



# The Institution of Engineers (India)

## U.P. State Centre, Lucknow

### IEI NEWS

"A Century of Service to the Nation"



PH NO.7839572369

JULY - SEPTEMBER, 2025

### Chairman Desk



The UP state centre of institution of Engineers India, the premier States centre of the country which celebrated its centenary and is 104 plus year old. It started as a humble begins in 1921 has grown and is the pride of the nation. Many illustrious engineers holding this

post before me, it's a great honour for me to be the chairman of this great institution. We represent 15 engineering branches namely Agriculture, Aerospace, Architecture, Civil, Chemical, Computer, Electrical, Electronics and telecom, Environmental, Material engineering Mechanical, Mining, Marine and Textile engineering. our members have diverse engineering backgrounds with rich experience which adds to its greatness. UP State centre will continue to strive for excellence and prepared to take on new challenges. Wishing everyone a great day

**Er. Satya prakash, FIE  
Chairman**

### Technocrats Retirement Planning with LIC

Held on 18/07/2025



The Institution of Engineers (India), UP State Centre, Lucknow organized a technical talk on the theme "Technocrats Retirement Planning with LIC" on 18th July 2025 at Engineers Bhawan, IEI, River Bank Colony, Lucknow.

The event was graced by Mr. S K Shukla, Marketing Manager, LIC of India, Lucknow, as the Chief Guest. He told LIC's Pension Products— Jeevan Akshay & Shanti. Highlighting its significance, he explained that this is a non-linked, non-participating plan that offers guaranteed returns life long irrespective of falling interest rates, immune to market volatility.

The keynote speaker, Mr. Akshat Srivastava, Deputy Manager (CLIA), LIC of India, Divisional Office, Lucknow, elaborated on the key features of the plan. These Pension Plans is designed as an individual scheme that offers Immediate Annuity & Deferred Annuity It requires a one-time premium payment, and is open to individuals aged 25 to 100 years, regardless of profession—be it engineer, technocrat, or from any other field.

One of the key benefits of the scheme is the continuity of pension for the co-beneficiary after the demise of the primary policyholder. Additionally, another best return market based plans LIC Ulips which gives highest return & tax free benefits was also explained.

The program began with a warm welcome and insightful remarks by Er. Prof. (Dr). Bharat Raj Singh, Immediate Past Chairman and IEI Council Member. The session was coordinated and compered by Er. J. B. Singh, FIE Member, who also introduced the keynote speaker.

The event concluded with a vote of thanks by Er. Vijay Pratap Singh, Honorary Secretary, expressing gratitude to the speakers, organizers, and the audience. The session witnessed active participation from a large number of professionals, making it a successful and insightful event.

## Nuclear Energy for Peace and Development

Held on 22<sup>th</sup> July 2025



The Institution of Engineers (India), Uttar Pradesh State Centre, Lucknow, organized a technical seminar on the topic “Nuclear Energy for Peace and Development” on 22nd July 2025 at the Engineers Bhawan, Lucknow. The keynote speaker of the seminar was Prof. Usha Bajpai, former professor at Lucknow University. In her address, she highlighted the Indian context, there are 24 Nuclear Power Plants with the generation capacity of 8,180 MW. Prof. Bajpai told that the Government of India is planning to increase the capacity of 22,480 MW by 2031-32. Prof. Bajpai told the audience that the nuclear energy can be used in different sectors like medical, industrial particularly food and agriculture, and space sectors peaceful uses of nuclear energy and its vast potential in contributing to socio-economic development. She emphasized that if used safely and in a controlled manner, nuclear energy can not only be a solution to the global energy crisis but can also bring revolutionary changes in fields such as medicine, agriculture, water management, and industry. The program commenced with a welcome address by Er. Masarrat Noor Khan, FIE, SCC Lucknow, IP Chairman and Council Member, who welcomed the guests and shared his insights on the theme. Experts present at the seminar also discussed modern nuclear technologies, safety standards, and the need for global cooperation in the field. The convener of the seminar, Dr. Jaswant Singh, welcomed all the dignitaries, outlined the objectives of the event, and expressed gratitude for the collective efforts in making the program a success. The seminar concluded with a vote of thanks delivered by Er. Vijay Pratap Singh, Honorary Secretary, who expressed sincere appreciation to the speakers, organizers, and all participants for their active engagement. The event witnessed enthusiastic participation from numerous professionals, making it a successful and enriching experience.

## 37<sup>th</sup> National Convention “Innovative Approaches in Agricultural Engineering for Agriculture of Viksit Bharat-A road map towards-2047

Held on 29<sup>th</sup> & 30<sup>th</sup> August, 2025



The Institution of Engineers India UP State Centre, Lucknow organised 37th National Convention of Agriculture Engineers which was inaugurated by the Chief Guest Hon’ble Shri Brajesh Pathak, Deputy Chief Minister, Uttar Pradesh. In his address, the Chief Guest stated that agriculture has always played a vital role in India’s economy. He highlighted that in earlier times, farmers’ income was very limited, but with the passage of time, their earnings have seen significant growth. This progress is the result of agricultural engineering, modern technologies, and welfare schemes initiated by the government.

India's Gross Domestic Product (GDP) is targeted to be about \$30 trillion by 2047. About 43% population is employed in agriculture. Present growth rate in agriculture sector is less than 3.5%.

For India to grow major thrust is needed in agriculture sector for it to grow at 7%. Agriculture engineers are main drivers for accelerating growth in Agriculture.

The programme was presided over by Er. V. B. Singh, National President, Institution of Engineers (India). He emphasized that earlier farmers’ incomes were restricted, but due to agricultural engineering, modern technologies, and government schemes, farmers’ monthly income has increased by nearly 59%. This has been possible due to diversified farm incomes, better crop prices, and higher contribution from allied sectors.



As a distinguished guest, Mr. S. W. Akhtar, Chancellor, Integral University, was also present. He underlined the Government of India's commitment to continuously enhance farmers' incomes. He mentioned that in 2015–16, the average monthly farm household income was around ₹8,059. Due to government policies, technological interventions, and innovations in agricultural engineering, there has been steady growth in farmers' earnings over the years.

In deliberation following points were highlighted

In the context of Viksit Bharat 2047, the following innovations were highlighted as key drivers for boosting farmers' income:

- Modern irrigation techniques
- Precision farming
- Farm mechanization
- Drone and smart technologies
- Renewable energy-based equipment
- Crop processing and value addition

It is estimated that by adopting such innovations and sustaining the present growth rate, farmers' average income could rise up to 3–4 times by 2047 compared to today.

On the **second day (30st August 2025)** of the 37th National Convention of Agricultural Engineers & National Seminar, multiple technical sessions and presentations were conducted with active participation from experts, researchers, academicians, and delegates from across the country. During the convention, agricultural engineering experts and researchers presented their research papers and engaged in discussions on innovations and technological improvements required for the agriculture sector in the journey towards Viksit Bharat. The Institution of Engineers (India), U.P. State Centre, Lucknow, successfully conducted the **Technical Session on 30th August 2025** as part of the **37th National Convention of Agricultural Engineers & National Seminar**.

The session was **chaired by Dr. Jaiveer Singh**, an eminent academician and expert in the field of Agricultural Engineering. **Dr. Sunil Kumar** served as the **Rapporteur**,

discussions focused on technological interventions, water and soil management, energy efficiency in farming, precision agriculture, and the integration of renewable resources for long-term agricultural growth.

The session emphasized the importance of developing farmer-centric solutions and promoting research that directly contributes to enhancing productivity, profitability, and sustainability in Indian agriculture. The experts also underlined the role of young engineers, scientists, and policymakers in creating a roadmap for strengthening food security and improving farmers' income in alignment with national development goals.



The rapporteur presented a detailed summary of the session, capturing the key recommendations and proposed action points, which will serve as valuable input for policymakers, institutions, and stakeholders working toward achieving the vision of a self-reliant and prosperous agricultural sector by 2047.

At the beginning of the programme, Organising secretary Dr Jaswant Singh introduced the topic and guests. Mr. Satya Prakash, Chairman of the UP State Centre, welcomed the dignitaries and shared his views on the subject. The programme was coordinated by Er. K.P.Tripathi, FIE, SCC Member, who introduced the keynote speaker and conducted the proceedings successfully.

On this occasion, Scientist and Engineers from all over India Notably Sri S.W.Akhtar, Chancellor, Integral University, Lucknow; Dr S.N.Jha, Deputy Director General (Engineering) Indian Council of Agricultural Research; Dr I.M.Mishra, V.C. Vasantrao Naik Marathwada Krishi Vidyapeeth Parbhani, Maharashtra; Dr M.L.Gaur, V.C. D r C.V.Raman University. Vaishali, Bihar; Dr Bangali Baboo, Former National Director ( ICAR- NAIP); Dr R.C.Srivastava, Former V.C. Dr Rajendra Prasad Central Agricultural University, PUSA, Samastipur, Bihar; Dr N K Das from Bhubaneswar, Dr M Nemichandrappa from Bangalore, Er Jaiprakash ADGB Chairman from Patna, Er Vasant

compiling the key deliberations and insights.

During the presentations, distinguished speakers and researchers highlighted innovative strategies, modern tools, and sustainable practices in agricultural engineering to support the vision of “**Viksit Bharat @ 2047.**” The Paradkar from Pune and Engineers from Uttar Pradesh participated in large numbers and shared his thoughts, emphasizing that modern technologies in agricultural engineering form the true foundation to realize the dream of Viksit Bharat. On the occasion Eminent Agricultural Engineers namely Er P.R.Chaurasia, Former HOD (Minor Irrigation), Government of UP; Dr Kanchan K.Singh Former ADG(Engineering), ICAR; Dr Ambarish K. Tiwari, Principal Scientist, Indian Institute of Soil and Water Conservation, Dehradun and Young Engineers namely Dr D Srigiri, Anantpur, Andhra Pradesh, Dr Jadhav Mahesh Laxman, Naloli, Maharashtra and Dr C.T.Ramchandra, Raichur Karnataka were felicitated.

At the conclusion, Er. Vijay Pratap Singh, Honorary Secretary, U.P. State Centre, extended a vote of thanks to all the guests, participants, and organizers. The event ended with a fellowship lunch enjoyed by all.

### **ROYAL CHARTER DAY**

Held on 09<sup>th</sup> September, 2025



The Institution of Engineers (India), U.P. State Centre, Lucknow, today organized the “Royal Charter Day” in a dignified manner. Royal Charter Day is celebrated because on this day the Institution of Engineers (India) (IEI) was granted the **Royal Charter** by the British Government. A Royal Charter is a special legal recognition that formally defines the functions, rights, and responsibilities of an institution. The Institution of Engineers (India) was awarded this Charter on **13 September 1935**. Under this Charter, IEI received official recognition to promote the engineering profession in India, Paradkar from Pune and Engineers from Uttar Pradesh

engineering innovations. The keynote speaker, **Prof. (Dr.) Deep Kumar Gupta**, stated that the integration of engineering knowledge and technical skills forms the foundation of the country’s sustainable progress. He further highlighted that in the present context, scientific management of water resources and the development of climate-resilient technologies are essential to meet future requirements. The event began with a welcome address by **Er. Masarrat Noor Khan, FIE, SCC Lucknow, Immediate Past Chairman & Council Member**, who welcomed the guests and shared his views on the theme. The Convener, **Er. N. K. Nishad**, welcomed the dignitaries and elaborated on the institution’s activities, emphasizing IEI’s commitment to providing socially beneficial engineering solutions.

The program concluded with a vote of thanks by **Er. Vijay Pratap Singh, Honorary Secretary**, who expressed gratitude to the speakers, organizers, and all participants. The technical discussions and expert insights greatly benefited the participants. The active participation of a large number of professionals made the program successful and highly enriching.

### **58<sup>th</sup> Engineers Day**

Held on 15<sup>th</sup> September, 2025



The Institution of Engineers (India), UP State Centre, celebrated the **58th Engineers’ Day** at *Engineers’ Bhawan*, River Bank Colony, Lucknow. On the occasion of the **165th birth anniversary of Bharat Ratna Sir Mokshagundam Visvesvaraya**. This day is observed every year on 15th September to honour the memory of Sir Visvesvaraya, one of the greatest engineers of the world. The theme for this



safeguard the interests of engineers, and contribute technically to society. On this occasion, the program was chaired by the Retired Chief Engineer & Head of Department, Uttar Pradesh Irrigation and Water Resources Department. In his address, he emphasized the challenges of water management, modernization of irrigation systems, and the importance of

year's Engineers' Day was **"Deep Tech & Engineering Excellence: Driving India's Techade."** The Chief Guest of the programme was **Dr. Arun Mohan Sherry**, Director, Indian Institute of Information Technology, Lucknow (IIIT Lucknow). In his address, he remarked: *"India is moving towards the golden era of the Techade. Deep Technology and Engineering Excellence will play a pivotal role in transforming India into a global technological power. Engineers must take the responsibility of addressing societal challenges through technological innovation."* The **Keynote Speaker, Er. A. K. Singh**, Former Engineer-in-Chief & Head of Department, Irrigation Department, Lucknow, highlighted that: *"Engineers play a critical role in nation-building. India can march towards self-reliance only through technological research and innovation."* **Mr. Satya Prakash**, Chairman, IEI UP State Centre, elaborated on the objectives of the Institution. He mentioned that the Institution has continuously contributed to national development through social and technical initiatives. This year marks the **105th year** of the Institution, and during its centenary year, several technical programmes and activities were organised across the country. On this occasion, Shri Satya Prakash, in collaboration with Nova Hospital, launched a **Health Card** to provide excellent healthcare services for engineers. The program was ably conducted by **Mr. Masarrat Noor Khan**, Former Managing Director of Uttar Pradesh State Bridge Corporation. He stated that the main objective of celebrating **Engineer's Day** on 15th September, the birth anniversary of the nation's greatest engineer and Bharat Ratna awardee, is to encourage all engineers of the country to bring excellence into engineering works. On this occasion, we take a pledge to make the field of engineering outstanding. A highly significant theme has been chosen for discussion this year. He also shed light in detail on the life of **Bharat Ratna Sir Mokshagundam Visvesvaraya**. On this occasion, more than 200 engineers from various state departments along with



their family members were present, who paid tribute to Sir Mokshagundam Visvesvaraya. In the end, the honorary secretary of the institution, **Mr. Vijay Pratap Singh**, expressed gratitude to all the distinguished guests. The program concluded with a dinner.

### The Dirty Sky

Held on 20<sup>th</sup> September, 2025



Today, on **20th September 2025**, a special screening of the documentary film *"The Dirty Sky"* was organized at The Institution of Engineers (India), Uttar Pradesh State Centre, Lucknow. **Mumbai, India – 17th September 2025** – Reelism Films proudly announces its new and powerful documentary *The Dirty Sky*, directed by senior filmmaker **Mr. O.P. Srivastava**. At a time when the world's connectivity depends on the rapidly expanding satellite networks, *The Dirty Sky* brings into focus a fast-escalating environmental crisis hidden from our eyes—**space junk and orbital debris**. From defunct satellites to rocket fragments and uncontrolled collisions, Earth's orbit is increasingly turning into a graveyard of technology. The documentary highlights the overcrowding caused by mega-satellite constellations like Starlink and OneWeb, warning that if this reckless growth continues, it could trigger

conducted to raise awareness among students, space professionals, and policymakers. The program was successfully coordinated and convened by **Er. S.K. Pandey**. Delivering the vote of thanks, the organizers emphasized that such initiatives help spread awareness in society and inspire youth to contribute towards solving environmental challenges. Plans are also underway to organize more such impactful and awareness-driven programs in the future. On this occasion, a large number of engineers, researchers, students, and invited guests were present and participated in constructive discussions on the subject. Finally, **Er. Vijay Pratap Singh**, Honorary Secretary, IEI UP State Centre, Lucknow, extended heartfelt thanks to all distinguished guests.

### **RADIOCARBON DATING: HOW AND WHY**

**Held on 26<sup>th</sup> September 2025**



Today, on **26th September 2025**, a **technical lecture** on the topic “*Radiocarbon Dating: How and How Much*” was organized by the Institution of Engineers (India), Uttar Pradesh State Centre, Lucknow. **Advantages** of Radiocarbon Dating include: The most reliable method to determine the age of ancient objects. Provides an accurate timeline in history, archaeology, and geology. Helps in distinguishing between genuine and fake artifacts. Useful in the study of natural phenomena such as volcanic eruptions and climate change. On this occasion, the **Keynote Speaker, Dr. C. M. Nautiyal**, Former Head of the Radiocarbon Laboratory, Birbal Sahni Institute of Palaeosciences, Lucknow, elaborated on the scientific methodology, working principles, and various applications of radiocarbon dating. He highlighted that radiocarbon dating is an extremely effective and reliable technique in the fields of ancient relics, archaeology, geology, and environmental studies. Radiocarbon dating is a dependable scientific method to determine the true age of ancient remains. Through it, history and archaeology gain accurate timelines, which help in identifying the correct period of human civilization, ancient settlements, temples, and fossils. This technique

catastrophic scenarios such as the **Kessler Syndrome**—a chain reaction of collisions that could render Earth’s orbit unusable. Director O.P. Srivastava remarks, “*The sky may look clear, but space is getting dirtier every single day. The world is racing to capture the final frontier, but no one is thinking about the garbage being left behind.*” The film combines compelling storytelling with scientific clarity. It explores the history of satellite launches, the structure of orbital mechanics, and recreates past catastrophic collisions. Enriched with insights from global space scientists and policy experts, *The Dirty Sky* also examines emerging experimental technologies for debris removal—such as **laser deflection, robotic arms, and space tugs**. At the same time, it questions how effective these solutions can be without international laws and sustainable economic models. This documentary is not just a scientific revelation, but a **wake-up call**. It appeals to world governments, private space companies, and global citizens to address this escalating crisis now—before space too becomes an environmental tragedy, only this time far beyond our reach. The film is currently being showcased at national and international science and environmental film festivals. In addition, special outreach campaigns are being

also plays a vital role in geology, environmental research, and authenticating cultural heritage. Hence, it is considered indispensable for modern research and historical studies. **Limitations** of Radiocarbon Dating are: Effective only up to about 50,000 years. Works only on carbon-based materials (wood, bone, plants). Results may be inaccurate if contamination or adulteration is present. The process is expensive and complex. The **Convener of the program, Er. G. M. Pandey**, stated that such lectures provide young engineers, researchers, and students with in-depth knowledge of the latest scientific techniques and inspire them towards research and innovation. In conclusion, the **Honorary Secretary of the Institution, Er. Vijay Pratap Singh**, proposed a vote of thanks to all distinguished guests.



## UPCOMING EVENTS

1. **WORLD HABITAT DAY** to be held on 6<sup>TH</sup> Oct., 2025.
2. **WORLD STANDARD DAY** to be held on 14<sup>TH</sup> Oct., 2025.
3. **ADVANCED CIVIL ENGINEERING PRACTICES FOR SUSTAINABLE INFRASTRUCTURE DEVELOPMENT ACED-2025** to be held on 28<sup>th</sup> & 29<sup>th</sup> Nov., 2025.
4. **ENERGY CONSERVATION DAY** to be held on 14<sup>th</sup> Dec., 2025.