

शुभ दीपावली

**i360 NEWSLETTER**  
**2023**  
**Volume 6 - October**



*In Spotlight*  
**"Dr. Ashwin Patni "**

**Associate Professor IITE, Indus University**



## ISR ACTIVITY BY IIMS

Ms. Drishta Barot guided, 25 students of MBA sem 1(B) to celebrated Dusshera with senior-citizen people at Avval Foundation, Ghatlodiya, Ahmedabad on October 24, 2023. The student-led ISR activity aimed to bring joy and positivity to the lives of elderly individuals aged 65 to 93. Fun activities like passing the parcel, bowling, antakshari, and balloon blowing were enjoyed, with participation from IIMS faculty. The event concluded with gift-giving and Ambe Ma's aarti, making it a successful and heartwarming initiative.



## FDP

Mr. Indr Jeet Rajput, Assistant Professor, Computer Engineering, IITE, Successfully Completed 30 Hours Online FDP on "Cyber Security" Organized by Chaitanya Bharathi Institute of Technology, from 25/09/2023 to 14/10/2023.



## PAPER PUBLICATION

Mr. Indr Jeet Rajput, Assistant Professor, Computer Engineering, IITE, published a research paper entitled "Trust-Based Approach for MANET using Optimization Techniques" in the Journal of The Maharaja Sayajirao University of Baroda Volume-57, No.1(VI) : 2023, ISSN: 0025-0425.

## PAPER PUBLICATION

Mr. Indr Jeet Rajput, Assistant Professor, Computer Engineering, IITE, published a Survey paper entitled "A Survey on Optimization Algorithms in MANET for Secure Routing" Presented in National Conference on Computational mathematics, Science, Engineering and Management Innovation, Organized by Shri Kaushal Das University, Hanumangarh, Date: 16-17 Oct-2023.



## VASTU TIPS FOR DIWALI

- #1: Diwali Cleaning
- #2: Declutter for Diwali
- #3: Clear the Entrance
- #4: Move Things to the Right Directions
- #5: Spray Salt Water
- #6: Light Up Your Home for Prosperity
- #7: Early bath and Dress Up Well on all 5 days



## CERTIFICATE PROGRAM

Indus Institute of Management Studies conducted a 30 Hours Skill Development Certificate Training Program titled 'Personal and Professional Development' from 5th October 2023 to 20th October. Dr Daisy Kurien, Dr Hariharan and Ms Drishta Barot delivered the training to 99 MBA sem 1 students.





## GROUP DISCUSSION

Indus Institute of Law organized a group discussion on the topic "Legal Aspects of Contract Drafting" on 5th Oct. 2023. The event brought together students from various law programs to engage in a thoughtful exchange of ideas and insights on the crucial subject of contract drafting. The discussion aimed to enhance the participants' understanding of the legal intricacies involved in drafting contracts and to foster critical thinking and communication skills. The faculty coordinators were CS Vihasi Shah & Ms. Priya Singh Chauhan as under the guidance of Dr. Priya Khandivar.



## FIELD VISIT AND SURVEY PROGRAM

With a view to gaining insight into the awareness, perception, and experiences of the residents of nearby villages of Rancharda, law students from the Indian Institute of Law, conducted a field survey on "Fundamental Rights as enshrined in the Constitution of India", under the guidance of Dr. Priya Khandivar and CS Vihasi Shah. The survey aimed to assess the awareness, access, and protection of these fundamental rights within the community. The survey was conducted over two days, from the 17th - 18th Oct. 2023. A structured questionnaire was used to collect responses from a representative of sample residents across various age groups, genders, and socio-economic backgrounds. A total of around 150 respondents participated in the survey.



## COURSE COMPLETION

Dr. Vedvyas J Dwivedi, Executive Vice President of Indus University completed a 5 hrs Course on "Sustainability Management in Business" from Udemy on September 17, 2023.

udemy

CERTIFICATE OF COMPLETION

### Sustainability Management in Business

Instructor: Dr. Harsha Wadhwanthi

Ved Vyas J Dwivedi

Date: Sept. 17, 2023

Length: 5 total hours

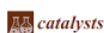
## PAPER PUBLICATION

Dr. Rawesh Kumar, Associate Professor, Chemistry, IISHLS published a research article entitled "Role of promoters over yttria-zirconia supported Ni catalyst for dry reforming of methane" in SCI index international journal Energy Science & Engineering. (Publisher Wiley, Impact Factor: 4.035)



## PAPER PUBLICATION

Dr. Rawesh Kumar, Associate Professor, Chemistry, IISHLS published a research article entitled "Pd+Al<sub>2</sub>O<sub>3</sub>-Supported Ni-Co Bimetallic Catalyst for H<sub>2</sub> Production through Dry Reforming of Methane: Effect of Carbon Deposition over Active Sites" in SCI index international journal Catalysts. (Publisher MDPI, Impact Factor: 3.9)



**Pd+Al<sub>2</sub>O<sub>3</sub>-Supported Ni-Co Bimetallic Catalyst for H<sub>2</sub> Production through Dry Reforming of Methane: Effect of Carbon Deposition over Active Sites**

Anis H. Fakhera<sup>1,2</sup>, Dharmesh M. Vafadar<sup>3</sup>, Mohammed F. Alkhatib<sup>3,4</sup>, Jehad K. Abu-Duhur<sup>5,6,7</sup>, Ahmed A. Elzohbi<sup>8</sup>, Ahmed E. Alkhatib<sup>9</sup>, Nafiz Alkhatib<sup>10</sup>, Rawesh Kumar<sup>11</sup> and Ahmed A. Elzohbi<sup>12</sup> \*

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3. Institute of Refining and Petrochemical Technology, King Abdulaziz City for Science and Technology (KACST), P.O. Box 6086, Riyadh 11462, Saudi Arabia; mohammed.f.alkhatib@ksu.edu.sa (M.F.A.); jehad.k.abu-duhur@ksu.edu.sa (J.K.A.); ahmed.a.elzohbi@ksu.edu.sa (A.A.E.); nafiz.alkhatib@ksu.edu.sa (N.A.); rawesh.kumar@ksu.edu.sa (R.K.); and ahmed.a.elzohbi@ksu.edu.sa (A.A.E.)
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**Abstract:** Dry reforming of methane (DRM) is gaining global attention due to its capacity to convert two greenhouse gases together to produce through CH<sub>4</sub> decomposition over active sites into CH<sub>4</sub>, followed by CH<sub>4</sub> oxidation by CO<sub>2</sub> into syngas. Furthermore, CH<sub>4</sub> oligomerization into coke cannot be neglected. Hence, NiPd–NiCo/Al<sub>2</sub>O<sub>3</sub> (x = 0.3, 0.7, 1.0, 1.5, 2.0) catalysts are prepared, investigated for, and characterized with X-ray diffraction, UV–Vis, transmission electron microscopy, temperature-programmed reduction (TPR) technique, and thermogravimetry. Fine-tuning among active sites, graphite carbon deposits, and catalytic activity is noticed. The total reducibility and activity are found to decrease upon increasing the Co proportion up to 2.0 wt% in the Ni-Co bimetallic Pd-Al<sub>2</sub>O<sub>3</sub>-supported catalyst. The active sites derived from strong metal-support interaction species (NiAl<sub>2</sub>O<sub>4</sub> or dispersed CO<sub>2</sub>) are found to be promoting in higher levels of activity. However, activity is again limited by graphite carbon deposits which is increased with an increasing Co proportion in the Ni-Co bimetallic Pd-Al<sub>2</sub>O<sub>3</sub>-supported catalyst. The incorporation of 1.5 wt% Co along with 3.75 wt% Ni over Pd-Al<sub>2</sub>O<sub>3</sub> results in the generation of fewer active sites, extensive carbon deposits, and inferior catalytic activity compared to NiPd/Al<sub>2</sub>O<sub>3</sub>. The 2.5NiPd/Al<sub>2</sub>O<sub>3</sub> catalyst has lower crystallinity, a relatively lower coke deposit (than the 3.75NiPd/Al<sub>2</sub>O<sub>3</sub> catalyst), and a higher number of active sites. It attains a 54–55% H<sub>2</sub> yield in 80 min TON and 647 H<sub>2</sub> (CO) (mole) to NiPd/Al<sub>2</sub>O<sub>3</sub>.

**Keywords:** graphite coke; DRM; Ni-Co bimetallic; Pd-Al<sub>2</sub>O<sub>3</sub> support; NiAl<sub>2</sub>O<sub>4</sub>

### 1. Introduction

Global warming is now not only limited to the melting of glaciers and the rise of sea levels but it has become the major cause of tremendous disturbances in seasonal cycles across the globe. The main cause of this issue is attributed to greenhouse gases like CO<sub>2</sub> and CH<sub>4</sub>. The catalytic conversion of both CH<sub>4</sub> and CO<sub>2</sub> into syngas (CO+H<sub>2</sub>), popularly known as dry reforming of methane (DRM), has brought major attention to the scientific community. More importantly, the product syngas has synthetic utility in industry and may be a hydrogen source to be exploited in order to achieve future clean energy goals. The catalytic conversion of CH<sub>4</sub> and CO<sub>2</sub> into syngas is summarized into two sequential steps. The first step is the decomposition of CH<sub>4</sub> into CH<sub>4</sub> and H<sub>2</sub> (Eq. (1)). The second step comprises two routes related to CH<sub>4</sub> oligomerization (into coke) and CH<sub>4</sub> + oxidation

## PAPER PUBLICATION

Dr. Rawesh Kumar, Associate Professor, Chemistry, IISHLS published a research article entitled "Understanding Coke Deposition Vis-à-Vis DRM Activity over Magnesia-Alumina Supported Ni-Fe, Ni-Co, Ni-Ce, and Ni-Sr Catalysts" in SCI index international journal nanomaterials. (Publisher MDPI, Impact Factor: 5.3)



**Understanding Coke Deposition Vis-à-Vis DRM Activity over Magnesia-Alumina Supported Ni-Fe, Ni-Co, Ni-Ce, and Ni-Sr Catalysts**

Yousaf M. Almaz<sup>1</sup>, Nafiz Tahir<sup>2</sup>, Anis H. Fakhera<sup>3</sup>, Jehad Abu-Duhur<sup>4,5,6</sup>, Ahmed A. Elzohbi<sup>7</sup>, Ahmed E. Alkhatib<sup>8</sup>, Rawesh Kumar<sup>9</sup> and Ahmed Al-Fateh<sup>10,11</sup> \*

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**Abstract:** The catalytic conversion of CH<sub>4</sub> and CO<sub>2</sub> into H<sub>2</sub> rich syngas is known as the dry reforming of methane (DRM). The character of CH<sub>4</sub> over active sites, coupled with the oxidation of polyethylene (PE), is a key factor in determining the DRM product yield and coke deposition. Hence, a series of bimetallic-supported catalysts are prepared by the deposition of Ni/Fe, Ni/Co, Ni/Ce, and Ni/Sr over 0.5 wt% MgAl<sub>2</sub>O<sub>4</sub>-Al<sub>2</sub>O<sub>3</sub> (MgAl<sub>2</sub>O<sub>4</sub> support). Catalysts are tested for DRM and characterized with XRD, surface area and porosity, temperature-programmed reduction (TPR), UV–Vis, Raman spectroscopy, and thermogravimetry. 2.5NiPd/Al<sub>2</sub>O<sub>3</sub> and 2.5NiCo/Al<sub>2</sub>O<sub>3</sub> catalysts show similar CO<sub>2</sub> reduction profiles. The 2.5NiPd/Al<sub>2</sub>O<sub>3</sub> catalyst maintains two types of coke, whereas 2.5NiCo/Al<sub>2</sub>O<sub>3</sub> maintains the presence of large coke, which results in catalytic inactivity. The higher activity over 2.5NiCo/Al<sub>2</sub>O<sub>3</sub> is due to the faster coke regeneration capacity for reducing coke. Moreover, a high DRM activity (90%) is stable up to 120 min against large coke deposition (weight loss 80%) over 2.5NiCo/Al<sub>2</sub>O<sub>3</sub> is due to the timely diffusion of coke from the active sites or the movement of active sites over the carbon nanotubes.

**Keywords:** MgAl<sub>2</sub>O<sub>4</sub> support; Ni-Co, Ni-Fe, Ni-Ce, Ni-Sr; Ni-Co coke deposit mechanism

### 1. Introduction

The concentration of greenhouse gases has reached a critical level, and the effects are being experienced. Apart from the rise in sea levels, drastic seasonal changes, droughts, and wildfires are also becoming intensified across the globe. At this point, the catalytic conversion of two leading greenhouse gases, CH<sub>4</sub> and CO<sub>2</sub>, into H<sub>2</sub> rich syngas is important. The proper catalyst for DRM may be a game-changer for mitigating greenhouse gases from the environment, and one of the main products, H<sub>2</sub>, is considered to be clean energy. This reaction is known as the dry reforming of methane (DRM), and it is highly endothermic (CH<sub>4</sub> + CO<sub>2</sub> → 2H<sub>2</sub> + 2CO; ΔH° = 247.4 kJ/mol). Pt, Pd, Ru, Rh, and Ni are the most active catalysts for this reaction [1].

The selection of Ni as the active site and MgAl<sub>2</sub>O<sub>4</sub> and TiO<sub>2</sub> as the support is cost effective. Among the supports, TiO<sub>2</sub> is known for its stronger metal-support interaction. Still, the catalytic performance of the Ni/TiO<sub>2</sub> catalyst was found to be inferior to the Ni/MgO and Ni/Al<sub>2</sub>O<sub>3</sub> catalysts due to the deactivation of these phases, as well as the coverage of active sites by Ni<sub>2</sub>TeO<sub>3</sub> species [2–7]. Ni<sub>2</sub>MgTeO<sub>3</sub> has a NiO/MgO solid

### 5 Days of Diwali

- The **First day** is called **DHANTERAS** which falls on the **thirteenth day** of the month of Ashwin. The word "Dhan" means wealth.
- The **Second day** is called **"NARKA-CHATURDASHI"** or **"CHOTI DIWAL"** which falls on the fourteenth day of the month of Ashwin.
- The **Third Day** is the **main Diwali Day**: This day is sacred to Goddess Lakshmi, the Goddess of Wealth. This is a day of celebration, feast and joy. Young and elders, poor or rich, everyone enjoys alike.
- This "festival of lights", for the common practice is to light small oil lamps (called diyas) and place them around the home, and also on the roof tops
- **Day 4** of Diwali is "Nutan Varsh" the Hindu New Year's day for many regions of India. It is also observed as Annakoot, meaning mountain of food.
- The **Fifth** and final day of Diwali Festival is known as Bhai-Duj. Love and Good wishes between brother and Sister.

## SIH 2023 - INTERNAL ROUND

As a part of Smart India Hackathon-2023, Indus University took an initiative to conduct an Internal Hackathon on 30th Sept. 2023, Saturday from 9:30 am onwards at MCA Lab. The following faculty members from IICT were a part of the Jury Panel: Dr. Disha Parekh, Ms. Nehal Adhvaryu, Dr. Akshara Dave & Mr. Deepal Shah. The SIH-2023 Internal Round was organized by SPOC, Ms. Mansi Mehta, Assistant Professor, IICT.



## PAPER PUBLICATION

Dr. Rawesh Kumar, Associate Professor, Chemistry, IISHLS published a research article entitled "Dry Reforming of Methane over Dual Metal Oxide Al<sub>2</sub>O<sub>3</sub>+ MO<sub>x</sub> (M=Ti, Zr, Si, Y) Supported Ni Catalyst: A Simple and Practical Approach" in SCI index international journal Catalysts Letters. (Publisher Springer, Impact Factor: 2.93)

## PAPER PRESENTATION

Dr. Chetna Deoghare, Assistant Professor, Department of Chemistry (IISHLS) presented a research work entitled "Indian Cow Urine: A Future Multipurpose Ayurvedic Medicine" in National Convention of Chemistry Teachers (NCCT) in collaboration with Association of Chemistry Teachers (ACT), India and Gujarat Science City, at Gujarat Science City, Ahmedabad on 27-29th Oct. 2023.



## EXPERT TALK

Civil Engineering Department, IITE organised an Expert Talk on "Demystifying Pile Foundation in the Construction Industry" on 6th Oct. 2023 from 3:00 pm onwards. The event featured Mr. Girish Gandhi, Vice President at Infinite Civil Solutions Pvt. Ltd., Ahmedabad, Gujarat, India, as the distinguished expert. Mr. Girish Gandhi's presentation proved to be a resounding success, benefiting 43 B.Tech Civil Engineering students who gained a comprehensive understanding of pile foundations. The event covered a wide spectrum of topics related to this critical construction element, providing valuable insights into its real-world applications. Beyond academic enrichment, it also expanded our students' perspectives on the practical challenges and innovations within the realm of pile foundation engineering. The Expert Talk was coordinated by Assistant Professor, Dr. Ankit Sodha and convened by HoD (I/C), Dr. Payal Mehta.



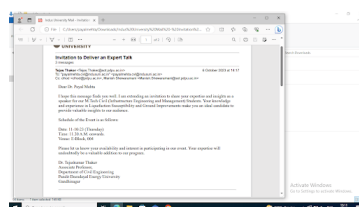
## WORKSHOP

The Civil Engineering Department conducted a Two days workshop on "Building Information Modeling: A Beginner's Workshop". Overall, the students found learning BIM will make them more efficient, better decision makers, and contributing to sustainable and cost-effective building projects. The event was coordinated by Dr. Samir Patel and Dr. Jishnu R. Gohel and convened by Dr. Payal Mehta.



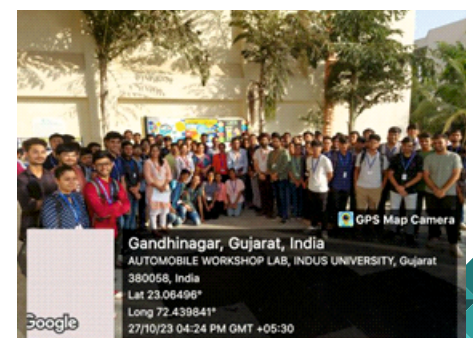
## INVITED FOR EXPERT TALK

Dr. Payal Mehta delivered an expert talk on "Liquefaction Susceptibility and Ground Improvements" to students of M.Tech Civil (Infrastructure Engineering and Management) School of Technology at Pandit Deendayal Energy University on 11th October, 2023.



## POSTER EXHIBITION

The Civil Engineering Department at the Institute of Technology and Engineering, Indus University, organized a Poster Exhibition held on 27th October 2023. The event is coordinated by Dr. Ankit Sodha, Assistant Professor, Civil Department, IITE.





## FREE VEHICLE CHECK-UP

The Department of Automobile Engineering organized a Free Vehicle Check-up camp for the faculties and staff members of Indus University on October 14, 2023. The Vehicle Check-up camp was organized in collaboration with Nanda Automobiles PVT LTD, Ahmedabad, a Maruti Suzuki service provider.



## SEMINAR

Mr. Marnish Modi, Assistant Professor, Automobile Engineering Department, Indus Institute of Technology Engineering (IITE), successfully organised seminar titled "Power Train and Mobility" on 3/10/2023.



## CAR MEET

The Department of Automobile Engineering organized a Car Meet on October 8, 2023. The meet was organized in collaboration with DV Automobiles, Ahmedabad. Automotive enthusiasts from different cities participated and showcased their vehicles with different performance driven technologies in the meet.





## INDUSTRIAL VISIT

Mr. Marnish Modi, Assistant Professor, Automobile Engineering Department, Indus Institute of Technology Engineering (IITE) arranged a Industrial visit on 13/10/2023 at "INTERNATIONAL AUTOMOBILE CENTER OF EXCELLENCE (iACE)".



## PAPER PUBLICATION

Dr. A D Dhas, Prof. Dharmendra Sapariya, and Dr. Dhiren Patel have published an article with the title "An analysis of waste/biomass gasification producing hydrogen-rich syngas: A review" in an International Journal of Thermofluids, Science Direct, Elsevier journal in Volume 20, on 18 October 2023.

## INDUSTRIAL VISIT

Department of Electrical Engineering conducted an Industrial Visit to SAC-ISRO, Ahmedabad on 4th October 2023.



## PAPER REVIEWER

Rashmi Sharma, Asst. Professor, Electrical Engineering received Certificate of Appreciation for her participation as a Peer Reviewer of The 8th International Conference on New Energy and Future Energy Systems (NEFES 2023) to be held in Matsue, Japan during 21-24 November 2023.

The 8th International Conference on New Energy and Future Energy Systems (NEFES 2023)

Review Certificate

2023/10/20

To Whom It May Concern,  
By this letter, I would like to explain the contributions of Ms. Rashmi Sharma from as a Peer Reviewer of The 8th International Conference on New Energy and Future Energy Systems (NEFES 2023) to be held in Matsue, Japan during 21-24 November 2023.

For each manuscript submitted to the Proceedings of the conference, it is required that at least two excellent reviewers who are not only competent in the technology but also are familiar with the existing literature. Their role is finally to determine if the submitted manuscript has a high scientific level and is worth publication.

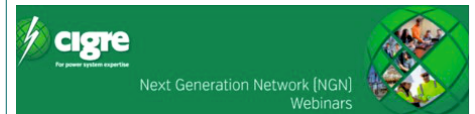
Ms. Rashmi Sharma has provided excellent feedback on the following article:  
*Impact of lightning induced voltage on power system based on satellite data and climatological projections*  
also carefully analyzing the merits of the paper with regards to scope, applications, research methodology, experimental techniques, and verification of mathematical equations, data interpretation, and grammar.

Ms. Rashmi Sharma's substantial contributions to maintain the standards of the Conference are greatly appreciated.

Sincerely,  
NEFES 2023 Organizing Committee  
info@nefes2023.org  
www.nefes2023.org

## WEBINAR

Dr. Sweta Shah, Assistant Professor, Electrical Engineering attended a Webinar on Power System Operation conducted by CIGRE INDIA NGN on 17th Oct. 2023. Webinar covered Transient models to enhance network safety and supply reliability as well as effective use of IoT for asset management. The experts were Adit Garg Principal Energy Consultant to EPRI, USA, Anthony Giacomoni Manager, Advanced Analytics (USA) and Nihar Raj, Vice president Adani Transmission (IN).



You're registered for CIGRE INDIA NGN Webinar

Hi Dr. Sweta,

Your spot is reserved for this event.

CIGRE INDIA NGN Webinar  
Tue, Oct 17, 2023 4:30PM - 5:30PM (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

We look forward to seeing you!

Sincerely,  
POWER SYSTEM OPERATION CORPORATION LIMITED

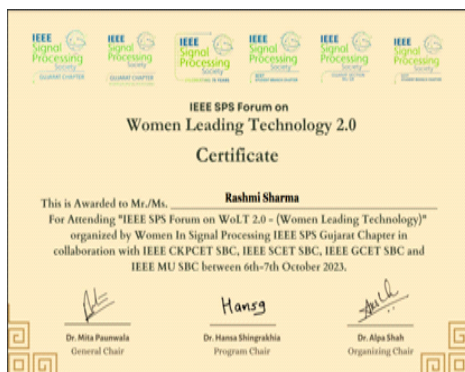
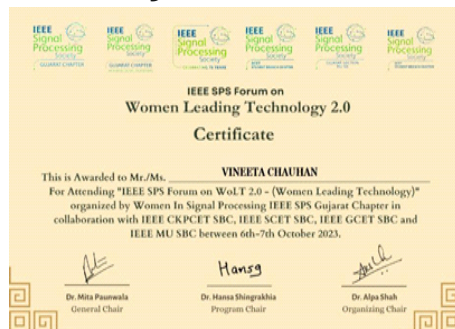
## 7 Steps to Celebrate Safe Deepawali



www.bloodforsure.com

## WiSP GUJARAT CHAPTER

Dr. Vineeta Chauhan, Assistant Professor, Electrical Engineering and Ms. Rashmi Sharma, Assistant Professor, Electrical Engineering Department participated in IEEE SPS Forum on WoLT 2.0, an event organized by the IEEE Signal Processing Society on October 6th and 7th, 2023, Gujarat Chapter Women in Signal Processing (WiSP) wing.



## INDUSTRIAL AUTOMATION

Department of Electrical Engineering, in collaboration with AlphaTech Automation, Ahmedabad, hosted a compelling session on "Latest Technologies in Industrial Automation" on 18/10/2023, attended by over 25 participants. The session was delivered by esteemed speakers including Er. Sumit Nandha, Er. Abhishek Kumar, and Er. Abhay Singh Thakur, who shared their expertise as Senior Automation Engineers and Tech. Marketing Manager, respectively. The event was Coordinated by Dr. Vineeta Chauhan. Students had the opportunity to grasp the fundamentals of PLC, HMI, SCADA, DRIVE and DCS.



## PAPER REVIEWER

Dr. Vineeta Chauhan, Assistant Professor, Electrical Engineering Department received award certificate as appreciation for participation in IJAPE (International Journal of Applied Power Engineering) as a Reviewer.



## PAPER PUBLICATION

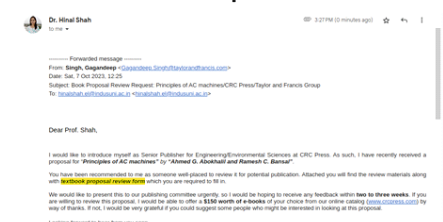
Rashmi Sharma, Assistant Professor, Electrical Engineering published a research article entitled "Enhanced modular multi-level converter-based static synchronous compensator with social ski-driver optimized adaptive neuro-fuzzy inference system controller for power quality enhancement" in SCI and scopus indexed international journal "Electrical Engineering" (Publisher Springer) on 22 September, 2023. DOI: <https://doi.org/10.1007/s00202-023-02018-8>

### SPRINGER LINK



## BOOK REVIEWER

Dr. Hinal Shah, Assistant Professor, Electrical Engineering Department reviewed a book on "Principles of AC machines" under publication of CRC Press/Taylor and Francis Group.





## INDUSTRIAL VISIT

The Department of Electronics and Communication organized an Industrial Visit to Space Application Centre, ISRO, Ahmedabad on October 11, 2023. A group of 20 first-year B.Tech(EC/ICT) students, accompanied by faculty member Dr. Sweta Shah (EL), participated in the visit.



## WORKSHOP

The Department of Electronics and Communication, in collaboration with Aimtron Electronics Pvt. Ltd., organized a workshop titled "How to Design Robot and 3D Print: Know what the Industry wants! DEEP DIVE INTO ESDM" on October 4, 2023 from 9:30 AM onwards in LH-22, 2nd Floor, Bhanwar Building, Indus University. This unique and enriching workshop aimed to provide students with hands-on experience and insights into the fields of robotics, 3D printing, and Electronic System Design and Manufacturing (ESDM).



## INDUSTRIAL VISIT

The department of Materials and Metallurgical Engineering organized an Industrial visit to Texspin Bearings Ltd., Ranpur along with the Mechanical Engineering department on 20th October 2023. The students got the opportunity to understand the manufacturing of various bearings.



## EXPERT TALK

Mr. Monil Salot, Assistant Professor, Department of Materials and Metallurgical Engineering, IITE gave an invited talk on NITTTR extension center Ahmedabad in join with the Metallurgy Department, GEC Gandhinagar conducted FDP on 17th October 2023.

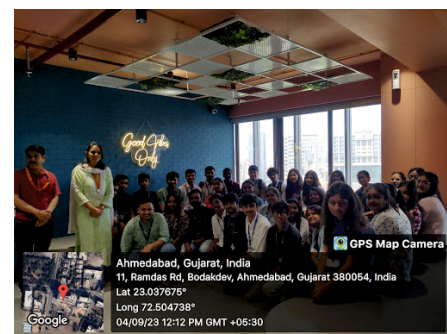


## EXPERT TALK

Dr. K. Santhy, Associate Professor, Department of Materials and Metallurgical Engineering, IITE gave an invited talk on NITTTR extension center Ahmedabad in join with the Metallurgy Department, GEC Gandhinagar conducted FDP on 17th October 2023.

## INDUSTRIAL VISIT

Department of Computer Science, Indus Institute of Information and Communication Technology arranged an Industrial visit to the Shiv Technolabs PVT. LTD., Ahmedabad for the 3rd Semester, IMSc(CA & IT) students. More than 55 students participated in the industrial visit. The whole session lasted for 2 hours. The Industrial visit of the students was accompanied by Assistant Professors of IICT- Dr. Akshara Dave and Mr. Prashant Halavadiya.



## HANDS-ON WORKSHOP

Information Technology (ACSIT), organised an Online Hands-on workshop on Machine Learning for the Final Year Post Graduate Student and BSc Computer Science (AI & ML) and BSc Data Science final year Students. The expert of the session was Ms. Krishna Modi, Assistant Professor, NFSU, Gandhinagar. The speaker introduced the concept of data and types of data, Machine learning and its applications, introduction of Decision Trees, Numpy, Matplotlib & Panda libraries, Linear Regression, K-Nearest Neighbour, True Positive & False Positive Identification and 6 algorithms of ML with the help of numpy, python using google colab. More than 25 students, faculty organized Dr. Diisha Parekh, ACSIT faculty coordinators Dr. Akshara Dave and Ms. Honey Shivnani and Convenor of the program - Ms. Bhavna Hotchandani Ma'am, I/C HoD, IICT were also present in the session

## TRAIN THE TRAINER

Department of Computer Science, Indus Institute of Information & Communication Technology organized 3 sessions of "Train the Trainers" under which three resource persons, Dr. Disha Parekh, Ms. Dolly Dave and Mr. Deepal Shah conducted the sessions for one and half hour each on Machine learning in R, Introduction to AngularJS, and IoT Applications and Protocols respectively. All the sessions were quite informative to the audience (the faculty members). The main objective to initiate such programs is to learn and share the knowledge amongst the other faculty members.



## PAPER PUBLICATION

Dr. Disha A. Shah, Assistant Professor, IICT participated and presented a research paper titled "Quantitative Analysis of Fingero-Imbibition in Heterogeneous Porous Medium with Magnetic Field Effect" at the international conference on Advances in Pure and Applied Mathematics (ICAPAM 2023) held during 27 - 28, October 2023 organized by Department of Mathematics, Ganpat University.



Department of Mathematics



### Certificate of Participation

Awarded to  
**Dr. Disha A. Shah**  
for participated and presented a Research paper titled  
*Quantitative Analysis of Fingero-Imbibition in Heterogeneous Porous Medium with Magnetic Field Effect*  
at the international conference on  
**Advances in Pure and Applied Mathematics**  
**[ICAPAM-2023]**  
held during 27 - 28 October 2023  
organized by the Department of Mathematics, Ganpat University.  
The conference organizing team appreciates your contribution and  
is thankful to you for being part of this academic event.

Dr. Kiran Amin  
Deputy Pro-Vice Chancellor & Executive Dean  
Faculty of Engineering & Technology  
Ganpat University

Dr. Amit Parikh  
Convener, ICAPAM 2023  
Dean Faculty of Science  
Ganpat University

## FDP

Ms. Manishaben Dineshbhai Bhatol, Assistant Professor, IICT participated in the Online NPTEL-AICTE FDP Online Certification for the course "Database Management System" from July-Sep 2023.



**NPTEL-AICTE**  
Faculty Development Programme  
(Funded by the MHRD, Govt. of India)



This certificate is awarded to  
**BHATOL MANISHABEN DINESHBHAI**  
for successfully completing the course  
**Data Base Management System**  
with a consolidated score of **62 %**

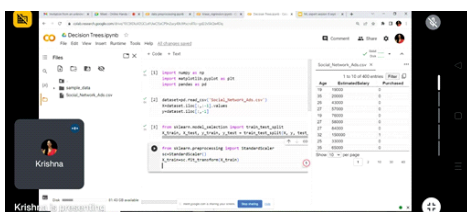
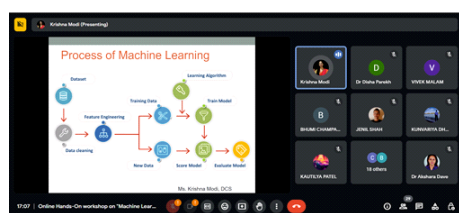
Prof. Andrew Thompson  
NPTEL Convener  
IIT Madras



Ref No: NPTEL23C37954440097

Duration of NPTEL course: 8 Weeks

The candidate has passed the above course through NPTEL's tools. The candidate has submitted online assignments and passed practical exams. This certificate is neither valid for admission to any other NPTEL course nor for any other NPTEL activity. It is valid for admission to other NPTEL courses only. For more information, visit [www.nptel.ac.in](https://www.nptel.ac.in)





## QUIZ COMPETITION

Mr. Deepalkumar A. Shah, Assistant Professor, IICT, had successfully conducted as well as judged the Elimination Round and Final Round of Quiz Competition, as a part of Gujarat University Youth Festival, Ellisbridge North Zone, hosted by JG College of Physiotherapy & JG College of Performing Arts, on 17th September 2023 & 21st September 2023 respectively.

**AARAMBH 2023**  
(Gujarat University Youth Festival (Ellisbridge North Zone))  
**Host: JG COLLEGE OF PHYSIOTHERAPY**  
Date: 17/09/2023  
To,  
MR. DIPAL SHAH  
Subject: Thank you letter for rendering services as a QUIZ MASTER & judging the QUIZ FINAL competition.  
Respected Sir,  
The team members Gujarat University Youth Festival (Ellisbridge North Zone) would like to thank you for rendering your services as a QUIZ MASTER & judging the Quiz Final competition at ASSEMBLY HALL - 1, JG COLLEGE OF PHYSIOTHERAPY, JG CAMPUS OF EXCELLENCE, OPP. GULAB TOWER, OFF. SOLA ROAD, AHMEDABAD - 61 on 17/09/2023 at 1:30 pm. We sincerely appreciate your time and effort in making our event a success. Again, thanks for your generous support and we hope that you will consider supporting Youth Festival competitions in the future.  
Sincerely,  
  
Dr. Amit M. Patel  
(Chairman)  
(Gujarat University North Zone Youth Festival)

## FDP

Dr. HIRAK JOSHI, Professor, IIPR participated in Online Five days National Faculty Development Program on "Fundamentals of Intellectual Property Rights and its applications and importance in academia" during 12th October to 16th October, 2023.



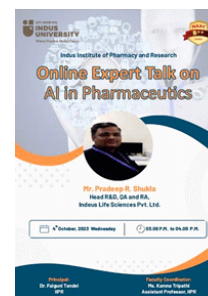
## INDUSTRIAL VISIT

Students of Indus Institute of Pharmacy and Research (IIPR), Indus University visited National Forensic Science University (NFSU) and explored various departments like forensic testing laboratory, human behavior science lab, automated finger print and scanning unit, and various analytical instruments. On the same day students also got benefited from Asia Lab Equipment Expo at Gandhinagar, where students got to know about the various analytical instruments, lab equipment, API drugs and many more importance things related to their subjects. The event was coordinated by Dr. HIRAK JOSHI, Professor, IIPR.



## EXPERT TALK

The Indus Institute of Pharmacy and Research organized a stimulating expert talk on the "AI in Pharmaceuticals" for B. Pharm 1st and 3rd Semester students. The expert talk held by Mr. Pradeep R. Shukla, Head R&D, QA and RA, Indeus life Sciences Pvt. Ltd. The expert talk aimed to shed light on the "AI in Pharmaceuticals" is a great way to expose B.Pharm students to the applications and advancements of artificial intelligence in the pharmaceutical industry.



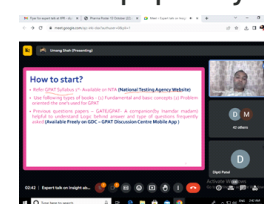
## FDP

Dr. HIRAK JOSHI, Professor, IIPR participated as a Delegate in Online Five days International Faculty Development Program on "Challenges in Management Education in the Context of Industry-4.0" during 9th October to 13th October 2023.



## EXPERT TALK

The Indus Institute of Pharmacy and Research organized a stimulating expert talk on the 13th October, 2023 on "Insight about GPAT: A Pharmacy Entrance Examination" for B. Pharm 1st and 3rd Semester students. The expert talk held by Dr. Umang Shah, Associate Professor, Ramanbhai College of Pharmacy, Charusat University. The expert talk aimed to shed light on the Graduate Pharmacy Aptitude Test (GPAT). The webinar covered detailed information about syllabus, how to do preparation for GPAT and paper style etc.



## REFRESHER COURSE

Indus Institute of Pharmacy and Research (IIPR) organized a Gujarat State Pharmacy Council sponsored Online "Refresher Course for Registered Pharmacists" on 28th-29th Oct. 2023. Around 300 pharmacists from across Gujarat joined online and received guidance on various topics related to pharmacy and drug management. LM Pharmacy College Professor Dr. Praful Bhardiya, Principal of Indus Institute of Pharmacy Dr. Falguni Tandel, Professor Dr. HIRAK JOSHI, Dr. Deepti Patel, Mr. Nitin Upwar, Ms. Kamana Tripathi presented their thoughts on various topics related to pharmacy like bioavailability of drugs, patient counselling, consumer protection act, drug interactions, drug storage conditions and in-depth information on the subject to the pharmacist friends present. Also, the Registrar of Gujarat State Pharmacy Council Shri Jashubhai Chaudhary gave detailed information about the various supportive activities conducted by the Council and the programs applicable to pharmacists.



## SWACCHTA ABHIYAAN

Eco Club, Indus University organised "स्वच्छता अभियान" with the tagline एक कदम स्वच्छता की ओर on 06th Oct. 2023. This event was focused on carrying out campus cleaning drive and स्वच्छता शपथ (A pledge to do 100 hours of श्रमदान and help in turning the dream of स्वच्छ भारत into a reality). During the drive participants cleaned the various open areas of the campus, classes and collected the waste from the premises. More than 45 students and 20+ staff members took part in it and contributed in making the event successful. It ended with refreshments for the participants. Event was coordinated by students Ms. Riya Shah and Ms. Mallika Gupta.



## MUSIC MEETUP

The 'MUSIC MEETUP', was organized by the Music Club of Indus University on 9th Oct. 2023. The primary goal was to provide a platform for talented musicians and music enthusiasts to come together, share their passion, and entertain a diverse audience. It showcased immense musical talent within our university and brought together more than 30 enthusiastic participants from various branches of the university. The events was coordinated by the event heads, Devmitra Sharma, Preksha Thacker along with the help of Faculty Coordinators Dr. Disha Parekh, Dr. Samir Patel and Capt. Umang Jani.





## BLOOD DONATION DRIVE

The principles and ethics that characterize Indus University, motivated us to organize a Blood Donation Camp. This camp was organized by Student Activity Cell in association with Civil Hospital on 10<sup>th</sup> Oct. 2023. 300 units of blood were donated by students, staff and faculty members. Free thalassemia tests were done for 336 persons. A token memento was given to each donor.



## GARBA WORKSHOP

An energetic dance event, the Garba Workshop, was organised by the Dance Club on 11th Oct. 2023, from 3:00 p.m. onwards. The workshop was conducted by professional choreographers from Rang Rasiya Garba Classes. A diverse turnout of students from various branches attended the event, creating a vibrant and lively atmosphere, with both students and guests contributing to the energetic ambiance throughout the entire event. The event was coordinated by student heads Shubham Patel, Mahir Patel and Dhruv Shah along with Faculty coordinators Dr. Sweta Shah, Dr. Richa Verma and Dr. Tejal Shah.



## FASHION MEET-UP

A fashion meetup was held on 27th Oct. 2023. The meetup provided a platform for students to discuss fashion trends, share styling tips, and express their unique styles. The event fostered a sense of community among 20+ fashion enthusiasts. Fashion Club Student Coordinators, Mitanshi Wadhwani and Tanvi Kalathiya, along with Faculty Coordinator Sejal Thakkar, hosted this engaging event.



## ASTRO TALK

Astro Club, SAC, Indus University & Department of Physics, IISHLS has organized an Astro Talk on 'Insights of Chandrayaan-3 and Aditya-L1 missions' on 12<sup>th</sup> October, 2023 during 1.00 pm to 2.45 pm for the students of various disciplines, faculty and staff of Indus University.

The event started at 1:00 pm with Saraswati Vandana and Lighting of Lamp by distinguished members Honorable Executive president Dr. Sandeep Chakravorty, Executive Vice-president Dr. Vedvyas Dwivedi, Registrar Dr. R. K. Singh, The President of Vigyan Gurjari Dr. Chaitanya Joshi, VIBHA representative Shri Sreeprasad ji, Expert Speaker Dr. M. Shanmugam and Dean (IISHLS) Dr. K. C. Roy.



## MUSKAN MELO

Members of Rotaract Club of Indus University visited "Jivan Sandhya" an old age home on 12 Oct. 2023. The Muskan Melo event left "Muskan" and warmth on their faces, making them more beautiful. The Rotaract Club of Indus University spread muskan, laughter, and companionship, bridging generations with warmth and love. One of the most critical aspects of this event is the opportunity for the 16 participants to discuss what they learned from the visit and how it may have changed their perspective on ageing, isolation, and the needs of the elderly in our community.



## WORKSHOP

Indus University's Bulls and Bear Club held a workshop on "Financial Derivatives - Futures & Options" for its students on 13th Oct. 2023. The speaker was Certified Financial Planner (CFP) Nirali Dave, Assistant Professor, IIMS. CFP Nirali Dave gave insight on derivatives, the words used in option trading, its various techniques, and its process. She also talked about a variety of trading techniques, including the extremely dangerous Open Market tactics (only call or only put). The lesson that the students learned the most was that the purpose of derivatives is to protect an investor's portfolio rather than to trade. Students were strongly advised to read this message in order to educate them on the need of trading responsibly and hedging using derivatives. A total of 85 students registered for the session. The session was led by student coordinators Manav Shah and Jigar Devjani.



## FDP

Lt. (Dr.) Parshva Shah, Assistant Professor, IIMS attended the Faculty Development Program (FDP) titled "Teaching, Research, and Institution Building in the Contemporary Academia" on 28 October 2023 organized by Auro University.



## NCC CAMP

15 students had attended a NCC Camp from 28th Sep. to 7th Oct. 2023 for 10 days. They participated in different competitions like drill, firing, drawing and cultural programs. We are very proud to announce that our students stood first in Drill and Cultural Programs and Debate and won many medals and trophies in the camp. It is a proud moment for our University. In all A total of 5 medals were won by the cadets of Indus University. All these achievements are made possible due to the constant efforts and support of ANO Lt.(Dr.) Parshva Shah and Registrar Dr. R.K.Singh.





Entire Indus family (all students, Staff & faculty members 3000+) danced their feet out and flaunted their Garba steps, all in their colorful traditional attires. Well known artist Archit Patadia & his energetic band made the Navaratri experience even more magical and memorable. RaasRang started with Maha Aarti offered to the goddess. Entire crowd danced to rhythmic steps with melodious traditional Gujarati garba songs. Prizes in the categories in Best Male & Female (student), Best Male & Female (faculty and staff), Best Dance Group for both faculty members and students were awarded.

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## FILM PROMOTION - 12th FAIL

Hindi Film and OTT platform superstar Mr. Vikrant Massey along with his co-star Ms. Medha Shankar, visited Indus University on 18th Oct. 2023 for the promotion of their upcoming film "Twelfth Fail". The promotional event was organized by Student Activity Cell where students greatly enjoyed the trailer and songs of the film shown during the visit of Mr. Vikrant Massey and Ms. Medha Shankar. Vikrant Massey highly praised the infrastructure of Indus University. Apart from that, during the interaction with the university officials, Vikrant said that very good work is being done here for the welfare of the students. The event was enjoyed by more than 400 students.





## SAC- FELICITATION CEREMONY FOR 2022 PANEL

The Felicitation Ceremony was organized by the current SAC panel (2023-2024) as a goodbye ceremony for the old SAC panel (2022-2023). The event was a great success under the guidance of our honorable Registrar, Dr. R.K. Singh Sir; Dean of SAC Dr. Ketan Lakhtaria Sir and DGM Administration, Ms Meeta Agrawal ma'am along with SAC faculty members and students. Change is the only constant. Keeping that in mind, SAC is now iSAC whose new logo was revealed during the event.

The old SAC panel was felicitated with a certificate and a memento as a gesture of acknowledgement for all their hard work and selfless dedication throughout the year, followed by welcoming the new panel with their badges of honor. The event was brought to a memorable end with a group photograph of old panel, new panel, dignitaries and the faculty members.



## ***New Logo of Indus Student Activity Cell***

## TRAINING AND PLACEMENT

### PLACEMENTS:

A total no. of 38 students from B. Tech (CE/CSE/IT), MCA/MSc.IT, B. Tech (Mechanical, Metallurgy, Automobile) were selected with packages ranging of Rs.3.60 LPA and RS.7.00 LPA.

### SELECTIONS DURING THE MONTH:

| S<br>r.<br>N<br>O | COMPANY<br>NAME     | DESIGNATION           | BRANCH                                             | STATUS            | PACKAGE<br>(RS.IN<br>LPA) |
|-------------------|---------------------|-----------------------|----------------------------------------------------|-------------------|---------------------------|
| 1                 | HELIOS TECH         | SOFTWARE<br>TRAINEES  | B. TECH (CE/CSE/IT/EC),<br>MCA/MSc.IT, BSc.(CS/DS) | 3 Selected        | 5.00 LPA                  |
| 2                 | KODY<br>TECHNOLAB   | SOFTWARE<br>ENGINEERS | B. TECH (CE/CSE/IT/EC),<br>MCA/MSc. IT             | 2<br>shortlisted. | 5.00 KPA                  |
| 3                 | MEDKART<br>PHARMACY | SOFTWARE<br>TRAINEES  | B. TECH (CE/CSE/IT/EC),<br>MCA/MSc. IT             | 4 selected        | 4.00 LPA                  |
| 4                 | MOTADATA            | SOFTWARE<br>ENGINEERS | B. TECH (CE/CSE/IT/EC),<br>MCA/MSc. IT             | 1 selected        | 6.00 LPA                  |
|                   |                     |                       |                                                    |                   |                           |

Ms.Amrita, SoftSkill Trainer, T & P Department along with Mr. Harry Gosai, T & P Coordinator, conducted the an interactive soft skills sessions for MBA, MCA and B.Tech Students on 18th, 19th and 20th October 2023 respectively.







## GUJARAT POLICE REFORMS-INDUSTRY MENTOR

Miss Radhika Bhandari, Dean of Aviation and Director of WIIA, has been invited to join as an Industry Mentor for the Innovation Challenge launched in partnership with the Gujarat Police Department and the Government of Gujarat. The appreciation letter from the Director General of Police (Police Reforms) to Miss Radhika Bhandari, the Dean of Aviation and Director of WIIA, for significant collaboration between Gujarat Police, Indus University, and Western India Institute of Aeronautics Pvt. LTD. This partnership represents a vital step in enhancing the safety and security of our communities, fostering a closer and more effective relationship between these organizations. The collaboration between Suraksha Setu Society, educational institutions, and Gujarat Police aims to enhance safety through education and community engagement. Miss Radhika Bhandari's commitment is commendable. Their participation in the Gujarat Police Reforms Open Innovation Challenge promises innovative solutions for law enforcement. Joint awareness programs for community policing will foster trust and understanding. This collaboration will have a lasting, positive impact on Gujarat's safety and security.



GOVERNMENT OF GUJARAT

**GUJARAT POLICE REFORMS  
OPEN INNOVATION CHALLENGE 2023-24**

**Startup Opportunities with  
SURAKSHA SETU SOCIETY  
Police Reforms, Community Policing  
Government of Gujarat**



**SHRI ANIL PRATHAM - IPS**  
(DGP, Police Reform, Government of Gujarat)

### Industry Mentor



**RADHIKA BHANDARI**  
(Dean - Academic, Indus University & Director, WIIA)



Director General of Police  
(Police Reforms)  
1<sup>st</sup> Floor, Police Bhavan,  
Gandhinagar, Gujarat  
Tel. 079-33354776, (Fax) : 079-33346151

See PAIR & PROGRESS (p. 10)

To  
 Mrs. Radhika Bhandari  
 Dean - Aviation, Indus University & Director,  
 Wipro India Institute of Aeronautics Pvt. LTD  
 Indus University, Rancharda, Ahmedabad, Gujarat - 382110

Dear Radhika Bhargava

I am writing to express my heartfelt appreciation on behalf of the Gujarat Police for collaboration between Gujarat Police, India University, and Western India Institute of Aeronautics LTD (WIIA). This partnership signifies a significant milestone in our ongoing efforts to ensure safety and security of our communities, and I am confident it will foster a closer, more affe

The joint initiative of the Saraksha Seta Society, wherein the Gujarat Police collaborates educational institutions and other stakeholders, plays a pivotal role in enhancing the safety and being of the people in our state. We believe in the power of education and community engagement create a safer and more secure environment for our citizens. Your willingness to collaborate in endeavor demonstrates your commitment to this shared mission.

Furthermore, I am excited about the prospect of working together on various award programs related to community policing. The role of educational institutions and organizations years in spreading awareness and promoting community engagement cannot be overstated. It is these initiatives that we aim to bridge the gap between law enforcement agencies and the community.

In conclusion, I want to convey my deep appreciation for your commitment to the safety security of the people of Gujarat. This collaboration marks the beginning of a promising journey, and I look forward to the remarkable outcomes that we can achieve together. The collective efforts of Gaforce, Infos University, and WEA will undoubtedly leave a lasting and positive impact on

Please accept my sincere gratitude for your support, and I eagerly anticipate our collective achievements in the days to come. Together, we can make Gujarat a safer and more secure place for all.

(Asif Pratham)  
Director General of Police  
Police Reform  
Gujarat State, Gandhinagar





## MANOVIGNYAN JIVANASYA ANVESHAM

Honorable Presidential Secretariat of Indus University, Smt. (Dr.) Ritu Bhandari, recently published an article titled "A Path from Entrance to Engineering & Management Graduation - "मनोविज्ञानं जीवनस्य अन्वेषणम्" in the Gujarat Mail Newspaper, dated October 29, 2023. This article explores the psychological evolution of students in engineering and management programs from admission to graduation. It describes how students go through stages of enthusiasm, self-discovery, and growing confidence as they progress through their academic journey. Ultimately, graduation marks the transition to confident and capable professionals, prepared for the challenges of the real world. The article emphasizes that this transformation equips students not only with academic knowledge but also with personal growth and resilience, contributing to their readiness for the professional world and nation-building.

ગુજરાત મેઇલ સાપ્તાહિક મેઇલ

રવિવાર, 29 ઓક્ટોબર 2023 | 08



## The Changing Mind of a Learner

### A Path from Entrance to Engineering & Management Graduation- "मनोविज्ञानं जीवनस्य अन्वेषणम्"

The evolution from an eager, fresh-faced student stepping into the doors of a University to the graceful, confident graduate crossing the stage with a degree in hand is a transformational journey, particularly in the fields of engineering and management. The four or more years spent in higher education mark a significant period in a student's life, during which their psychology undergoes profound changes. I am exploring the evolving psyche of University students, tracing their emotional, intellectual, and personal development from admission to graduation, within the context of engineering and management disciplines.

The initial days of University Campus life are filled with excitement, anticipation, and sometimes anxiety. Freshmen, particularly in the demanding fields of engineering and management, may grapple with the pressure of academic rigors and adjusting to a new, independent life away from home. The psychology of a fresh student is often characterized by a mix of enthusiasm, uncertainty, and the eagerness to make new friends and adapt to the University environment. Time management,

stress management, and setting academic goals become paramount.

By the second year, students start to familiarize to the academic and social demands of



Smt. (Dr.) Ritu Bhandari  
Presidential Secretariat  
Indus University  
info@indus.ac.in

University life. They begin to identify their strengths and interests within their chosen discipline. For engineering students, this might mean selecting a specific major or field of study, while management students may dig into areas of specialization such as marketing, finance, or human resources. The psyche of a Second Year student is marked by a growing sense of direction and purpose, along with a developing sense of identity and self-confidence.

As students' progress through their coursework and build on their experiences, they enter the junior year with a more profound sense of belonging. Junior year is often associated with more challenging coursework,

internships, and real-world exposure. In engineering, students may start working on complex projects, while management students may undertake leadership roles in student Associations or participate in case competitions. The psychology of a junior student is characterized by increased determination, responsibility, and a growing passion for their chosen field.

The senior year is the result of the academic journey, where students become experts in their chosen disciplines. They might engage in capstone projects, research, or prepare for job interviews and graduate school applications. During this phase, the student's psychology is marked by a profound sense of accomplishment and anticipation. The excitement of upcoming graduation is tempered by the anxiety of transitioning to the professional world. Senior students exhibit a high level of self-assuredness, knowledge, and readiness to tackle real-world challenges.

Upon graduation, students in engineering and management have evolved significantly. They have developed a strong foundation of knowledge, honed critical thinking skills, and cultivated a robust work ethic. Additionally,

they have forged lifelong friendships, expanded their horizons, and acquired a valuable network of peers and mentors. Graduation marks a moment of transition, as the psyche shifts from a student to a professional. Students are self-confident to enter the Industry or pursue further education with the confidence and skills acquired during their Academic Journey.

Hence, the psychological transformation of a student from admission to graduation in engineering and management is a remarkable journey in the university ecosystem. Over the years and with the help of University education, students undergo a transformation, growing from enthusiastic Fresher to confident and capable Industry ready graduates. The Academic experiences, challenges, and achievements during this period mold their psyche, preparing them for the complexities of the real world. This evolution not only equips them with academic knowledge but also fosters personal growth, resilience, and a True Nationalist ensuring that they are well-prepared for the challenges and opportunities that await them as they step into their professional lives and for Nation Building.

## TOUCHING THE SKY WITH GLORY: WOMEN IN AVIATION

Miss Radhika Bhandari, Dean of Aviation and Director of WIIA, has recently published an article titled "Touching the Sky with Glory: Women in Aviation" in the Gujarat Mail Newspaper, November 02, 2023.

The article highlights the inspirational journey of Miss Radhika Bhandari, Dean of Aviation and Director of WIIA whose father's Dr. Nagesh Bhandari, Honorable Presidential Secretariat of Indus University passion for aviation influenced her to enter into this field. She emphasized the importance of multidisciplinary skills and discusses the increasing representation of women in India's aviation sector, which is the third largest domestic civil aviation market in the world. She discusses the industry's growth, the economic significance of aviation, and the increasing number of Indian flyers. She also mentioned the need for skill-based training, importance of reducing the skills gap, and the role of education in the future of aviation sector. The article underlines the industry's resilience during the COVID-19 pandemic and its continuous growth.

ગુજરાત જ્ઞાન મેદાન ( ) KNOWLEDGE મેદાન

ગુરુવાર, 02 નવેમ્બર, 2023 | 08

TOUCHING THE SKY WITH GLORY:  
WOMEN IN AVIATION

A great source of inspiration for me to enter into this field is my father Dr. Nagesh Bhandari. He is a Spine Surgeon by profession and an educationist and went on to pursue his childhood dream of flying aircraft. eventually and acquire a private pilot license. His passion for technicality and aviation greatly influenced me to make my mark in this field.

I did my engineering in metallurgy; an area where usually male was in the majority but I was always interested in understanding fundamentals and Metallurgy was one of those fields where you learn all about 'Metals' which is the backbone of the Aviation industry. It also made me explore the manufacturing process of various industries. For ex: During my metallurgy study, I learned about the honeycomb composite material that goes into building up the wings of an aircraft, rudder, floorboards, or cabin baggage compartment. This background eventually helped me to understand the aviation industry from scratch. I am a big advocate of multidisciplinary skills and my upbringing has been done in a manner wherein I have been encouraged to pursue multiple skills in a balanced manner. For ex: if I learned to be a Bharatanatyam dancer, I also explored rifle shooting and horse riding. Connecting this with the aviation industry, I am of the mind-set that even if you do not possess any particular aviation degree, diploma, or license course, if you are truly dedicated and passionate about this field, there are multiple entry points and that you can bring on the table along your existing skill set. It was very interesting for me to know that we Indians, have the highest proportion of female commercial pilots in any country, which is 13%, and the global average is about 5%. With this intention, I got into this field to give my contribution to other aviation fields.



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India is currently considered the third largest domestic civil aviation market in the world and with the rising demand, the country's airlines are succeeding in addressing its demand by hiring more women in this sector. We can witness, with a rapid expansion of our aviation sector where we are having a lot of non-traditional options available youngsters are now being encouraged to develop their technical skills and make their way into an area where they had less representation earlier. Dynamic changes are taking place within the aviation industry as well, and youngsters

are now opting to study core operations like aircraft engineering, flying, etc. The aviation industry is predicted to become one of the largest contributors to the nation's economy, following the announcements by the Ministry of Civil Aviation. I wish to contribute to this growth by empowering the youth and women and advancing the aviation industry overall. Aviation is a vital industry that contributes substantially to economic development and improved living conditions. According to the reports of ICAO (ICAO International Civil Aviation Organization which consists of 193 countries and India is a part of it and India is also one of the 36 governing members) the 4.1 billion passengers transported in 2017 are expected to grow to around 10 billion by 2040. And according to IATA (International Air Transport Association), 35% of world trade by value is transported by air cargo, equivalent to \$6.4 trillion of goods. The role of the aviation industry in commerce,

trade, and transport infrastructure makes it indispensable to the global economy. As per International Civil Aviation Organization, Aircraft Maintenance Engineering (AME) License and Commercial Pilot License (CPL) are recognized internationally in 193 countries as India is a part of ICAO, only requirement by different countries is their conversion exam which can be completely within a couple of days. such as DGCA (Directorate General of Civil Aviation), FAA (Federal Aviation Authority in the US, CAA Civil Aviation Authority in Canada and UK). Fortunately, to cope with the demand of Indian Civil Aviation, these foreign licenses can be converted to Indian licenses. Aviation is an industry that does not have the full stop mark. It's growing and ever-evolving as it has a huge demand in India with a huge profit margin. People love to travel domestically and internationally. While we all witnessed the destruction the pandemic caused to us, but aviation industry didn't stop. From importing medicines, masks, and other necessary equipment to bringing back people to India, aviation did not stop. As our country slowly unlocked itself, giving people the freedom to travel again. Therefore, the number of travellers is increasing at a faster rate and so is the demand.

The civil aviation sector in India has become more customer-friendly and cost-efficient with the recent reforms in the aviation sector. The data from the Airport Authority of India suggests that the number of Indian flyers on both Domestic and International flights has increased by more than 500% in the last 5 years. There is no substitute for highly skilled management & technical personnel to manage this huge demand. I would like to highlight a couple of fundamental transformations that I believe we are going to witness in the coming times or future of aviation through this new education

policy such as multidisciplinary options, and multiple exit options but, most important here skill-based training, known as Lok-Vidya. Recent studies by McKinsey analysts have suggested that a generation ago, the half-life of skill was about 26 years but today, it's 4.5 years and dropping. It has been estimated that up to 800 million workers globally could be displaced by robotic automation by 2030. The pace of change increases, stress increase, and the greater feeling of irrelevance has increased. This current set-up for a pre-determined curriculum where learning development for the country's Aerospace and Aviation sector, under the National Skills Development Corporation. The Government of India has reduced GST on MROs from 18% to 5% and waiving customs duty on tools, kits and spare parts imported by MROs came as a big push, the country already has half a dozen MROs that are operational while several more are waiting to enter the space. Until a few years ago, almost all our airplanes flew to Malaysia, Singapore, UAE or Sri Lanka, or other overseas MRO destinations for repairs and maintenance. Today, we can handle 25% of such work within the country. In the next 5-10 years, we should be able to raise it to 50% and 70%, respectively. That means huge savings in time, fuel, and money for airlines. In the early days of flight, approximately 80 percent of accidents were caused by the machine and 20% percent were caused by human error. Today that statistic has reversed. Approximately 80% of airplane accidents are due to human error (pilots, air traffic controllers, mechanics, etc.) and 20% are due to machine (equipment) failures. We need to become quality. Consciousness and work with accuracy to avoid human error as it is very important to achieve perfection in the aviation sector. There is no dearth of opportunities as it is a skill-based field. The one who possesses the dexterity to survive will be paid well. IATA (International Air Transport Association) has pledged that by 2025 that at least 25% of women should work in the aviation industry our company has already done that. Takin inspiration from this, I would like to share some very interesting facts about Western India takes place in a particularly standardized manner has led to fragmentation and segmentation of learning. This has led to a huge gap in the supply of people in the workforce coming out of educational institutes with skills and credentials to fill the gaps employers are looking for. To reduce the traditional skills gap, NEP is greatly focusing on skill development. Luckily, the aviation sector has always been ahead, we always send our students to work in live working environments for practical training because being in the aviation industry requires you to be responsible for the safety of the passengers and aircraft, and all of this is governed by DGCA (Directorate General of Civil Aviation). We must ensure students train with industry experts. The biggest challenge right now is not against human exploitation but against human irrelevance to the economic and political system and constant reinvention of one's skill development and technological advancement is the topmost priority and that is the basis of aviation.



## THE ROAD LESS TRAVELLED

Walking on unknown road  
Could not travel the both...  
Scariness with excitement  
Walking for enhancement...  
Lying leaves,  
Growing branches...  
Warned me, for the road  
Not to walk on...  
Twilight is setting on  
Darkness scattered the road...  
No ray of light  
Lead me to bright...  
Yet walking on the road  
The road, less chosen by...  
Sun rays bring smile  
Leading me to the height...  
Telling this after ages hence  
Chosen the road, less travelled by...



*Nikita Gadani*

## SPECIAL SOMEONE



*Saanvi Agarwal*  
(BA ENGLISH SEM 1)

## THE UNBORN STAR

Little stars in the sky.. Her dreams were to fly high,  
A soul with lots of dreams in her mind..  
She doesn't need to get abort, She needs our support..  
She was calm.. Why did you harm ?  
Your womb was her dwelling, Why did you left her yelling..?  
Didn't she fight so brave, Dreams in her grave?  
She needs to fly.. Don't let her die?  
No one to wipe out her tears, Was only her fear?  
Don't judge her by gender.. It's the god who is the sender?  
Was the main reason, She was she..  
But what the same would be done if, She was he?  
As she was your will, Why did you kill?  
What was her guilt.. Why she was killed?  
What for all the pain, She had to gain?  
She is not at all a burden, For what she will never pardon.  
She was not at all a tension, She is equal to ten sons.  
All she is, she didn't get a chance, To prove and enhance..  
She was to become a live star.. But now she is already a star..  
The unborn star..



*Parita Shah*



“

### *Congratulations*

#### **Ms. Nisha Thankachen, IISHLS**

for receiving her Ph.D notification entitled  
"Investigation of Magneto Electric Properties  
of some Functional Materials"

on 25th Oct. 2023,  
under the guidance of  
Prof. Utpal S. Joshi at  
Gujarat University.

”

“

### *Congratulations*

#### **Mr. Rana Jaypalsinh Ambalal, IITE**

for receiving his Ph.D notification entitled  
"ANALYSIS OF SELECTED ISSUES INFLUENCING  
SUSTAINABLE LEAN SIX SIGMA ADOPTION IN

INDIAN SMALL AND  
MEDIUM SCALE MANUFACTURING ENTERPRISES"

in Oct. 2023,  
under the guidance of  
Dr. Suketu Y. Jani at  
Indus University.

”

### **Dr. Ashwin Patani – “Sports Prodigy”**

Ms. Priya Singh Chauhan and Dr. Nisha Thankachen of i360 team got the opportunity to have an interaction with one of the oldest employees of Indus University – Dr. Ashwin Patani. The following is the excerpt of the interaction.

Dr. Ashwin Patni is a stalwart of Indus University and has spent 17 years of his life as an academican with EEE and CSE department. He has been a part of Indus family from its inception and has contributed to its growth from the beginning. He has worked with Physical Research Laboratory and North Gujarat university prior to joining Indus. He has done his B.Tech, M.Tech and Ph.D.

His passion is sports with deep love for cricket. Very few of us know that he has played the Ranji Trophy as a wicket keeper. He has also played with famous cricketers like Zaheer Khan and Parthiv Patel. His favourite cricketers are Yuvraj Singh and Steve Waugh.

He fondly remembers the sports team of Indus university whom he took to Goa for participation in sports in 2013. The teams won almost all the competition and both the students and our university got distinct recognition. He also cherishes memories of the first batch that he taught in 2006 and takes pride in the fact that one of his students of the batch is now a successful and famous film director Mikhil Musale of Bollywood and he has directed the movie 'Made in China' and 'Wrong side Raju' from Dollywood – Gujarati movies.

He shared a story of 'Marvan Atapattu' captain of Sri-Lankan cricket team who failed 13 times to get into the board as a cricketer but then finally got selected. He is an excellent cricketer and he motivates all of us to keep on trying until the goal is achieved.



Interviewed by: Ms. Nisha Thankachen & Ms. Priya Singh Chauhan





## SHUBH DEEPAWALI & NUTAN VARSH ABHINANDAN

From : i360 Team

We express our gratitude and appreciate the efforts of the following i360 team representatives for coordinating with different institutes and collecting preliminary data.

- 1) IICT- Ms. Mansi Mehta
- 2) IIMS - Ms. Drishta Barot
- 3) IIATE & WIIA - Capt. Umang Jani
- 4) IISHLS - Dr. Bhavika Vyas
- 5) IIL & IIPR - Ms. Priya Singh Chauhan
- 6) IDS, IAS, WDC & ICSII- Dr. Monika Gupta
- 7) ISS (Indic Studies), T&P and SAC- Ms. Pushti Purohit
- 8) CE&IT, IITE - Ms. Sejal Thakkar
- 9) Computer Science Engineering, IITE - Dr. Ashwin Patni
- 10) Core Branches, IITE - Mr. Marnish Modi
- 11) NCC - Lt. Dr. Parshva Shah.



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Dr. Monika Gupta  
Dr. Samir Patel  
Capt. Umang Jani

Mr. Monil Salot  
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Ms. Meeta Agrawal  
Dr. Nikita Gadani  
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