



## KJ College of Engineering & Management Research

### A Newsletter of Engineering Science Department

#### INTRODUCTION

The July issue of Newsletter of Engineering Science Dept is the Seventh issue of the year 2026. It features a number of events, activities, and accomplishments racked up by our students and faculty in the month of July 2026.

We are thankful to our founder President Hon. Shri Kalyan Jadhav Sir, Management and Principal Dr. Suhas Khot for their continuous support and firm belief in us.

#### **FDP on Women First: A Holistic Approach to Empowerment:**

The Department of Engineering Science in association with the National Service Scheme (NSS), successfully organized a One Week Online Faculty Development Program on Women First: A Holistic Approach to Empowerment from 13<sup>th</sup> to 17<sup>th</sup> July 2026. The program aimed to create awareness about women & empowerment through a holistic perspective by covering topics related to health, financial literacy, legal rights, gender equality and social responsibility. The FDP included sessions by experienced experts from the fields of healthcare, law, finance and social service. They shared their knowledge and practical experiences with the participants.

The objectives of the FDP were:

- To Create awareness regarding women's holistic health and wellbeing.
- To Enhance understanding of legal rights and protection mechanisms available for women.
- To Promote gender equality and social inclusion.
- To Encourage financial literacy, investment awareness and taxation knowledge.
- To Inspire faculty members to contribute towards women empowerment through education and community engagement.

Details of the day wise FDP were as follows:

| Day   | Date                       | Session Topic                                     | Resource Person                                       |
|-------|----------------------------|---------------------------------------------------|-------------------------------------------------------|
| Day 1 | 13 <sup>th</sup> July 2026 | Inauguration & Keynote Address                    | Mrs. Geetanjali Deshpande,<br>Vice Chair Person, FPAI |
| Day 2 | 14 <sup>th</sup> July 2026 | Investment Opportunities and Taxation Perspective | Dr. Priya Agashe,<br>Chartered Accountant             |
| Day 3 | 15 <sup>th</sup> July 2026 | Beyond Gender: Building an Equal Society          | Mrs. Alka Joshi, Convener,<br>Abhivyakti Pune         |
| Day 4 | 16 <sup>th</sup> July 2026 | Her Wellness, Her Power                           | Dr. Tejal Borate,<br>Consultant Gynecologist          |
| Day 5 | 17 <sup>th</sup> July 2026 | Legal Measures for the Protection of Women        | Mrs. Rohini Nitnavre,<br>Advocate, PDCC Bank          |

The FDP commenced on 13<sup>th</sup> July 2026 through an online platform (Google Meet). The inaugural ceremony began with the gathering of participants followed by the welcome address delivered by Dr. Prajakta Deshmukh, FE Coordinator. The dignitaries addressed the participants and highlighted the importance of women empowerment in education and society.

Chief Guest Dr. Savita Kulkarni (Director, Board of Student Development, SPPU Pune) emphasizes nurturing confident, responsible and socially conscious youth while fostering an inclusive and supportive educational environment. Through her guidance and visionary leadership, she empowers young minds to excel not only academically but also personally and professionally. Her vast experience, insightful perspectives and unwavering commitment to educational excellence continue to inspire and motivate each one of us.

Mrs. Geetanjali Deshpande (Vice Chairperson, FPAI) emphasized women's contribution towards nation-building, leadership, education, family development and professional excellence. Participants were encouraged to become advocates of gender equality and create supportive work environments.

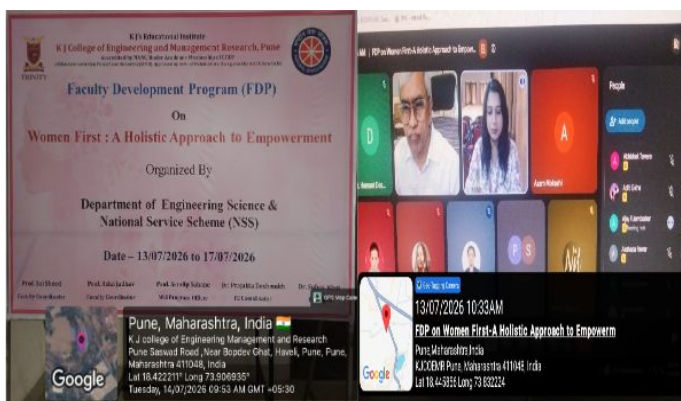
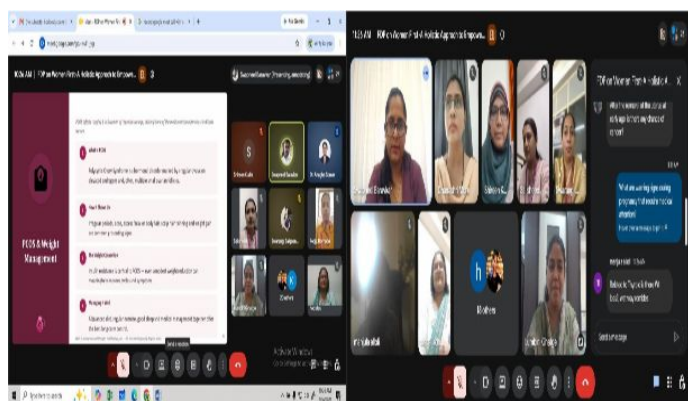
Dr. Priya Agashe (Chartered Accountant, Pune) session was focused on financial literacy and wealth management for women. Various investment opportunities such as Mutual Funds, SIPs, PPF, NPS, Fixed Deposits, Equity Investments and Tax Saving Instruments were discussed. Participants also learned about income tax planning and financial independence.

Mrs. Alka Joshi (Convener, Abhivyakti, Pune) session highlighted gender equality, stereotypes, unconscious bias and inclusive workplace culture. The speaker encouraged participants to become change-makers by promoting equal opportunities irrespective of gender.

Dr. Tejal Borate (Consultant Gynaecologist, Pune) session was focused on women's physical and mental health. Topics included nutrition, reproductive health, preventive healthcare, stress management, work-life balance and healthy lifestyle practices.

Mrs. Rohini Nitnavre (Advocate, Pune) session was focused on various constitutional and legal provisions available for women's protection. Important Acts related to domestic violence, workplace harassment, inheritance rights, cyber safety and legal remedies were discussed.

The FDP served as an excellent platform for professional development, knowledge enhancement and social awareness. The active participation of faculty members and valuable guidance from eminent resource persons made the program highly successful. The knowledge gained during the FDP will undoubtedly help participants promote inclusive values, gender equality, and holistic development within educational institutions and society. Overall, the FDP concluded successfully with positive feedback from participants and fulfilled its intended objectives.



## STTP on Advanced Materials for Smart and Sustainable Technologies:

The Department of Engineering Science, organized a one-week ISTE approved Short-Term Training Programme (STTP) on Advanced Materials for Smart and Sustainable Technologies from 27<sup>th</sup> to 31<sup>st</sup> July 2026. The programme was conducted under the ISTE-sanctioned self-financing programme for the financial year 2026–2027.

The objectives of the STTP were:

- To provide participants with exposure to recent developments in advanced materials and their engineering applications.
- To discuss materials and technologies relevant to smart, sustainable, energy, sensing, photonic and environmental applications.
- To facilitate interaction with experts from reputed academic and research institutions.
- To promote awareness of emerging research directions and interdisciplinary applications of advanced materials.

The STTP provided a platform for faculty members and participants to engage with contemporary research and applications in advanced materials. The technical sessions covered a broad spectrum ranging from quantum and nanomaterials to energy storage, sensing, photonics, sustainable construction and water purification. The programme also encouraged interaction with experts from IITs, universities and other reputed institutions, thereby supporting knowledge enhancement and awareness of emerging research opportunities.

The programme brought together expert speakers and participants for focused discussions on advanced materials and their applications in smart and sustainable technologies. The diverse technical sessions provided valuable academic and research exposure and contributed to the professional development of the participants.

Major areas covered were:

- Quantum materials and device perspectives under extreme conditions.
- Functionalization and DFT-based study of carbon nanostructures.
- Advanced materials for energy storage and supercapacitor technologies.
- Smart sensing, photonic applications and luminescent materials.
- Nanotechnology and transition metal oxide nanomaterials.
- Nanocomposite surface structuring and plasma-based processing.
- Cold-formed steel for sustainable building systems.
- Graphene-based materials for water purification and sustainable applications.



**Details of the day wise STTP were as follows:**

| Date       | Session                       | Topic                                                                                            | Resource Person                                                               |
|------------|-------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 27/07/2026 | Inauguration & Keynote Speech | Quantum Materials Under Extreme Conditions: Physics and Device Perspectives                      | Dr. Amit D. Lad, IIT Mandi                                                    |
| 27/07/2026 | Session 2                     | Functionalization of carbon nanostructures for various applications: A DFT study                 | Dr. Darshan Yashavant Habale, Amity University Mumbai                         |
| 28/07/2026 | Session 3                     | Advanced Materials for Energy Storage: Chemical Synthesis and Applications                       | Dr. Mangesh Dhore, GH Rasoni University, Amravati                             |
| 28/07/2026 | Session 4                     | Advanced Functional Materials for Smart Sensing, Energy Storage, and Photonic Applications       | Dr. N. N. Shejwal, AISSMS's COE, Pune                                         |
| 29/07/2026 | Session 5                     | Engineering Transition Metal Oxide Nanomaterials for Next-Generation Supercapacitor Technologies | Dr. Santosh Uke, BIT'S Pilani                                                 |
| 29/07/2026 | Session 6                     | Nanotechnology: the future of engineering                                                        | Dr. Pranav Bhagwan Pawar, J. D. Patil Sangludkar Mahavidyalaya                |
| 30/07/2026 | Session 7                     | Optimization of Ti–C Colliding Plasma Parameters for Nanocomposite Surface Structuring           | Dr. Pramod Pandey, Symbiosis Institute of Technology Nagpur,                  |
| 30/07/2026 | Session 8                     | Advances in Cold-Formed Steel for Modern and Sustainable Building Systems                        | Prof. Mohammad Adil Dar, BITS Hyderabad                                       |
| 31/07/2026 | Session 9                     | Luminescent materials for WLEDs and Displays                                                     | Dr. Kaushal Kumar, IIT(ISM) Dhanbad                                           |
| 31/07/2026 | Session 10                    | Engineering Graphene-Based Materials for Water Purification and Sustainable Applications         | Dr. Abhishek Pandey, Assistant Professor, COEP Technological University, Pune |

## RESEARCH UPDATES (PATENT, CONFERENCES, FDPs, JOURNAL PAPERS PUBLISHED, AWARDS etc.)

- Prof. Vishal Bhoi completed one week FDP on **Next Generation Sustainable Energy Systems and Industrial Automation** in association with IEEE Pune Section, Organized by the Department of Electrical Engineering, K J College of Engineering and Management Research, Pune From 6<sup>th</sup> to 10<sup>th</sup> July 2026.
- Dr. Nilesh Salunke completed one week ISTE approved STTP on **Advanced Materials for Smart and Sustainable Technologies** Organized by the Department of Engineering Science, K J College of Engineering and Management Research, Pune From 27<sup>th</sup> to 31<sup>st</sup> July 2026.
- Prof. Shireen Kudle completed one week FDP on **Next Generation Sustainable Energy Systems and Industrial Automation** in association with IEEE Pune Section, Organized by the Department of Electrical Engineering, K J College of Engineering and Management Research, Pune From 6<sup>th</sup> to 10<sup>th</sup> July 2026.
- Prof. Komal Birare completed one week ISTE approved STTP on **Advanced Materials for Smart and Sustainable Technologies** Organized by the Department of Engineering Science, K J College of Engineering and Management Research, Pune From 27<sup>th</sup> to 31<sup>st</sup> July 2026.
- Prof. Komal Birare completed one week FDP on **Women First: A Holistic Approach to Empowerment** Organized by the Department of Engineering Science, K J College of Engineering and Management Research, Pune From 13<sup>th</sup> to 17<sup>th</sup> July 2026.