  
Mode: Online  
\* E-certificates will be provided to all



Scan to Register

For queries contact:  
Santosh Chauhan: 900093040  
Shreyansh Dixit: 7987608403

The event featured an interactive Q&A session, allowing students to engage directly with Anil Kumar Choudhary and address specific concerns about the exam. Additionally, he discussed the numerous advantages of pursuing a career in mechanical engineering, emphasizing the field's benefits and opportunities. Networking opportunities were also integral to the event, fostering meaningful connections between current students and alumni. Paramarsh 2.0 effectively combined expert advice with interactive engagement, greatly enhancing attendees' understanding of GATE and their future career prospects in mechanical engineering.

# ALUMNI NEWS

## Deputy Collector

An alumni of MITS Gwalior Mechanical Engineering branch Vijay Shakya has recently cleared MPPSC and became Deputy Collector bringing glory to his Alma Mater. We wish him all the best for his future on behalf of the department and the institute.

शहर ने दिए दो डिप्टी कलेक्टर, सालों से जुटे थे तैयारी में अब करना चाहते हैं कमजोर तबके के साथियों की मदद

### एमपीपीएससी रिजल्ट

सिटी रिपोर्टर • ग्वालियर | मप्र लोकसेवा आयोग ने गुरुवार की रात 2021 की राज्य सेवा परीक्षा का परिणाम घोषित किया। इसमें सुरेश नगर के पवन गुरैया और विजय शाक्य डिप्टी कलेक्टर का पद अपने नाम है, जबकि दामोदर बाग में रहने अंजलि उपाध्याय अधीनस्थ सेवा अधिकारी बनीं हैं। परिणाम दर रात आने से सिलेक्शन पाने वाले प्रतिभागियों का आंकड़ा ठीक से नहीं निकल पाया है। सफलता पाने वालों का कहना है उन्होंने कमजोर तबके के युवाओं के मन में एमपीपीएससी

### बने घर के पहले प्रशासनिक अधिकारी



पिजव शाक्य

डिप्टी कलेक्टर बने पवन गुरैया ने बताया कि मेरे घर में पहला प्रशासनिक अधिकारी बना हूँ। पिता हेमंत गुरैया हाउसिंग बोर्ड में एसडीओ हैं, मां पुष्पा गुरैया हाउस वाइफ। मैं तीन साल से पीएससी की तैयारी में जुटा था। मैं अपनी जिम्मेदारी संभालने के साथ अब ऐसे बच्चों को गाइड करना चाहता हूँ, जो आर्थिक रूप से कमजोर हैं, उनके मन में ऊँचाई पर पहुंचने की ललक हो।



अजीत तामर



परिणाम में अजीत तामर नायब तहसीलदार बने अजय शर्मा ने अधीन सेवा अधिकारी बने हैं। ही भूतपूर्व सैनिक हैं। एक्स-जगमोहन द्विवेदी ने बताया परिणाम की ठीक स्थिति शुकवार को साफ हो पाएगी, क्योंकि नतीजे गुरुवार को देर रात आए।

### मामा के घर रहकर 2017 में शुरू की तैयारी

अंजलि उपाध्याय ने बताया मेरे पिता चंद्रशेखर एडवोकेट हैं और मां सुनीता हाउस वाइफ। मैंने पूरी पढ़ाई मामा प्रवीण पाठक के घर भिंड से आकर पूरी की। मामा मेरे लिए पैरेंट्स से कम नहीं हैं। 2017 से पीएससी की तैयारी शुरू की। 2019 में मेरा सपना इंटरव्यू फेस में आकर टूट गया। 2020 में मेंस क्लियर नहीं हो पाया। इस परिस्थिति ने मुझे मानसिक रूप से कमजोर किया,

# STUDENT WRITINGS

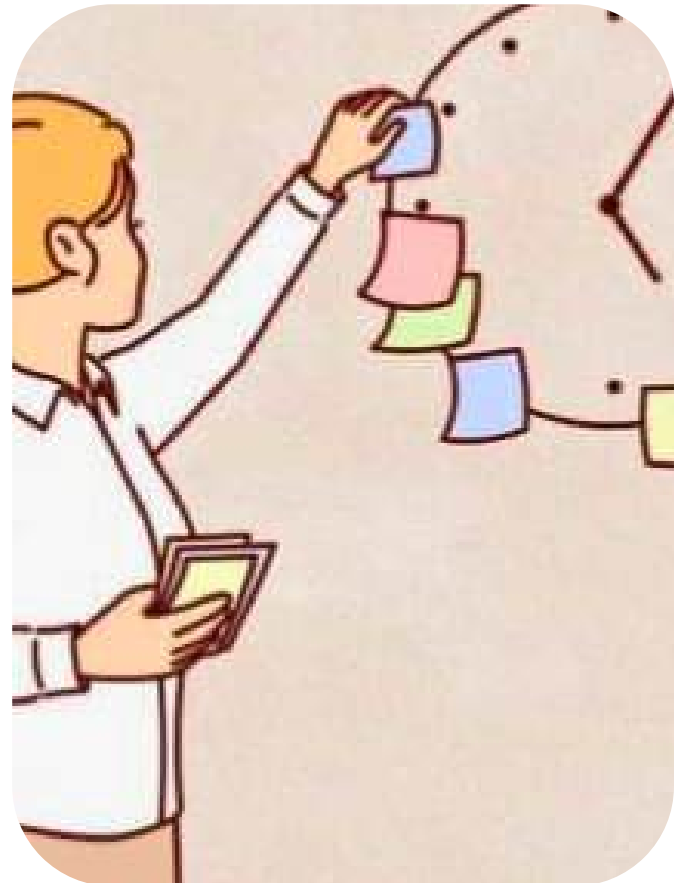
## Importance of setting goals in life: Not all who wander are lost

### Fortune favours the bold

Goals are crucial as they provide direction, purpose, and motivation. They transform aspirations into achievable milestones, fostering personal growth, resilience, and a sense of accomplishment in one's life. Whether short-term or long-term, goals help focus your energy on specific tasks, ensuring that you make progress in life.

Goals can simply range from daily tasks to big life achievements. Setting goals involves figuring out what you really want and making a plan to achieve it. Reaching a goal takes dedication, discipline, and the ability to overcome challenges. Achieving a goal boosts your confidence and encourages you to aim even higher.

Students often encounter several challenges when setting goals. Some of the major problems include lack of clarity, unrealistic expectations, procrastination, lack of motivation, fear of failure, external pressure, and poor time management.



To overcome goal-setting challenges, students should adopt precise planning, using smart criteria to clarify and structure objectives. Combat procrastination through detailed timelines and productivity techniques. Enhance motivation by aligning goals with personal values and reward progress. Address external pressure and improve time management and prioritization and organization tools.

-Khushi Kumari

‘Perhaps when we find ourselves wanting everything, it is because we are dangerously close to wanting nothing.’

# STUDENT WRITINGS

## The one of a kind life of Sundar Pichai: Success comes to those who will and dare

### (First Indian CEO of Google)

Pichai Sundararajan was born on 10 June 1972 in Madurai, Tamil Nadu. He made history as the first Indian-origin man to become the CEO (Chief Executive Officer) of one of the world's biggest tech giant Google on 10 August 2015. He was a true trailblazer, breaking barriers and inspiring countless individuals to follow their dreams.

After completing his Undergraduate degree in Metallurgical Engineering from IIT (Indian Institute of Technology) Kharagpur in 1993, he was awarded a scholarship to study at Stanford University so he moved to the United States to pursue his Master's degree in Material Science and Engineering in 1995. He earned an MBA (Master of Business Administration) from University of Pennsylvania in 2002.

Pichai joined Google in 2004 as the head of product development and management. Over the next few years he was involved in the development of Chrome which was released to public in 2008.



In 2011, Pichai pursued for employment by Twitter and in 2014 he was touted as a possible CEO for Microsoft. He also helped negotiate Google's \$3.2 billion deal to acquire Nest Labs in 2014. Therefore, when Google cofounders Larry Page and Sergey Brin announced the creation of Alphabet Inc., in August 2015, it came as no surprise to industry insiders that Pichai was named CEO of Google.

In December 2019 he also was named CEO of Alphabet, replacing Page.

# STUDENT WRITINGS

## Bullying as we know it: Ever thought how it could traumatise someone?

### No one heals himself by wounding others

Do you ever think what is bullying?

Why people or who are these people who bully others?

where to complaint what to do ?

Need help? scared?

Student take it as fun part but can turn into accident.

Let's talk about it.

Bullying is a form of harassment done by others. It can be physical, mental, body shaming, and many other forms.

Mostly, bullying is done in collages, schools, workplaces etc.

Let's have a short story.....

There was a introvert girl and she loves to have friends. She get hurt easily . One of her friend always mentally bully her by calling her buffalo (bhains).

Give me some weight of yours. These remark hurt her a lot. At last she started giving back them the taste of their own medicine who used to make fun of her.

In same way,

There is not a specific person who bully you. This world is full of these kind of bullies. At the end you have to take stand for your own. Don't give chance to anyone to demean you, hurt your self respect.



Don't afraid of being the voice of your own. It's okay, if they stop taking and considering you it's good to get hurt once rather then hurt thinking about it every moment .

Don't let anyone face what you have faced be the voice against crime.

-Harshita sharma

'Never allow yourself to be made a victim'



# STUDENT WRITINGS

## Poetry

### Jhoothe

‘आंसू में भी नहीं दिखते सच्चाई , होंठ भी झूठे हैं,  
कवि लिखते प्रेम की गाथा को लेकिन प्रेम से रुठे हैं”

- Khushi Kumari

### Murlidhar

‘वो धारण करते मुरली को,  
जिसके अनेक मधुर राग हैं।

तो काल भी उनकी कानी उंगली पर बिराज है।

मित्र सुदामा उनका,  
जिसका साम्राज्य विशाल है।

करते नृत्य गोपी संग,  
जो कालिया पर मृत्यु रूपी नाचे हैं।  
ब्रह्मांड समाया मुख जिनके ,  
माया को वो त्यागे हैं।

करते धारण साधारण को,  
फिर भी सौंदर्य उनका विशेष है।  
वह है स्वरूप उनका जिनको ,  
स्वयं पूजते महेश है।

संसार के पालनहार वो,  
फिर भी कहते खुद को आधे है।  
पूजती सारी दुनिया जिनके चरणों को,  
वो रटते राधे राधे हैं।

- Khushi Kumari



# STUDENT WRITINGS

## Poetry

### Musafir

‘ निकले थे मुसाफ़िर बनके मंज़िल न ठिकाना था  
ना यही पता था कि हमें कहाँ पर जाना था

कुछ दरों ने धिक्कारा तो कुछ ने बहुत नवाज़ा भी  
खुला हमेशा मिला जो मुझको था ऐसा दरवाज़ा भी

कुछ पत्थर लगे प्यारे फिर खायी उनसे ठोकर भी  
एक राबता सा महसूस हुआ अनजान सभी से होकर भी

हुआ करिश्मा मुद्दत में हो ऐसी वो दहलीज़ हुई  
हुजूम-ए-दहर में हुआ नहीं कोई ऐसी वो अज़ीज़ हुई

गुज़रा दौर एक ऐसा भी बातों का सा क़िस्सा था  
किसे खबर थी इतना ही बस उसका मेरा हिस्सा था

था होना क्या इनायत का फिर वो शीराज़ा बंद हुआ  
बंद हुई बस बात ही क्या थी वो दरवाज़ा बंद हुआ

किया ग़ौर मक़सद पर सीखा फिर अदब है क्या  
पता लगा बुलंदी पर खामोशी का सबब है क्या

मजबूरन तन्हाई को ही हमने आख़िर गले लगाया फिर  
ख़ैर ख़बर का भी किसी को कभी ख़याल ना आया फिर

ज़्यादातर वक़्त तेरे बाद मुख़ालिफ़त में गुज़रा  
तेरी सोहबत में नहीं तो फिर ग़फ़लत में गुज़रा

देखे ऐसे मंज़र फिर जो ख़ीफ़ज़दा कर देते हैं  
रही कसर का कुछ हैं जो की फ़र्ज़ अदा कर देते हैं

इस ज़माने की बातों को नज़रअंदाज़ कर दिया जाये  
हम कहते हैं जो सच है वो क्यों ना सामने आये

...



...

झेली हमने तोहमत भी और झेले कई backlash  
करी preserve अस्मत भी जब था नहीं कोई stash

अना कहा किसी ने तो किसी ने मसरूफ़ियत समझी  
थे यूँ भी जिन्होंने यह हमारी तरबियत समझी

ज़िम्मेदारी और दूरी में सबने साथ छोड़ दिया  
जो कहते थे एक रिश्ता है उन सबने रिश्ता तोड़ दिया

टूटा दिल अपना तो फिर हमसे भी कुछ टूट गये  
हाथ जोड़ कर माफ़ी उनसे हाथ जिनके छूट गये

जो किसी को आहत तनहा और बेबस बेचारा करता है  
चैन की नींद कैसे उसका ज़मीर गवारा करता है

कुछ तो पर्दा-दारी है शरीफ़ नज़र बस आते हैं  
जानते हमें ख़ूब हैं जो हमें अनजान बताते हैं

इतने से ही थम जाएँ हम ऐसे तो हालात नहीं  
हम अनजान मुसाफ़िर किसी पहचान के मोहताज नहीं ”

- Harsh Bhardwaj



# PROGRAM OUTCOMES

## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- Graduates of the program will be able to have successful professional career.
  - Graduates of the program will be able to develop attitude of learning and become adaptable to dynamic industrial and social environment.
  - Graduates of the program will be able to design and develop mechanical system by using skills and knowledge of core competency along with allied engineering skill.
  - Graduates of the program will be able to undertake interdisciplinary research needed to build a sustainable society.
- 
- Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
  - Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
  - The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
  - Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
  - Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

## PROGRAM OUTCOMES (POs)

*Mechanical and Automobile Engineering Graduates will be able to:*

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# NEWSLETTER COMMITTEE

## Faculty Incharge



*Dr. Surendra Kumar Chourasiya*

## Student Editors



*Khushi Kumari*  
*ME 2nd Year*



*Harsh Bhardwaj*  
*ME 2nd Year*



*Mansi Verma*  
*ME 2nd Year*



# Darpanam

दर्पणम्



**We welcome your recent news for  
inclusion in our next newsletter.  
Please email your updates to  
[rescuebird18@gmail.com](mailto:rescuebird18@gmail.com) or [mishraneeraj@mitsgwalior.in](mailto:mishraneeraj@mitsgwalior.in)**

## **DISCLAIMER:**

'MITS Mechanical Engineering department E-Newsletter' is meant for Private Circulation only intended to bring quarterly updates of the institute's activities related information published in various media like newspapers, and digital media, etc. to the attention of members of research and academic fraternity of India. Sources of all cited information have been acquired from concerned individuals and are duly acknowledged and members are advised to read, refer, research and quote content from the original source only, even if the actual content is reproduced. The information content does not reflect quality judgment, prejudice or bias by MITS Mechanical Engineering department E-Newsletter committee. Selection is based on the relevance of content to members, readability/ brevity/ space constraints/ availability of content.

**Department of Mechanical Engineering  
Madhav Institute of Technology and Science  
Gwalior 474005  
[www.mitsgwalior.in](http://www.mitsgwalior.in)**

**Published by** E-Newsletter Committee  
dept. of Mechanical Engg. MITS Gwalior  
**Design Layout:** Harsh Bhardwaj

**A Quarterly Newsletter: June 2024 Issue**