



**NEWSLETTER**

# The Institution of Engineers (India)

Udaipur Local Centre

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**THE INSTITUTION OF ENGINEERS (INDIA)**

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**Er. Piyush Javeria, MIE**  
Honorary Secretary  
Pro Vice-Chancellor  
SAI Triupati University, Udaipur

## IEI, Udaipur Local Centre COMMITTEE SESSION 2024-2026



**Er. C.P. JAIN, FIE**  
Immediate Past Chairman  
General Manager, Adarsh Engitech Projects Pvt. Ltd, Udaipur



**Er. Purushottam Paliwal, FIE**  
Chairman  
Former Executive Engr. AVVNL  
CESE, Govt. of Raj.

## Elected Members



**Dr ABHAY KUMAR MEHTA, FIE**  
Former Director (Research), MPUAT, Udaipur  
Agricultural Engineering Division



**Er. SHRIYA PANCHAL, AMIE**  
SWM consultant, Bhavnagar Municipal Corporation  
Architecture Engineering Division



**Er. RAJKUMAR SINGH CHAUHAN, FIE**  
Former Additional Chief Engineer PWD, GOR  
Civil Engineering Division



**Er. JITENDRA MENARIA, MIE**  
Former Superintending Engr, water resources GOR  
Civil Engineering Division



**Er. NISHA KUMAWAT AMIE**  
Assistant Engineer, PWD, udaipur  
Civil Engineering Division



**Prof (Dr) ASHOK JETAWAT, FIE**  
Director, IICE Institution, Udaipur  
Computer Engineering Division



**Er. GIRISH KUMAR JOSHI, MIE**  
Former Zonal Chief Engineer, AVVNL, Udaipur  
Electrical Engineering Division



**Er. PRAKASH SUNDARAM, AMIE**  
HOD (Elec.) Vidya Bhawan Polyt. College, Udaipur  
Electrical Engineering Division



**Er. GOPI KANT TIWARI, FIE**  
Former Additional Chief Engr.  
Nuclear Power Stations, Rawatbhata  
Electronics & Telecommunication Engineering Division



**Er. AJIT KUMAR JAIN, FIE**  
Global Head - Service Ideation & Design,  
Secure Meters Ltd., Udaipur  
Electronics & Telecommunication Engineering Division



**Er. L T LOKHANDWALA, MIE**  
Former Chief Engineer, MEO class I, M.I. Mar. E. (I)  
Marine Engineering Division



**Er. MAHAVIR PRASAD JAIN FIE**  
Former Add. Chief Engineer, Department of  
Atomic Energy, Nuclear Power Corporation  
Mechanical Engineering Division



**Er. KRISHNA KANT SHARMA FIE**  
Former Scientific Officer "G" Department of  
Atomic Energy Nuclear Power Corporation of India  
Mechanical Engineering Division



**Er. LAXMI NARAYAN KACHHAVA MIE**  
DGM (OD), RSMML, Jharmarkotra  
Metallurgical & Materials Engg. Division



**Er. RAMESH CHANDRA PUROHIT MIE**  
Former Assistant Vice President (Mines), JK Cement Ltd  
Mining Engineering Division



**Er. HITANSHU KAUSHAL MIE**  
CEO, HK & Associates, Udaipur  
Mining Engineering Division



**Er. PAVAN KUMAR JAIN, MIE**  
Former Industrial Engineering & HR Head, HZL  
Production Engineering Division



**Er. MAHENDRA KUMAR CHAUHAN, FIE**  
Chairman, RSC, IEI, Jaipur  
Ex-Officio Member



**Dr HEMANT KUMAR GARG FIE**  
Honorary Secretary, RSC, IEI, Jaipur  
Ex-Officio Member



**Er. S.S. YADAV, FIE**  
Council Member (Rajasthan)  
Ex-Officio Member



# MESSAGE

Happy New Year

I am very glad to know that Udaipur Local Centre is going to publish Newsletter. I Hope, in this Newsletter all members will get information about upcoming activities and brief news about the activities held in the Centre. This is very commendable/appreciable efforts by Udaipur Local Centre team.

I hope that seeing this commendable work of Udaipur Local Centre team, more of our centre's will also start such informative work. Many thanks and congratulations to Chairman, Honorary Secretary and your team for this appreciable work.

With regards,

Mahendra Kumar Chauhan  
Chairman,  
Rajasthan State Centre, Jaipur

## From the desk of the Chairman



Dear Members,

It is with great pleasure and enthusiasm that I extend warm greetings to each of you through this first edition of the newly introduced newsletter. As Chair, I am honoured to lead such a dynamic and dedicated community of engineers, innovators, and thought leaders.

In today's fast-paced world, the role of engineering in shaping our future through collaboration, ingenuity, and a relentless pursuit of excellence, we have the power to address the challenges of our time and create a more sustainable and equitable world for generations to come.

Looking ahead, our focus remains on fostering growth, embracing change, and building a vibrant community where ideas thrive, and goals are realized. I encourage each of you to actively participate in the initiatives and programs we have planned, as your involvement is the cornerstone of our collective success.

I encourage you to take full advantage of this newsletter as a platform for learning, networking, and sharing knowledge. Your contributions, whether through articles, opinions, or feedback, are invaluable in shaping the future direction of our organization.

As we navigate the opportunities and challenges that lie ahead, let us remain steadfast in our commitment to excellence, integrity, and collaboration. Together, we can continue to elevate the profession of engineering and make a lasting impact on society.

Thank you for your continued support and dedication to the IEI Udaipur Local Centre.

I look forward to our continued journey of growth and success together.

Warm regards,

Er. Purushottam Paliwal



## From the Desk of Honorary Secretary

Dear Members,

It is with immense pleasure and pride that I extend my warm greetings to you all through the inaugural edition of our newsletter. This marks a significant milestone for the Udaipur Local Center as we take a step forward in fostering communication, collaboration, and knowledge-sharing among our engineering community.

The Institution of Engineers (India) has always been a cornerstone for the professional development of engineers and technologists across the country. Our Udaipur Local Center is committed to upholding this legacy by organizing activities that promote innovation, technical excellence, and community engagement.

Through this newsletter, we aim to provide you with updates on our recent initiatives, upcoming events, technical sessions, and achievements of our esteemed members. It will serve as a platform to showcase the collective efforts of our community and inspire a sense of unity and purpose among us.

I encourage all members to actively contribute to the newsletter, share your ideas, achievements, and suggestions to make this publication vibrant and enriching. Together, we can continue to make significant strides in advancing the engineering profession and addressing the challenges of our ever-evolving world.

Let us remain steadfast in our commitment to engineering excellence, innovation, and service to society. I look forward to your continued support and participation in our activities.

Wishing you all the best in your endeavors.

Warm regards,  
Piyush Javeria

## From the Editor's Desk

Welcome to the inaugural edition of our technical newsletter & Wishing you all a very happy New Year!

In today's fast-paced world, staying updated with cutting-edge technology is not just a necessity—it's a catalyst for growth and innovation. Our mission with this newsletter is to bring you the latest insights, trends, and activities of our center.

We will try that each edition will feature expert articles, in-depth analysis, success stories, and emerging innovations that are shaping industries. Whether you're a seasoned professional or someone exploring the tech world, there's something here for you.

We aim to make this space a hub for knowledge-sharing and inspiration. Your feedback is crucial to us, so please feel free to share your thoughts, suggestions, and ideas. Let's shape the future of this platform together!

Happy reading, and welcome to this journey of discovery and growth!

Warm regards,  
RC PUROHIT



## About the IEI, Udaipur Local Centre

The Udaipur Local Centre which was established in 1979 has attained the young age of 46 years is one of the active centre of Rajasthan. The first Chairman of this centre was Er. R.P. Kapoor and Dr. K.N. Nag was first Honorary Secretary. This centre witnessed in organising of many technical events, seminars, and national conventions such as Agricultural, Chemical, Mining, Mechanical, and Council meetings of IEI besides the mega event of the 22nd Indian Engineering Congress in December 2007 and the 33rd Indian Engineering Congress in December 2018. Udaipur Local Centre has 1251 Corporate Members and 9 Institutional members namely Geetanjali Institute of Technical Studies-Udaipur, Aravali Institute of Technical Studies-Udaipur, Techno India NJR Institute of Technology-Udaipur, Shrinathji Institute of Technology & Engineering-Nathdwara, Pacific Academy of Higher Edu. & Research Society-Udaipur, College of Technology and Engineering-Udaipur, Govt. Engineering College-Banswara, Mohanlal Sukhadia University-Udaipur and Sir Padampat Singhania University-Udaipur

## Tenure of Chairmen and Honorary Secretaries

S.No.	Year	Chairman	Honorary Secretary
1.	1979-1981	Er. R.P. Kapoor	Dr. K.N. Nag
2.	1981-1983	Er. Y.S. Sardalia	Er. B.L. Mantri
3.	1983-1985	Er. Y.S. Sardalia	Er. B.L. Mantri
4.	1985-1987	Er. M. Dutta	Er. B.L. Mantri
5.	1987-1989	Er. K.P. Gupta	Er. R.C. Kumawat
6.	1989-1991	Er. H.V. Paliwal	Er. R.C. Kumawat
7.	1991-1993	Er. B.L. Mantri	Er. S.P. Anand
8.	1993-1995	Er. D. Lahiri	Er. B.K. P. Sinha
9.	1995-1997	Er. B.K.P. Sinha	Er. S.L. Godawat
10.	1997-1999	Er. N.C. Bansal	Er. S.L. Godawat
11.	1999-2001	Er. R.L. Tayalia	Er. K.K. Chhabra
12.	2001-2003	Er. Sohan Singh Rathore	Dr. N.K. Purohit
13.	2003-2005	Dr. K.K. Chhabra	Er. M.S. Khamesra
14.	2005-2007	Er. R.C. Kumawat	Dr. R.C. Purohit
15.	2007-2009	Er. S.L. Godawat	Er. Naveen Kumar Vyas
16.	2009-2011	Dr. S.S. Rathore	Dr. Y.C. Bhatt
17.	2011-2013	Dr. Y.C. Bhatt	Er. Syed Irshad Ali
18.	2013-2014	Er. A.S. Choondawat	Dr. Dharm Singh
19.	2014-2015	Er. A.S. Choondawat	Er. M.K. Mathur
20.	2015-2017	Er. M.K. Mathur	Er. Anurodh Prashant
21.	2017-2019	Er. Anurodh Prashant	Er. Y.K. Bolia
22.	2019-2022	Er. Y.K. Bolia	Er. C.P. Jain
23.	2022-2024	Er. C.P. Jain	Er. Purushottam Paliwal
24.	2024-2026	Er. Purushottam Paliwal	Er. Piyush Javeria

## Activities in Forthcoming Quarter

15 <sup>th</sup> February 2025	One Day Seminar on Advance Heavy Water Reactors
04 <sup>th</sup> March 2025	World Engineering Day for Sustainable Development
22 <sup>nd</sup> March 2025	World Water Day



# IEI, ULC Activities Conducted During Oct- Dec. 2024

## Annual General Meeting and Talk on “Role of Smart City Project in Development of Udaipur City”



The Annual General Meeting was held on 28th October 2024 at office of Udaipur Local Centre in presence of Er. Mahendra Kumar Chauhan, Chairman, Rajasthan State Centre, Jaipur.

The programme began with the lighting of the lamp. In the beginning Er. C.P. Jain, Outgoing Chairman welcomed all the Members. Outgoing Honorary Secretary Er. Purushottam Paliwal, presented the audited accounts for the year 2023-24. After discussion, the House approved the audited accounts unanimously. He also presented the Annual Report for the year 2023-24 elaborating on the activities conducted by the Udaipur Local Centre.

The newly elected Chairman Er. Purushottam Paliwal and the Honorary Secretary Er. Piyush Javeria took over the office by exchanging of seats with the outgoing Chairman. The newly constituted committee of the Udaipur Local Centre for the sessions 2024-26 was then announced before the house by the newly elected Chairman Er. Purushottam Paliwal. He appealed to the members to actively participate & co-operate in organization of technical and other events. He assured the members that many technical activities would be conducted during the session. Er. Piyush Javeria, after taking over the charge of Honorary Secretary conducted the proceedings of the programme. On this occasion outgoing Chairman Er. C.P. Jain was felicitated.

In continuation of the AGM, a talk was also organized in which Er. Purushottam Paliwal newly elected Chairman welcomed the Keynote Speaker Shri Satish Kumar Shrimali, Former Additional Chief Town Planner, Government of Rajasthan and Er. Mahendra Kumar Chauhan, Chairman, Rajasthan State Centre, Jaipur, and corporate members.

Keynote Speaker Shri Satish Kumar Shrimali, expressed his views on the "Role of Smart City Project in the Development of Udaipur City". In his address, Mr. Shrimali said that the Smart City Project plays an important role in the development of modern cities by integrating technology and data-driven solutions to improve the quality of life, promote sustainability, and enhance urban services. Smart cities focus on using technology to enhance public services like transportation, water supply, parking, waste management and energy. Maharana Udai Singh laid the foundation of the city in 1557 A.D. and the city is a famous tourist destination known worldwide such as "City of Gardens" and "Venice of the East". He said that the specialty of a smart city is in uninterrupted power supply, roads, drainage, parking, traffic, and clean lakes, ponds, etc. He suggested that local administration and town planning department should involve engineers of IEI to develop Udaipur as a smart city and also stressed for implementing strong public transportation in the Udaipur City.

Er. Mahendra Kumar Chauhan, briefed about the goal and vision & activities being conducted by the Institution of Engineers (India).

In the last, Er. Piyush Javeria, Honorary Secretary, proposed vote of thanks.

## World Standard Day Celebration



### Theme: SHARED VISION FOR A BETTER WORLD: SPOTLIGHT ON SDG 9

World Standard Day was celebrated on 28th October 2024 on the theme “Shared Vision for a Better World: Spotlight on SDG 9”

At the beginning of the programme Er. Piyush Javeria, Honorary Secretary, speaking on World Standard Day stated the importance of today's dialogue, stating that human life development exists with compliance with standards only.

Er. Purushottam Paliwal, Chairman welcomed Keynote Speaker Shri Satish Kumar Shrimali, Former Additional Chief Town Planner, Government of Rajasthan, Er. Mahendra Kumar Chauhan, Chairman, Rajasthan State Centre, Jaipur, and the audience

The Keynote speaker Shri Satish Kumar Shrimali, in his address highlighted international standards' role in supporting the UN's Sustainable Development Goals (SDGs). This year's observance focused particularly on SDG 3, which promotes good health and well-being. He emphasized the importance of health-related standards to improve public health outcomes globally.

He said that in India, BIS celebrated the event with various outreach programs under its “Manak Mahotsav,” aimed at raising awareness about quality standards. Activities included campaigns, street plays, technical sessions, and workshops across several districts, especially to inform and educate youth and rural leaders about health standards' significance in daily life. This campaign illustrated how standardized health practices can help reduce risks and improve the quality of life in communities.

On this occasion, Er. Mahendra Kumar Chauhan, praised the activities being conducted at Udaipur Local Centre.

Er. Piyush Javeria, Honorary Secretary proposed a vote of thanks to the Keynote Speaker of the function, and all the participants.

## Technical Talk on “United Nations Climate Summit, COP 29: HARIT perspective and Lessons for Udaipur”



Technical talk on “United Nations Climate Summit, COP 29: HARIT perspective and Lessons for Udaipur” organized on 26.11.2024 in the office of IEI, Udaipur Local Centre in a grand manner.

In the beginning Er. Piyush Javeria started the programme with full enthusiasm and welcomed all the guests on the dais. He expressed his views on the challenges being faced by climate change in Udaipur city such as biodiversity, water scarcity, tourism dependence, etc.

Er. Purushottam Paliwal, Chairman welcomed the Keynote Speaker, Dr. Anil Mehta Principal, Vidya Bhawan Polytechnic College, Udaipur, and Speaker Dr. Giriraj Nyati, Director, Techno India NJR Institute of Technology, Udaipur and all the engineers and students. Er. Paliwal said that housing and urban development initiatives are focused on sustainable urban planning and climate-resilient infrastructure. The historic city of Udaipur can learn from the COP29 results and green perspectives.

The Keynote speaker Dr. Anil Mehta in his address in the context of the United Nations Climate Summit, COP 29, held in Azerbaijan told that Indian delegation tried to convey the delegates across the world, including UN officials to adopt the Vedic Peace Path as the UN Climate Peace Prayer "अन्तरिक्ष शान्ति, पृथ्वी शान्ति, वनस्पतयः शान्ति; ॐ शांतिः शांति शांति. This climate peace prayer, invokes peace in water, land, sky, space, forest, garden, building, village, city, every living being, every particle of the world, Nature and all forms of supreme consciousness, leads toward environment based conduct, thoughts and behavior.

Er. Mehta said that there was a lack of transparency in COP 29. The fund of approximately 25 lakh crore (300 billion US dollars) was approved by developed countries and Global North for developing countries to deal with the climate change crisis, adaptation etc. is much less than the basic need of Global South of 100 lakh crore (1.3 trillion US dollars). At the end of the conference India protested by raising the voice of the entire Global South. He said that in this era of lack of climate finance, to control and resolve the climate change crisis, we will have to move from SDG-based sustainable goals to green-based actions through life mission (environment-friendly lifestyle) and green (Green: Holistic Actions for Revitalization of Indigenous Traditions) works of holistic restoration of environmentally based approach, culture, and traditions. Every person can play an important role in saving his village, city, and the whole world from the climate change crisis. While sharing his experiences of the summit, Mehta said that trees, water, and soil will have to be saved through life and green-based efforts. If this does not happen, we all have to face serious disasters and the horrors of climate change.

The other speaker of the function Dr. Giriraj Nyati, while speaking on the topic of Industry 4.0 emphasized that the industry is moving towards achieving environmental goals through automation and energy consumption control. He said that in the coming times, there will be tremendous changes in the industry and giving the example of a car, he said that whatever facility you need in the car, the motor company will be able to provide that facility accordingly and there will be a change in the service model of the car, due to which there will be no need to remember to change the oil in the car after the mileage or time limit because such features will come in the car which will automatically indicate that the oil needs to be changed and Industry 4.0 refers to the combination of several major innovations in digital technology, including advanced robotics and artificial intelligence, sophisticated sensors, cloud computing, Internet of Things, data capture and analysis, digital manufacturing, 3D printing, smartphones and other mobile devices, platforms that use algorithms to guide motor vehicles. He said that the use of artificial intelligence (AI) within Industry 4.0, smart maintenance, human-robot collaboration, and creating better products with generative design is revolutionizing manufacturing to adapt to constantly changing markets. Smart factories will be more intelligent, flexible, and dynamic. The manufacturing processes will be organized differently in which entire production chains, from suppliers to logistics to life cycle management of a product will be closely connected across corporate boundaries.

Er. Piyush Javeria, Honorary Secretary convened the program very well and proposed vote of thanks.



Members are requested to send article, case study, success story and emerging innovation that are shaping industries to publish in Newsletter.

Articles for Publication may be sent through E-mail : [ieiulc@gmail.com](mailto:ieiulc@gmail.com)



## Er. Y. S. Sardalia Memorial Lecture



Er. Y.S. Sardalia Memorial Lecture 2024 was organized on the 13th of December 2024.

At the outset Er. Purushottam Paliwal, Chairman welcomed the Chief Guest Er. B.L. Khamesra, Former Managing Director, Jodhpur Vidyut Vitaran Nigam Limited, Government of Rajasthan and Speaker Dr. Vishnu Agarwal, Professor, Department of Mechanical Engineering, GITS, Udaipur. He spoke about the activities being organized by the Udaipur Local Centre and paid tribute to the great personality of Er. YS Sardalia and apprised the members that the said memorial lecture is organized every year by Udaipur Local Center in his memory. The Chief Guest Er. B.L. Khamesra, highlighted the remarkable work done by great Engineer Y.S. Sardalia. He threw light on the main points related to the life of Er. Y.S. Sardalia.

He added that the legacy of his tremendous contributions will be felt for years, whether through the projects that bear his brilliance or the people he inspired to dream bigger and aim higher.

The Speaker of the function Dr. Vishnu Agarwal, while delivering his speech on the subject, "Waste Heat Recovery Techniques-A Sustainable Future of Energy" said that the problems in energy conservation are that inefficient use of resources results in wastage of energy. Coal ash contains pollutants like arsenic cadmium and mercury and it is disposed of on land and water. India has limited conventional energy resources and is dependent on imports to meet its energy demands. He said that to meet the future demand India started implementing energy conservation measures and has a clear policy to promote energy conservation and important to reduce our dependence on fossil fuels like oil, gas, coal etc. Dr Agarwal said that India is the third largest global emitter of CO<sub>2</sub> and the carbon intensity of its power sector is above the global average. Energy conservation reduces the demand for fossil fuels which contribute to climate change.

Er. Khushwant Singh Sardalia (Elder Son of Er. Y S Sardalia), Shri Lucky Singh Sardalia (Younger Son of Er. Y.S. Sardalia) narrated interesting and memorable memoirs related to Sardalia's life. On this occasion other family members of Er. Y.S. Sardalia were also present.

In the end Honorary Secretary Er. Piyush Javeria proposed a vote of thanks to the Chief Guest and Speaker, family members of Er Sardalia and all the participant.

## Energy Conservation Day



Energy Conservation Day 2024 was organized on the 13th of December 2024 at Udaipur Local Centre

In the beginning Er. Purushottam Paliwal, Chairman welcomed the Chief Guest Er. B.L. Khamesra, Former Managing Director, Jodhpur VidyutVitaran Nigam Limited, Government of Rajasthan and Keynote Speaker Er. Vivek Gupta, Director & Principal

Consultant, M/s LC Mutlisolutions, Ahmedabad. Er. Paliwal while sharing his views on energy conservation said that environmental conservation helps in reducing climate change by reducing energy consumption and greenhouse gas emissions and energy conservation ensures a sustainable future for the coming generations.

The Chief Guest Er. B.L. Khamesra said that energy conservation can be done only by controlling our human behavior and less use of electricity. He said that in the next two decades, the electricity demand will increase by 25% globally. To meet the demand, energy-efficient equipment required to be used and solar and wind energy needs to be promoted. Net zero initiatives needs to be implemented in time frame.

Er. Piyush Javeria, Honorary Secretary, said that the purpose of Energy Conservation Day is to create awareness towards efficient use of energy and the role of individuals, industries, and governments in promoting energy efficiency. He highlighted the need to adopt innovative technologies that reduce energy consumption and reduce environmental impact.

Keynote Speaker Er. Vivek Gupta in his address said that energy conservation can be achieved through a variety of actions such as turning off lights and electric appliances when not in use, using energy-efficient appliances, Installing energy efficient lights and appliances. Using a smart thermostat ,timer for decorative lights can help to conserve energy. Unplugging appliances when they are not in use can help to conserve energy. He said that energy audit may address many issues to promote energy conservation. Energy can be conserved by using high-efficiency boilers, steam systems, furnaces, insulation systems, waste heat recovery systems, power distribution systems, motors, DG sets.

In the end Honorary Secretary Er. Piyush Javeria proposed a vote of thanks to the Chief Guest and Speaker and all the participants.

## Workshop on “Role of Electrical Engineer in the Changing Scenario of E-mobility and Smart Grid”



The workshop on “Role of Electrical Engineer in the Changing Scenario of E-mobility and Smart Grid” was organized on the 20th of December 2024.

Er. Purushottam Paliwal, Chairman welcomed the Keynote Speaker Dr. Ritesh Tirole Associate Professor, Sir Padampat Singhania University, Udaipur, Prof. Neha Tak, Assistant Professor in Electrical and Electronics Engineering, BITS Pilani, Hyderabad. While giving his welcome address He talked about the challenges facing the smart grid such as design and development of charging infrastructure, grid integration, energy management and optimization, security, and compliance of standards.

Er. Piyush Javeria, Honorary Secretary said that electrical engineers play a vital role in the development and integration of charging infrastructure for e-mobility within smart grid systems and the area of responsibilities of Electrical Engineers in respect of design, implementation, maintenance, ensuring efficiency, reliability, and sustainability.

The Keynote Speaker Dr. Ritesh Tirole elaborates that Virtual Power Plant (VPP) is an innovative energy management system that aggregates decentralized energy resources such as solar panels, wind turbines, battery storage and demand-response systems into an integrated, cloud-based network. By acting as a single, flexible power plant, VPP optimizes energy generation, storage and distribution to increase grid reliability and efficiency. He highlighted the key features of Virtual Power Plants as energy optimization that balances supply and demand in real-time, grid stability that reduces the risk of blackouts by supporting grid operations, sustainability that promotes the integration of renewable energy sources, and cost efficiency that reduces energy costs for consumers and businesses. VPPs are important in transitioning to a greener, more flexible energy future, empowering communities and industries to adopt clean energy solutions.

The other Speaker of the function Prof. Neha Tak said that renewable energy refers to energy obtained from natural sources which is continuously replenished. Examples include sunlight, wind, and water, these sources are essential for sustainable development, reducing dependence on fossil fuels. She said that hydropower, wind, solar energy, and fossil fuels balance the demand and supply of



electricity. While explaining the features of a smart grid, she said that in smart grid is an electricity network that uses advanced technologies to monitor and manage the flow of electricity, smart grids use sensors to collect real-time data on energy use and grid conditions, smart grids can automatically adjust to changes in energy supply and demand. She said that today there are 2.3 million two-wheelers, and four-wheelers electric vehicles in India. Using electrical vehicles helps Pollution control reduce oil imports. Disposal of batteries installed in electric vehicles is a big challenge. She said that electric vehicles are cheaper than petrol-powered vehicles and have comparatively lower maintenance costs but these vehicles have higher electricity bills, & potentially longer charging times, and charging stations are not as convenient as gas stations. She said that an ideal solar PV inverter should have features like power quality, reliability, efficiency, affordable cost, etc. She said that electric mobility and smart grids are revolutionizing the energy landscape, creating a more sustainable and efficient future. By adopting these innovations, we can support the growth of EVs, optimize energy distribution, and contribute to a greener tomorrow.

In the end Honorary Secretary Er. Piyush Javeria proposed a vote of thanks to the Keynote Speaker, Speaker and all the participants.

## Technical Visit at Piplantari J K Marble Natural Stone Private Limited, Morward & R K Marble Private Limited, Morward District Rajsamand



A Technical Visit was organized at Piplantari, J K Marble Natural Stone Private Limited & R K Marble Private Limited, Morward situated in District Rajsamand on 28th December 2024.

40 Engineers of the Udaipur Local Centre visited Pipalantri the unique, incredible, and exemplary forest chain created by residents of Piplantari Gram Panchayat in leadership of Padma Shri Shyam Sundarji Paliwal. Shri Shyam Sundar ji Paliwal said that he started this initiative 16 years ago which is continuing till date and has become a large forest chain. Padma Shri Paliwal said that the efforts and involvement of the villagers in planting trees and their protection and conservation helped in doing this noble work. Shyam Sundar ji Paliwal informed that 111 trees are planted on the birth of a daughter in Pipalantri Gram Panchayat. He did this innovation to promote the environment after his daughters' death at an early age. Shyam Sundar ji Paliwal said that by doing organic farming, the villagers are earning good income from vegetables, maize, wheat etc. He said that if work is done with dedication, then all the Panchayats can become like Pipalantri, due to which the money of the village will remain in the village. Pipalantri model has received very good recognition due to the plantation and survival of trees, water management, organic farming and Swachhata. He was awarded Padma Shri by the President of India in the year 2021.

Padma Shree Shyam Sundar Ji Paliwal welcomed all the engineers very cordially and also mentioned the remarkable work done on water conservation. In the end, Er, Piyush Javeria, Honorary Secretary, thanked him for his cooperation in the visit to Piplantari village.

In this tour, JK Marble Pvt. Ltd. Natural Stone Pvt. Ltd. was also visited. Honorary Secretary Er. Piyush Javeria told all the engineers that more productivity can be achieved by mining with modern equipment and machines, apart from this water and the environment can be conserved.

Engineers of ULC also visited the world class marble mine of M/S R.K. Marbles Private Limited situated at Morward District Rajsamand. Shri ML Paliwal, GM (Mines) demonstrated salient features of mine during tea session in their VT centre. Shri Paliwal also replied and explained nicely all questions and queries of visiting engineers regarding mine development, production and machineries. Er. Piyush Javeria, Honorary Secretary, IEI, ULC expressed thanks to Er. ML Paliwal of RK Marble Pvt. Ltd and Arun Rai, Mines Manager, JK Marble Natural Stones for organizing visit.

40 engineers including Er. Anuradh Prashant, Er. Madhusudhan Paliwal, Er. RC Purohit, Dr Y.C. Bhatt, Er MP Jain actively participated. Chairman Er. Purushottam Paliwal expressed his gratitude to all the participating engineers for their cooperation during the visit.

# Glimpses



Visit RK Marble



Visit Piplantri



Visit JK Marble



AGM

## Thought

The purpose of this institution is to explore, in technical language, behaviour and its practical aspects, what engineering is all about. The central message is that the newly elected committee members doing a great remarkable initiative towards the bookmark of practical engineering is intimately part of who and what we are. The present body of executive committee will explore the role of engineering in the modern world through the story of its fundamentals and relationships with art, craft, science, and technology. We will surely see how engineers utilize natural phenomena to embrace human needs shortly. The story continues – so we look at some of the contributions engineers will have to make in the future to sustain and promote human well-being. The chairman, Secretary, and the committee as a whole defined engineering as 'turning ideas into reality' – succinct & perhaps helpful in coordination with the fellow members of local centre, officials of other departments and lesioning with Headquarters and state centre. A dictionary definition is 'the art, science, and craft of changing a dream into a reality through conception, feasibility, design, manufacture or construction to operation and eventual decommissioning of something that fulfils a human need'. Engineering is the discipline of using scientific and technical knowledge to imagine, design, create, make, operate maintain, and dismantle complex devices, machines, structures, systems, and processes that support human endeavour. I wish them best of luck.

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