

B.TECH. I YEAR



NEWSLETTER

Volume 1, May 2026

Udaan

Seeds of Knowledge, Wings to Innovation

“

“Innovation is not about resources, it is about the courage to think differently.”

-Vikram Sarabhai

”



Department of Basic Sciences and Humanities

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

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Message from the I year In-Charge



Dear all,

It gives me immense pleasure to present the first issue of the B.Tech First Year Newsletter (2025-26). This newsletter is a reflection of the enthusiasm, efforts, and achievements of our students and faculty throughout the academic session.

The first year of engineering is a unique and transformative phase. It marks the beginning of a journey where curiosity meets knowledge and learning extends beyond classrooms. Over the past months, students have actively engaged in academic activities, workshops, project exhibitions, and co-curricular events, showcasing both their potential and commitment.

As Albert Einstein once said, *"The important thing is not to stop questioning. Curiosity has its own reason for existing."* I hope the students carry this curiosity forward, because it is the true driving force behind innovation and learning.

I extend my sincere appreciation to the faculty members for their dedication and mentorship, and to the editorial team for their efforts in bringing out this newsletter. I also congratulate all students for their active participation and accomplishments.

Wishing you all the very best.

Dr. Sangeeta Choudhary
In-Charge, B.Tech. First Year

Swami Keshwanand Institute of Technology, Management & Gramathan

Buddha Poonnima.
1 May 2026

Cover Story

The **Project Expo 2026** was successfully organized with great enthusiasm and active participation from students across various engineering branches. The event aimed to provide a platform for students to showcase their innovative ideas, technical skills, and practical knowledge.

A total of 52 projects were presented by 197 participants, reflecting creativity, teamwork, and problem-solving abilities among the students. The event was graced by the esteemed presence of the Chief Guest, Dr. Shuchi Sharma, IAS (Retd.), who appreciated the students' efforts and encouraged them to continue innovating for societal development.

Several projects stood out for their originality, functionality, and real-world relevance, highlighting the potential of budding engineers at an early stage of their academic journey.

Overall, the Project Exhibition was a great success, fostering innovation, confidence, and a spirit of inquiry among first-year students. It served as an important step towards developing practical skills and nurturing future-ready engineers.



Winners of the Project Expo

First Position (Software)

Awdhesh Kumar Soni, Archit Bagra, Bhagyaveer Singh Chauhan, and Aryan Sharma (CS, Section A)
Project Title: Geo Netra: AI Powered Hazard Mapping & Community Alerts

First Position (Hardware)

Ashish Jhajhria (EC, Section T)
Project Title: RC Aircraft with Air Aid and Low-Cost RF Communication

Second Position

Rahul Saini, Ravindra Jangid (IT, Section R)
Project Title: Apni ride

Second Position

Rakshit Sharma, Shivansh Dwivedi, Simran Jat, Sneha Lakhara (Section R, IT)
Project Title: Mind Score AI

Introducing Our New Faculty



Dr. Dinesh

Assistant Professor
Department of Chemistry
M.Sc., Ph.D., IIT JAM, NET(JRF), GATE
Research Area: Optoelectronic Devices,
Environmental Remediation, Photocatalysis



Mr. Nikhil Sharma

Assistant Professor
Department of Mathematics
M.Sc., Ph.D.*, CSIR-NET (JRF), GATE
Research Area: Fractional Calculus,
Mathematical Modelling, Neural Network



Dr. Aditi Tiwari

Assistant Professor
Department of English
M.A (English Literature), Ph.D.
Research Area: India writing in English,
Postcolonial literature, Mythology & Cultural Studies



Ms. Raunak Goswami

Assistant Professor
Department of English
B.A. (H), M.A., M.Phil., Ph.D.*
Research Area:- Eco-Criticism,
Mythology, World Literature



Ms. Divyanshi Jain

Assistant Professor
Department of English
M.A, UGC NET, Ph.D.*
Research Area: Postmodernism, Cultural Studies
and Ethics

Academic Toppers I Sem (2025-26)



YASH AGARWAL
Rank -I (SGPA-10)



SHREYA AJMERA
Rank -II (SGPA-9.85)



KRISH SWAMI
Rank-III (SGPA-9.85)



ISHIKA VIJAY
Rank -IV (SGPA-9.82)



LAKSHITA SINGH
Rank -V (SGPA-9.78)



BHOOMI SHARMA
Rank-VI (SGPA-9.78)



SHIVALI TAMBHI
Rank -VII (SGPA-9.72)



POORWANSH CHOUDHARY
Rank -VIII (SGPA-9.72)



CHIRAG SAXENA
Rank -IX (SGPA-9.72)



ANVIKSHA JAIN
Rank -X (SGPA-9.70)



PRACHI MENARIA
Rank-X (SGPA-9.70)

Workshops/FDP/ Expert lectures Organized

Expert Talk on Waves at play: Exploring Interference and Diffraction Through Experiments (November 4, 2025) (Department of Physics)

Expert talk on, "Waves at play: Exploring Interference and Diffraction Through Experiments," was organized by the Department of Physics, SKIT M&G, Jaipur, on November 4, 2025, with participation from around 250 students. Dr. Narendra Jakhar, Assistant Professor, Department of Physics, University of Rajasthan, Jaipur, who discussed linearity and superposition principle. He also conducted interactive session's on optics using self-developed models and measure thickness of hair using single slit diffraction. The expert talk offered highly informative, hands-on learning experiences for all participants.



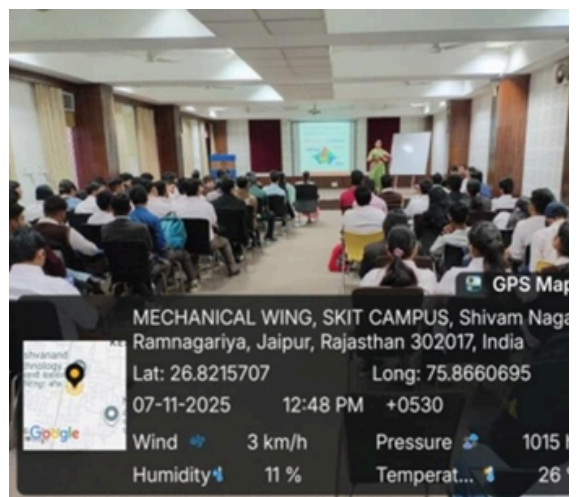
Two Day Student Workshop On Physics Through Practice: An Experimental Workshop (November 6-7, 2025) (Department of Physics)

A two-day workshop, "Physics Through Practice: An Experimental Workshop," was organized by the Department of Physics, SKIT M&G, Jaipur, on November 6-7, 2025, with participation from around 250 students. Day 1 featured talks by Prof. Y. K. Vijay, who discussed hydrogen as a clean future fuel, and Dr. Vipin Kumar Jain, who conducted interactive sessions on electronics and optics using self-developed models. On Day 2, Dr. Pawan Kumar Jain demonstrated Virtual Lab experiments, highlighting their value for learners. The workshop offered highly informative, hands-on learning experiences for all participants.



A Three-Day Student Workshop on Applications of Calculus in Engineering (November 6-8, 2025) (Department of Mathematics)

A three-day workshop on "Applications of Calculus in Engineering" was held from 6th-8th November 2025 by the Department of Mathematics at SKIT, Jaipur. The inaugural session featured Dr. Alok Bhargava, who discussed real-life applications of differential and integral calculus. On the second day, Dr. Mridula Purohit covered fundamental and advanced concepts including limits, continuity, curl, gradient, divergence, and key theorems with engineering relevance. The final session by Dr. Amit Parmar focused on integral calculus methods and interdisciplinary applications. The workshop was highly interactive, enhancing students' conceptual understanding and practical insights into calculus and its engineering applications.



Five Day 2nd National Workshop on Green Practices for Sustainable Development (December 8-12, 2025) (Department of Chemistry)

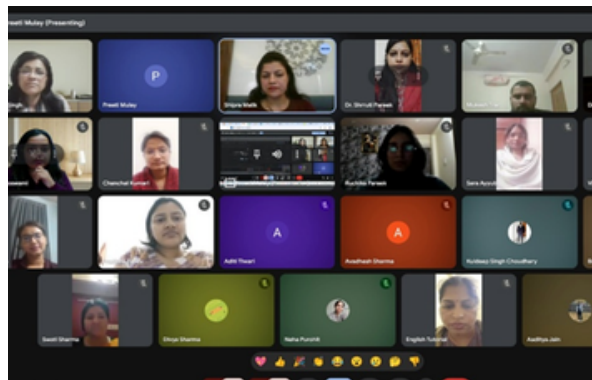
A five day 2nd national workshop on green practices for sustainable development was organized by Department of Chemistry for Faculty and Research Scholars. The main objective of the workshop was to generate awareness on sustainability and green practices not only in labs but also in everyday life. For its execution, experts from various fields of green practices were invited and they explained that how world is transforming into the use of green technology in every aspect of life. Workshop comprised of sessions of Dr Nivedita Kaul & Dr Meena Nemiwal, MNIT, Jaipur, Dr. Sushil Sharma, University of Kota and Dr Garima Kaushik, Central University of Rajasthan on Green Practices and sustainability. Workshop also included visit Material Research Centre (MRC) lab, MNIT, Jaipur.



Five-Day online Workshop on AI-Powered Research: Tools, Techniques and Applications (January 19-23, 2026) (Department of English)

The workshop was coordinated by Dr. Anupriya Singh, Dr. Shipra Malik, and Ms. Raunak Goswami.

The programme featured an eminent speaker, Dr. Preeti Mulay, a former Professor of Computer Science and Engineering at Symbiosis International University. The workshop provided practical insights into using AI tools to identify research gaps, conduct bibliometric analysis, visualize research data, and employ research storytelling techniques to present findings effectively.



Expert Talk on Green Practices (January 31, 2026) (Department of Chemistry)

Department of Chemistry conducted an expert talk on Green Practices for students on 31st January, 2026. The talk was delivered by Prof. Ranjana Prakash from Department of Chemistry, Thapar University. The expert talk covered the topics related to sustainability and green practices, an effort made to achieve the sustainable Development Goal. In her lecture Dr Prakash explained the students about the uses of green practices in day to day life. She also threw some light on the emerging areas of sustainability, about twelve principles of green chemistry, food adulterants, organic farming and many other topics related to green practices



**Five day online FDP on Gaining mastery over the art of keeping students engaged (February 2-6, 2026)
(Department of English)**

The goal of the FDP is to familiarize participants with challenges and changes in higher education in India as brought out in NEP 2020, with particular reference to the teaching and learning methodology, institutional governance research issues promotion, and, most importantly, the manner in which these impact the development of faculty members. The FDP discussed how to motivate the students to engage in learning processes so that they can view information, activities, and assignments as relevant; feel emotionally connected to course content and experience positive interactions with their professors.



**Expert Talk on Waves at play:
Exploring Interference and Diffraction
Through Experiments
(February 7, 2026)
(Department of Physics)**

Expert talk on, "Waves at play: Exploring Interference and Diffraction Through Experiments," was organized by the Department of Physics, SKIT M&G, Jaipur, on November 4, 2025, with participation from around 250 students. Dr. Narendra Jakhar, Assistant Professor, Department of Physics, University of Rajasthan, Jaipur, who discussed linearity and superposition principle. He also conducted interactive session's on optics using self-developed models and measure thickness of hair using single slit diffraction. The expert talk offered highly informative, hands-on learning experiences for all participants.



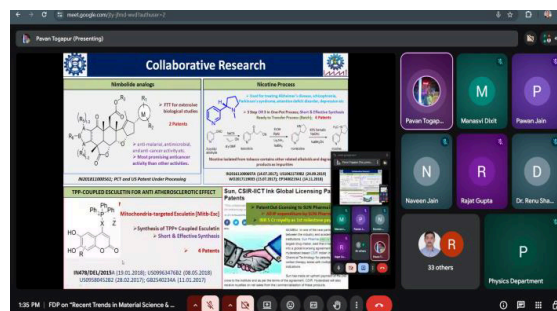
**One Week FDP on
Applications of Symbolic Software Tools
in Mathematics
(February 9-13, 2026)
(Department of Mathematics)**

A Faculty Development Program on "Applications of Symbolic Software Tools in Mathematics" was held from 9th-13th February 2026 at SKIT, Jaipur. Experts delivered lectures on Python, GeoGebra, Mathematica, and MATLAB. Sessions covered optimization, mathematical modeling, visualization, symbolic computation, and simulations. Speakers included Dr. Vijay Pal Poonia, Dr. Ritu Agarwal, Dr. Kailash Chandra Lachhwani, Dr. Shivi Agarwal, Dr. Trilok Mathur, and Dr. Dharmendra Tripathi. The program highlighted practical and interdisciplinary applications of mathematical tools in engineering and biomedical fields.



One-week online Faculty Development Programme on Recent Trends in Materials Science and Engineering (February 24-28, 2026) (Department of Physics)

A one-week Faculty Development Programme (FDP) on "Recent Trends in Materials Science and Engineering" was organized by the Physics Department of SKIT Jaipur in association with CSIR-IMMT. The programme featured expert lectures on emerging materials and energy technologies. On first day Dr. Vikas Sharma discussed next-generation solar cells beyond silicon, focusing on perovskite photovoltaics. On second day Dr. Nisha Verma highlighted thermoelectric materials for converting waste heat into electricity. On third day Dr. T. Pavan Kumar emphasized innovation and Intellectual Property Rights in research. On fourth day Dr. D. V. Maheswar Repaka spoke on high-throughput synthesis and energy harvesting materials, while on the last day Dr. Anurag Gaur discussed nanomaterials for energy conversion and storage.



MOOC's Orientation Programme (January 12-17, 2026)

A one-week MOOC Orientation Programme for B.Tech first-year students was held from 12th to 17th January 2026. It aimed to introduce students to MOOCs and their role in enhancing learning and skills. Sessions highlighted benefits such as flexible learning, access to quality content, and certification opportunities. Students were encouraged to enroll in relevant online courses. The programme was coordinated by Prof. Sharda Soni, with sessions conducted by SPCO, Chief Librarian Dr. D. R. Binchar, and Prof. Chandan Kumar, who guided students on course selection, registration, and effective use of MOOC platforms.



National Science Day Celebration (February 28, 2026)

A special session on "Women in Science and Technology" was organized by the Women's Cell for first-year students to promote awareness and inspire participation in STEM fields. The session was delivered by Dr. Nilam Chaudhary, who highlighted the contributions of women in science and discussed challenges and the need for gender inclusivity. She motivated students, especially young women, to pursue careers in science and technology with confidence. The session witnessed enthusiastic participation, with students actively engaging through discussions and questions, making it an inspiring and enlightening experience for all attendees.



Clubs & Co-curricular Activities

DYNAMIC DOCU-DRAMA

The club has unveiled an exciting lineup of activities for the 2025-26 session, highlighted by a dynamic docu-drama initiative. The year began with impactful street performances like the Anti-Ragging Nukkad Natak and BIS Nukkad Natak, spreading awareness through creative expression. Club orientations welcomed new members, followed by engaging platforms such as Stage Masters to showcase talent. Major highlights include MNIT Blitzschlag and Rasverse, promising vibrant cultural participation. The session concludes with the grand Annual event, celebrating creativity, teamwork, and artistic excellence.



SKIT TOAST MASTERS

Living up to the motto of Toastmasters International, "where leaders are made," the club fosters a supportive environment that enhances members' communication, leadership skills, confidence, and personal growth. This commitment was reflected in remarkable performances at Area-level contests: TM Ajo George Mathews secured 1st position in the International Speech Contest (ISC), TM Vageesha Choudhary achieved 2nd position in ISC, TM Vansh Jain earned 2nd position in the Table Topics Contest (TTC), and TM Aditi Sharma secured 3rd position in TTC. Continuing this success, TM Ajo George Mathews won 2nd position at the Division level in ISC, bringing further recognition to the club.



SKIT READERS' CLUB

Skit Readers' Club is a platform that allows people to feature themselves as a speaker on novels of their own interest, to promote reading on a greater level and make books interesting to talk about. The purpose is to create a love for reading in students and enable them to become better, lifelong readers. The Reader's Club invites eminent speakers, scholars, and writers to deliver speeches, which stimulates their own thinking power. The members of the club can take the book from the Reader's Club library and develop their habit of reading. An activity Roo-B-Roo, a discussion on the book "ATOMIC HABITS" Date: 13 November, 2025. An activity Roo-B-Roo, a discussion on the book "The Notebook" Date: 28 March, 2026.



DYNAMIC CLUB

The Dynamic Club of the college is a student-driven initiative that promotes innovation, technical skills, and creative problem-solving by bridging theoretical knowledge with practical application. It provides a platform for students to explore emerging technologies and collaborate on ideas. Several engaging events were organized, including Typo Titans, a typing competition to enhance speed and accuracy; AI Ideation Blitz, a workshop on prompt engineering and effective use of AI tools with hands-on activities; and Syntax Scavenger, that tested logical thinking, coding skills, and teamwork, encouraging active participation and collaborative learning among students.



NSS Unit (National Service Scheme)

The National Service Scheme (NSS), under the Ministry of Youth Affairs and Sports, Government of India, promotes personality development through community service. Guided by its motto "Not Me, But You," NSS encourages selfless service and social responsibility among students. Volunteers actively participate in activities such as cleanliness drives, blood donation camps, health awareness, environmental conservation, and rural development. During the 2025-26 session, various events were organized, including a quiz on blood donation, poster making competition, Walk for Blood-Walk for Life, cloth donation drive, old age home visit, and a week-long NSS Special Camp, contributing significantly to community welfare and student development.



MATHS N RATES CLUB

The Maths N Rates Club is organizing a Quiz Competition to promote mathematical skills and intellectual curiosity among students. The event offers a platform for participants to showcase their problem-solving abilities and numerical aptitude. It is open to all students who have a passion for mathematics and logical thinking. Participants can expect an engaging and competitive environment with challenging questions.

In addition, the club is also hosting a Poster-Making Competition to encourage creativity in mathematics. This event allows students to express innovative ideas through artistic presentations. Both competitions aim to blend learning with fun and healthy competition. Students will gain exposure, confidence, and teamwork experience through participation.



UHV CELL

The annual report on Universal Human Values (UHV) activities conducted at Swami Keshvanand Institute of Technology (SKIT) was presented by Dr. Nidhi Sharma at the prestigious Rajasthan Gyan Sabha, a national conference jointly organized by the Rajasthan Education Department and Rajasthan Shikshak Sanskriti Utthan Nyasa. On the occasion of Hindi Diwas, Swami Keshvanand Institute of Technology, Management and Gramothan (SKIT) organized a grand cultural poetry event titled "Vishesh Kavyaras" under the aegis of its Universal Human Values (UHV) Committee. On the occasion of National Sports Day, a vibrant sports event was organized at Swami Keshvanand Institute of Technology (SKIT) by the Universal Human Values (UHV) Committee. The program witnessed enthusiastic participation from students, who took part in various competitions with great energy and sportsmanship.



WOMEN CELL

Members of the Women's Cell of Swami Keshvanand Institute of Technology (SKIT) actively participated through video conferencing. Students and faculty shared their views and welcomed the initiative as a step toward women's leadership.

A five-day wellness workshop was conducted from February 10 to 14 focusing on student well-being. The workshop concluded with a lecture on "Understanding POSH: Responsibilities, Rights and its Redressal." This session was delivered by Dr. Kanchan Mathur, former Director of IDS Jaipur. The Women's Cell also organized a health talk featuring Dr. Shubhra Singh. The talk focused on "Women's Hormones and Their Impact on Health," promoting awareness among students.



SCIENCE & TECHNOLOGY CLUB

The Science & Technology (S&T) Club organized diverse events during the 2025-26 session to enhance students' technical, creative, and analytical skills. It began with "Aarambh," followed by "Code with S&T" for coding practice. Interactive sessions like "Ask S&T" and "AlgoCamp" improved problem-solving and algorithmic thinking. Workshops on web development and design provided hands-on experience, while "HackTalk" encouraged innovation and awareness of emerging technologies. Creative thinking was promoted through the Science Day Poster Competition, and "Astrohunt" added excitement with astronomy-based activities. Overall, these events created a dynamic platform for learning, collaboration, and skill development among students.



ECO FRIENDS CLUB

The ECO-SNAP online photography contest was organized by the ECO Friends Club to inspire students to observe, capture, and celebrate the beauty of nature in their surroundings. Centered around the theme "Capture Your Moment with Nature", the event encouraged students to explore environmental awareness through creative expression. The event was appreciated by participants for its smooth submission process and the freedom to capture nature in their own creative style. Winners were felicitated.



SPIC MACAY HERITAGE CLUB

During the 2025-26 session, the SPIC MACAY Heritage Club at SKIT organized various events to promote Indian culture and traditions. The Bharatiya Heritage Challenge encouraged students to explore traditional knowledge through a quiz. A sitar performance by Shakir Khan, accompanied by Rushikesh Jagtap, offered a soulful experience of classical music. The puppet show highlighted storytelling traditions and cultural values. Abhivyakti, a grand cultural event, showcased dance, music, theatre, and poetry from across India. These activities fostered cultural awareness, creativity, and appreciation of India's rich heritage among students.



Faculty Achievements & Academic Contributions

Research Publications

Author(s)	Title of Paper	Journal / Conference	Indexing
Deepika Khandelwal, Sumit Gupta, Chandra Prakash Jain, Pawan Kumar Jain	High performance AI-machine learning enabled Levenberg-Marquardt algorithm for thermo-energy storage in tetra hybrid nanofluids	Nano Structures and Nano Objects, Volume 45, 2026.	SCI
Sumit Gupta , Pawan Kumar Jain , Deepika Khandelwal	Novel Investigation of Hepatitis B Transmission Dynamics via Fractal-Fractional Operators of Variable and Constant Order with Memory Effects	Critical Reviews™ in Biomedical Engineering Volume 54 (1), 2026.	SCI
Sumit Gupta, Pawan Kumar Jain,Vijay Kumar Singhal	EMHD flow of double stratified 3D-cobalt ferrite-based Maxwell nanoliquid flow over an exponentially stretching surface	Physica Scripta, Volume 100 (3), 2025.	SCI
Sangeeta Choudhary	Innovative approaches in nonlinear pedagogy for Biomathematics Education	International Journal of Advances in Signal and Image Sciences, Volume 12(1), 2026.	SCI
Komal Sharma	Reconfigurable Truncated E-Shape Electromagnetic Gap-Coupled Antenna with Air Gap	Journal of Nano- and Electronic Physics, Volume 17(3), (2025).	SCOPUS
Komal Sharma	Optimized Electromagnetic Gap Coupled Arrays of E-shaped Microstrip Patch Antenna with Air Gap for Wireless Communication	Journal of Nano- and Electronic Physics, Volume 17(1), (2025).	SCOPUS
Sumit Gupta , Deepika Khandelwal ,Sheeba Anjum,Neha Purohit	Linguistic Sustainability: An Innovative Technique for Simulating Constant and Variable Fractional-Order Dynamics	Mathematical Methods in the Applied Sciences, Wiley Volume 49 (2), January 2026.	SCOPUS
Sumit Gupta, Deepika Khandelwal Pawan Kumar Jain and Vijay Kumar Singhal	EMHD Flow of MoS ₂ /GO 3D hybrid nanofluid with gyrotactic microorganisms and Cattaneo-Christov heat model	International Journal of Ambient Energy, Taylor and Francis Volume 46 (1), 2025.	SCOPUS

Author(s)	Title of Paper	Journal / Conference	Indexing
Pawan Kumar Jain	Design Optimization of Compact Microstrip Patch Antenna for 5G Networks	Recent Trends in Applied Physics and Material Science, 1st Edition,2025, CRC Press	SCOPUS
Pawan Kumar Jain	Design and Performance of a Dual-Band Planar Dipole Antenna for Enhanced Connectivity	Recent Trends in Applied Physics and Material Science, 1st Edition,2025, CRC Press	SCOPUS
Pawan Kumar Jain	A Detailed Overview of CSP and Thermal Energy Storage Technologies	Recent Trends in Applied Physics and Material Science, 1st Edition,2025, CRC Press	SCOPUS
Pawan Kumar Jain	Design and Performance Analysis of a U-Shaped Microstrip Patch Antenna for Multiband Wireless Applications	Recent Trends in Applied Physics and Material Science, 1st Edition,2025, CRC Press	SCOPUS
Poonam ojha ,Swati Joshi , Jyoti Arora	Sustainable Conversion of Solid waste into Energy: Review	International Journal for Research Trends and Innovation Volume 11 (1), January-2026.	Other
Poonam Ojha, Swati Joshi, Jyoti Arora	Review on Effects of Fluoride Contamination and Remediation Methods	International Journal of Innovative Research in Technology , Volume: 12,(8) ,January 2026.	Other
Archana Saxena, Sangeeta Vyas, Vinita Sharma, Anurag Sharma,Poonam ojha, Sharda Soni,Swati Joshi	Defluoridation of Water by Metal oxide and hydroxide Adsorbents: A Review	International Journal of Biology, Pharmacy and Allied Sciences Volume 14(6),2025.	Other
Shiv Priya	Beyond Patriarchy: Gender Roles, Struggles, and Societal Disillusionment in Mohan Rakesh's Halfway House	Rajasthan University Studies In English (Ruse)	Other
Divyanshi Jain	Madness as Metaphor in Partition Literature	Rajasthan University Studies In English (Ruse)	Other
Divyanshi Jain	Rewriting Empire: Historiographic Metafiction in Salman Rushdie's Victory City	The Context: Journal of English Studies, Vol. 12 No. 6 (2025): Special Issue September 2025.	Other

Author(s)	Title of Paper	Journal / Conference	Indexing
Shipra Malik	A Study of Morrison's Sula under Sartrean Lens	JOURNAL OF ADVANCE AND FUTURE RESEARCH Volume 3(11), November 2025.	Other
Shipra Malik	Reimagining Empire and Female Resistance: A Postcolonial and Feminist Reading of Christina Rossetti's Goblin Market	International Journal of Research Publication and Reviews, Vol 6(11), November, 2025.	Other
Rashmi Kaushik	Linguistic Diversity, Marginal Dialects and Accessibility in Bihar	International journal of Science and Research, Volume 14 (12), December 2025.	Other
Chandra Prakash Jain, Deepika Jain, Sumit Gupta	Artificial Intelligence based Levenberg Marquardt approach to solving Tsunami Wave Propagation Model	SKIT Research Journal, Volume 15, 2025	Other
Deepika Jain, Sumit Gupta	Data Driven ANN-ML based Levenberg Marquardt algorithm for Fractional Coupled Differential equations	SKIT Research Journal, Volume 15, 2025	Other
Deepika Jain, Sumit Gupta	Intelligent Computational Machine Learning Approach for solving 3D heat-like equation	SKIT Research Journal, Volume 15, 2025	Other
Sangeeta Choudhary, Jyoti Arora, Pramila Kumawat	The Integral Role of Mathematics in Machine Learning	SKIT Research Journal, Volume 15, 2025	Other

FDP/ Conferences/ Workshops Attended

Department	Conferences	FDP's	Workshops
Physics	2	29	10
Chemistry	8	22	4
Mathematics	8	60	4
English	4	16	8

NPTEL Courses Completed

Faculty Name	Course Title	Duration	Badge / Grade
Mr. Chandra Prakash Jain	Developing Soft Skills and Personality	8 Weeks	Elite+Silver
Dr. Pawan Kumar Jain	Introduction to Quantum Computing: Quantum Algorithms and Qiskit	4 Weeks	Elite+Silver Top 2%
Dr. Pramila Kumawat	Yoga and Positive Psychology for Managing Career and Life	8 Weeks	Elite
Dr. Vivek Vijay	Matrix Solver	12 Weeks	Elite
Dr. Rashmi Kaushik	Science of happiness and well-being	Weeks	Completed
Dr. Rishi Vyas	Artificial Intelligence: Concepts and Techniques	12 Weeks	Elite+Silver

Books Published

Faculty Name	Book Title	Published by
Dr Nidhi Sharma	Universal Human Values	RBD publishers
Dr Nidhi Sharma	Technical Communication	RBD publishers

Recognitions



The Knowledge Corner

Why Materials Science is the Ultimate Cheat Code: The Alchemists of the 21st Century



Prof. Rishi Vyas
HOD, Physics

The notion of Physics reminds us of complex formulas and the mysteries of the cosmos, whereas engineering is always perceived to be associated with the tangible world of technology, bridges and machinery. However, there is a fascinating discipline that serves as a quiet connector between these two, and it is materials science, which is the foundation of most of the technologies we employ on a daily basis. Materials science can actually be termed as the secret weapon of modern technology.

For instance; consider events that a smartphone becomes lighter, an electric car travels further, or a medical implant becomes both more intelligent and less risky, it is likely that a materials scientist is somewhere, quietly contemplating a fundamental question: What if we could start a new and completely reimagine the material?

1. Designing Materials at Atomic Level

The core of materials science is a captivating concept: the ability to manipulate the arrangement of atoms in order to create materials. The era of merely accepting existing materials is over; researchers now comprehend the process of reshaping atoms to generate entirely new characteristics.

Consider the paradox of the diamond and pencil lead. Diamond and graphite, which is the substance present in pencil lead, are entirely constituted of carbon atoms. Carbon is the element that is responsible for the hardness of diamond and the ease with which it marks paper in graphite. The primary distinction merely lies in the arrangement of the atoms. The extraordinary strength of diamond is a result of the locked carbon atoms in a robust three-dimensional structure. On the other hand, graphite is composed of atoms that are capable of effortlessly sliding past one another, which is the reason for its distinctive lubricity and suppleness. Materials that are only a few atoms thick are currently under investigation by scientists. These two-dimensional substances exhibit distinctive electrical and mechanical properties, which have the potential to facilitate the development of quantum technologies and faster electronics in the future.

An additional material that is noteworthy is aerogel, which is frequently referred to as "frozen smoke." Aerogels are remarkably lightweight and maintain a solid form, even though containing up to 99% air. However, they are exceptional thermal insulators, despite their fragile appearance. This property has sparked significant interest in its potential implementation in a variety of high-performance contexts, including space missions and advanced insulation.

2. Materials That Can Respond and Adapt

Materials that demonstrate the ability to adapt and respond are particularly noteworthy. Although the process of fabricating objects layer by layer from digital designs, known as 3D printing, is already well-known to many, researchers are currently investigating a more complex domain: 4D printing. This method allows printed materials to sustain changes in form or properties over time in response to environmental stimuli, such as temperature, humidity, or other factors.

Shape-memory materials are another example. These materials have the capacity to be deformed or shaped, but they will revert to their original configuration when exposed to heat. In the medical sector, this attribute enables the creation of miniature devices, such as stents. The compact form of these devices is initially introduced, and they expand upon reaching their designated location. Simultaneously, researchers are conducting research on self-repairing materials, which are motivated by the regenerative processes observed in biological organisms. Minuscule capsules containing restorative agents are included in these materials. The substance is released when the capsules break open, which subsequently fills and repairs the harm that occurs as a result of a fracture.

These materials have the potential to be of great value in aerospace structures, protective coatings, and electronic devices, where reliability is of the uttermost importance.

3. The Battery Wars: Beyond Lithium

The pursuit of improved batteries poses a significant challenge for achieving a sustainable future, particularly in the field of energy storage. Despite the abundance of renewable sources such as solar and wind power, their electricity generation is inconsistent. As a result, it is imperative to have batteries that are capable of storing this energy for future use. At present, lithium-ion batteries are the most prevalent technology in electric vehicles and portable electronics.

However, scientists are currently exploring alternative routes that have the potential to be more environmentally friendly and cost-effective. For example, the development of sodium-ion batteries has the potential to provide comparable performance to lithium-ion batteries while being more sustainable. The sodium-ion battery is a viable alternative. Sodium is significantly more abundant than lithium, which provides it with a competitive advantage in the context of large-scale energy storage initiatives. Then there is the solid-state battery. These batteries are distinct from conventional batteries, which employ liquid electrolytes. Conversely, solid-state batteries utilize solid materials to transport ions. This design has the potential to produce batteries that are more reliable, charge more rapidly, and operate more efficiently, even in the most challenging environments. These developments have the potential to significantly enhance portable electronics and electric vehicles.

4. Confronting the Plastic Crisis

Plastic contamination is a worldwide environmental concern. New methods of mitigating the effects of plastic pollution are being investigated by materials scientists. A promising approach entails the development of packaging materials from mycelium, a network of fungal filaments. A strong and lightweight material that could supplant conventional packaging foam can be produced by growing mycelium, the root structure of fungi, into specific shapes. The most appealing characteristic of mycelium is its decomposability in soil within a brief period of time. Additionally, scientists are conducting research on biodegradable coatings that are composed of natural proteins, such as those derived from milk. These materials have the potential to provide a sustainable alternative to conventional plastic packaging, which could potentially assist in the mitigation of the increasing microplastics issue.

5. The ultimate quest: Superconductors

Arguably, the most ambitious endeavour in the field of materials science is the pursuit of room-temperature superconductors. Superconductors are extraordinary; they facilitate the passage of electricity without any resistance. Nevertheless, the majority of these materials are only functional at temperatures significantly below freezing, which severely restricts their practical usage. Consequently, their application in technologies such as magnetic levitation systems and power infrastructures is severely restricted. The potential of room-temperature superconductors is genuinely remarkable.

Imagine a world in which electricity is delivered without any discernible energy loss by power lines. Magnetic levitation transport may become increasingly prevalent, and entirely new electronic devices may be developed. Consider computing systems that operate at unprecedented velocities and ultra-efficient power grids. This is not merely a fantasy; scientists worldwide are striving to realize it.

6. Existing in the Era of Advanced Materials

The materials that civilizations have mastered have consistently characterized them. Consider the Stone Age, the Bronze Age, and the Iron Age. The way in which individuals lived was transformed by the technological advancements of each era. At present, we are on the brink of what could be referred to as the Age of Advanced Materials.

The future of our devices, power systems, medical apparatus, and even our space explorations is contingent upon our understanding of materials and our ability to manipulate them. In a sense, materials scientists are the contemporary equivalent of alchemists. Although they are not converting lead into gold, they are rearranging atoms to create materials that are more sustainable, resilient, and intelligent. The materials we engineer today will have a profound and subtle impact on the world of tomorrow, influencing everything from building and production to electronics and renewable energy innovations, as technology continues to advance relentlessly.

First Step, Right Direction: Seniors' Guide



Dear First-Year Students,

Welcome to an exciting new beginning. Go beyond theory—explore new ideas and apply your learning through real, practical experiences. Don't wait for opportunities; take initiative and create them. Every step you take today will shape your tomorrow. Keep learning, keep growing, and aim high.

Warm Regards,
Saarthak Chopra, CE- 2025
 Analyst at Design2Occupancy, Jaipur

Dear Juniors,

Welcome to the SKIT family! As you begin this exciting chapter, remember that college is about much more than just a degree - it is a time to discover who you truly are and what you are capable of achieving.

Respect your teachers, for they are your greatest guides, and cherish your classmates, as they will be your support system. Stay curious, stay motivated, and make every moment count.

Wishing you all a bright and fulfilling journey ahead!

Gaurvi Tekriwal, Final Year, B.Tech (CSE)



Welcome aboard, juniors! One day you're chasing attendance, the next you're chasing deadlines at an MNC with coffee at 2 AM. This college gave me friends, fundamentals, and a PhD in networking all still useful in life both personally and professionally.

So bunk the fear, not the classes. Build, question, and collect stories, not just grades. The degree gets you interviews, but curiosity and chai-breaks with friends get you careers.

You're now part of a legacy that went from hostel rooms to global boardrooms. Make it proud, make it fun, and never underestimate canteen samosas.

Apurv Agarwal, CSE-2021, Senior Analyst, Deutsche Bank

Starting your first year of college is a major milestone an exciting, challenging, and transformative time. Study hard so you can play hard. Manage your time so you have time for both studying and socializing. Join clubs, extracurriculars, or sports teams to make friends, but don't overload your schedule. "Enjoy the journey."

Ayan Sibaa , EE-2016
 (Police Inspector)





Welcome to SKIT and to the beginning of your engineering journey. As freshers, you are stepping into a phase that will shape your technical mindset and professional identity.

Focus on building strong fundamentals in your first year - they are the backbone of every domain. Stay curious, experiment beyond the syllabus, and start exploring practical skills early. Consistency matters more than intensity.

Engage in labs, projects, and technical communities. Learn how to think, not just what to study. Remember, technology evolves rapidly - adaptability and continuous learning will set you apart.

Wishing you a meaningful learning experience and a successful journey ahead. Best wishes!

Milind Sharma, CSE-2018
Assistant Professor, SKIT

The beginning of your college journey is a defining moment, one that quietly shapes the person you are becoming. As first-year students, you stand at the intersection of possibility and responsibility, where every choice contributes to your growth. Choosing SKIT is one of your best decisions that shapes you in ways you may not immediately realize. With the support of dedicated faculty and a learning environment that encourages both discipline and curiosity, SKIT provides a strong foundation for both personal and academic growth.

Wishing you clarity in your goals, strength in your efforts, and a future filled with meaningful success.

Nitya Singh, CSE-2024
computer science engineer
Threat Researcher at Sophos Technologies and exploiting vulnerabilities through cybersecurity principles.



To all the freshers,

Enjoy college—it can be the best phase of your life. Have fun, make friends, and explore, but don't take it casually. Study hard, try new things, and step out of your comfort zone.

Embrace both success and failure with grace—they'll shape who you become. Make it count

Shaily Jindal, CSE-2019
Associate Vice President (Data Scientist) with JP Morgan Chase, Mumbai.

Hey First-Years!

Welcome aboard the 4-year roller coaster of knowledge, friendship, and endless surprises! Buckle up for ups, downs, twists, and loops—you'll learn, stumble, laugh, and grow more than you ever imagined. Every project, every late-night study session, every new friendship is part of the ride. Try to grab as much practical knowledge as you can along the way—it's your ticket to real-world success! Enjoy it, embrace it, and make these years unforgettable!

Here's to a thrilling journey ahead!

Namam Pathak, ME-2015
Deputy Manager
Cleanmax Enviro energy Ltd., Pune



Our Core Strength



Dr. Rishi Vyas
HOD, Physics



Dr. Swati Joshi
HOD, Chemistry



Dr. Pramila Kumawat
HOD, Mathematics



Dr. Anupriya Singh
HOD, English

Our Editors



Dr. Vinita Sharma
Professor
Department of Chemistry



Dr. Anurag Sharma
Associate Professor
Department of Chemistry

“

“Physics explains how the universe works, Chemistry reveals what it is made of, and Mathematics is the language that binds them together.”

”



Swami Keshvanand Institute of Technology, Management & Gramothan

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