

Technology Roundup

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- 17th International Conference on Education Technology and Computers (ICETC)
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- 23rd International Symposium on Power Electronics Ee2025

Tech & Trade Offers

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Pakistan's Space Technology in Advancement

Pakistan has successfully placed its latest remote sensing satellite into orbit, a milestone confirmed by officials from the Space and Upper Atmosphere Research Commission (SUPARCO). Launched from China's Xichang launch centre on July 31, the satellite has now established stable communication with ground stations and begun transmitting high-resolution imagery. The availability of such advanced spatial data is expected to support a wide range of national sectors. With its superior imaging capabilities, the satellite will enhance urban planning, guide infrastructure expansion, and provide valuable insights into patterns of urban growth. In disaster management, it will serve as a vital tool by offering timely information that can alert authorities to potential floods, landslides, or seismic hazards, enabling faster and more effective responses. Environmental monitoring will also benefit, particularly in tracking glacier retreat, deforestation, and other ecological changes. Furthermore, experts believe the technology will boost agricultural productivity through improved land-use assessment. The satellite is also poised to contribute significantly to development initiatives such as the China-Pakistan Economic Corridor by mapping transport networks, detecting geo-hazards, and optimizing natural resource management.



KP Accelerates Digital Growth with New IT Parks

The Government of Khyber Pakhtunkhwa, through the Science, Technology and IT Department and KPITB, has announced the development of IT Parks in every divisional headquarter of the province. This initiative, led by Special Assistant to the Chief Minister on Science and Information Technology Dr. Shafqat Ayaz, reflects the vision of the provincial leadership to accelerate digital growth and strengthen the technology sector. The proposed IT Parks are designed to serve as hubs of innovation and entrepreneurship while building stronger connections between academia and industry. Facilities will be tailored to meet the needs of IT companies, startups, and freelancers, ensuring a conducive environment for growth. To encourage participation,

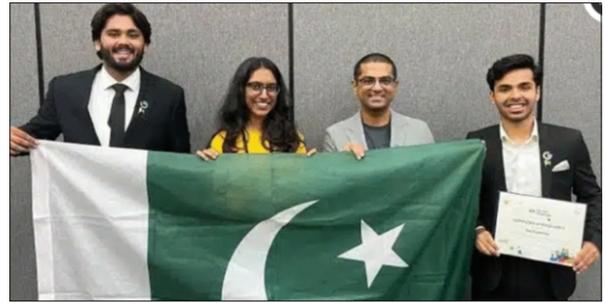


the parks will provide several incentives including a 25% subsidy on office rentals, reliable high-speed bandwidth, and access to fully equipped co-working spaces. To shape the project according to the needs of stakeholders, a survey has been launched to collect feedback from IT professionals and companies across KP. The responses will remain confidential and play a vital role in shaping the province's digital future.

GeoGemma: The Earth's AI Translator from Pakistan

In an era where artificial intelligence reshapes how we understand our planet, two students from Islamabad's Institute of Space Technology, Ahmed Iqbal and Hanzila Bin Younas, have turned their final year project into a global innovation. Their creation, GeoGemma, secured the Best AI Use Case award at the APAC Solution Challenge 2025 in Manila, marking a milestone for AI-powered geospatial tools. GeoGemma is not just software; it's a glimpse into the future of Earth observation. This open-source Geospatial Large Language Model (GeoLLM) inte-

grates seamlessly with Google Earth Engine, decoding complex satellite imagery and geospatial datasets into human-readable insights. Designed with accessibility in mind, GeoGemma empowers researchers, students, urban planners, and even non-technical users to engage with planetary data without specialized training. As the world shifts towards climate action and space-based analysis, GeoGemma positions itself as a pioneering tool, bridging the gap between orbital intelligence and everyday understanding.



China-Pakistan Launch Joint Agri-Tech Park

China and Pakistan are deepening agricultural cooperation with plans to establish a joint research laboratory and a China-Pakistan Bio-Healthy Agriculture Science and Technology Demonstration Park. The initiative was agreed upon during a visit by Prof. Zhang Lixin, Chairman of the Silk Road Bio-Healthy Agriculture Industry Alliance at Northwest A&F University, to the University of Agriculture Faisalabad (UAF) and Ayub Agricultural Research Institute (AARI). Prof. Zhang highlighted that China's advanced technologies will be shared with Pakistan to address food security challenges and uplift farming communities. UAF representatives emphasized that



the partnership would serve as a hub for innovation, applied research, and sustainable agricultural development, strengthening Pakistan's capacity for modernized farming practices. The collaboration coincides with a surge in Pakistan's sesame exports to China, which rose 300% in the first half of 2025, making Pakistan the fourth-largest sesame supplier. A bio-healthy sesame demonstration farm is already under construction in Sahiwal, supported by a joint oilseed laboratory and the introduction of high-quality Chinese sesame varieties. This venture marks a significant step towards sustainable agriculture, enhanced trade, and shared prosperity.

Pakistan Steps into CBDC Era

The State Bank of Pakistan (SBP) is preparing to launch a pilot programme for a central bank digital currency (CBDC) by the end of 2025 in collaboration with Japanese blockchain firm Soramitsu. The initiative, coming soon after the federal government's approval of the Virtual Assets Act 2025, is considered a key milestone in Pakistan's digital finance roadmap. According to Nikkei Asia, the project is supported by Japan's Ministry of Economy, Trade, and Industry under the Global South Future-Oriented Co-Creation framework. It aims to address challenges in Pakistan's heavily cash-dependent economy by reducing the costs of cash circulation and expanding access to financial services. Soramitsu plans to integrate an offline payment feature, enabling smartphone-based CBDC transactions even in areas with limited internet access, which could greatly enhance adoption. Built on the Hyperledger Iroha platform, the



system promises secure, transparent transactions. With experience from co-developing Cambodia's "Bakong" CBDC, Soramitsu now scales its largest project yet, targeting Pakistan's 250 million citizens and \$400 billion economy. Officials emphasise that strong regulation under the newly formed Pakistan Virtual Asset Regulatory Authority will ensure compliance with international standards.

Pakistan Shines in Asian Science Camp

Pakistan has achieved a landmark victory at the Asian Science Camp (ASC) 2025 in Thailand, where Pakistani students secured two gold medals and one silver medal which is the strongest



performance by the country in any international science competition to date. The eight-member team, chosen through a rigorous process by the Pakistan Science Foundation (PSF), joined participants from across Asia for a week-long programme that brought young innovators face-to-face with Nobel Laureates and leading scientists. Among the winners, Ali Afzaal Muhammad of Khyber Medical College earned gold medal in Innovation and Technology for his futuristic sleep

pod project, "Sleep 10 Hours in 2", designed to enhance rest efficiency. Malik Shahabuddin Syed of Bolan Medical College, Quetta, also won gold medal in Sustainability for his project on protecting marine ecosystems. Muhammad Hashir Ishaq of NUST claimed silver for his "Biological Firewall", a concept microchip that detects viruses and triggers an immune response. Officials praised the achievements as a moment of national pride, showcasing the creativity and scientific promise of Pakistan's youth on a global platform.

Pakistan Eyes a Green Transport Revolution with Chinese Technology

Pakistan has reaffirmed its intent to tap into China's technological expertise to accelerate the country's transition towards electric mobility. During an official visit to Beijing, the Planning Minister highlighted Pakistan's keen interest in adopting advanced battery technologies including next-generation sodium-ion batteries and developing a sustainable electric vehicle (EV) ecosystem in collaboration with China. The Minister noted that establishing EV production facilities in Pakistan would not only reduce reliance on imported fossil fuels but also create cost-effective opportunities for Chinese manufacturers seeking new markets. The government has also approved a five-year subsidy programme worth Rs100 billion to promote local adoption of EVs, including 116,000 e-bikes and 3,170 electric rickshaws/loaders which is a step towards cleaner transport and economic sustainability.



Next-Gen Learning Technology Begins in Pakistan

Pakistan has launched a new era of digital education with TikTok, unveiling a dedicated STEM feed to make science, technology, engineering, and math more engaging and accessible. Announced by the Ministry of IT, this in-app feature offers curated, high-quality content aimed at sparking curiosity, encouraging critical thinking, and opening new learning pathways for students, educators, and creators across the country. Through partnerships with top aca-



democratic institutions, TikTok will also train teachers and content creators in developing dynamic, short-form STEM videos in English, Urdu, and regional languages. The goal: make complex topics like coding, physics, and climate science relatable to Pakistan's digital generation. Government leaders hailed the initiative as a powerful tool to bridge education gaps, support aspiring youth, especially girls and prepare the next generation for tech-driven futures. A dedicated hashtag, #StemTok, and a localized landing page will support content discovery and community growth. With smartphones as classrooms and creativity as the medium, Pakistan is redefining how its youth learn, explore, and build the future.

Sindh Launches Phase II of Digital Skills Initiative

The Sindh government has launched the second phase of its flagship People's IT Program (PITP), with an ambitious plan to train 35,000 young people in advanced digital skills tailored to global market needs. Sindh Information Minister Sharjeel Inam Memon announced the program's expansion on Sunday, highlighting an allocation of Rs1.4 billion for Phase II. He described the initiative as a cornerstone of the province's vision to empower youth with modern technological expertise, ensuring their competitiveness in the fast-changing digital economy. The program, designed under the Information Science and Technology Department, has already achieved notable success. In its first phase, over 13,500 students received training in emerging IT fields, while 300 top performers were awarded Google Chromebooks and laptops as recognition of their achievements. Phase II aims to broaden this impact further by offering training across 12 high-demand digital domains, preparing the next generation of professionals to actively participate in Pakistan's tech-driven growth and position Sindh as a future-ready hub for digital innovation.



Punjab to Host New Chinese Electric Vehicle Facility

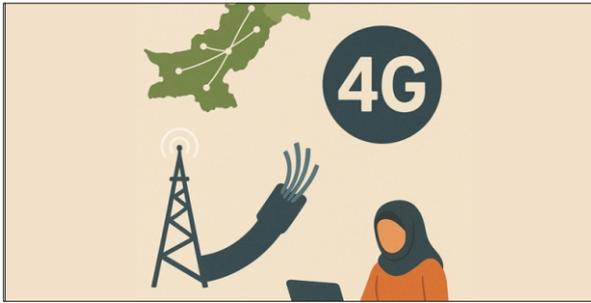
Punjab is set to witness a new wave of industrial growth as a leading Chinese electric vehicle (EV) manufacturer announced plans to establish a small-scale production facility in the province. A 15-member delegation of the company met with the provincial Minister for Industries and Commerce in Lahore. The minister assured full government support, offering special incentives duty-free machinery imports for plants set up in Special Economic Zones. According to the minister, this investment will not only strengthen Punjab's economy but also create thousands of jobs. He stressed that the provincial government considers electric mobility a policy priority and aims for Punjab to take the lead in Pakistan's clean transport transition. Industry analysts believe the move reflects growing global confidence in Pakistan's EV sector. With rising fuel



prices and government-backed incentives, experts foresee greater consumer choice, enhanced technology transfer, and long-term development of the local automotive supply chain. For Punjab, the initiative signals fresh opportunities in employment, innovation, and sustainable growth.

Pakistan to Expand 4G to Underserved Regions

The Government of Pakistan has approved a major expansion of 4G services and fiber connectivity to remote regions, aiming to close the digital divide and foster inclusive economic growth.



The Universal Service Fund (USF) Board, chaired by IT Secretary, has sanctioned seven strategic projects worth Rs7.49 billion, designed to extend high-speed broadband and fiber optic infrastructure across underserved districts. The rollout includes five broadband initiatives and two fiber optic deployments, covering nearly 940 kilometers of fiber lines to connect 347 villages and 113 union councils across 12 districts. Once operational, the projects

are expected to directly benefit 2.8 million residents through fiber connectivity and nearly one million individuals via enhanced broadband access. The initiative is also expected to empower skilled youth and women in rural areas, enabling them to enter the freelancing and digital entrepreneurship ecosystem. Under the guidance of Federal IT Minister, the accelerated expansion of digital infrastructure is set to transform Pakistan's rural landscape into a digitally empowered economy.

Tech Expo Drives Pakistan's Future

Sukkur IBA University organized the Pakistan Tech Exhibition as part of its Marka-e-Haq festivities, emphasizing the pivotal contribution of technology in shaping Pakistan's socio-economic growth. The exhibition highlighted advancements in artificial intelligence, robotics, and emerging digital technologies as effective tools to support the Sustainable Development Goals and build a more resilient future for the nation. Students actively participated by presenting innovative projects and solutions designed to tackle pressing national issues. Their contributions reflected a strong determination to harness science and technology for meaningful progress and positive change.



The exhibition was formally inaugurated by Dean of the Faculty of Science and Information Technology. In his address, he stressed the importance of technology and research in driving national development. He also urged young innovators to continue exploring creative solutions for sustainable growth. The event served as a testament to the enthusiasm of Pakistan's youth and academia in building a knowledge-driven and technology-powered future.

Pakistan's Indigenous Vaccine Milestone

Pakistan has entered a new era of medical self-reliance as Dow University of Health Sciences (DUHS) has successfully developed the nation's first indigenously produced human anti-rabies vaccine at the laboratory scale. Built from a locally isolated rabies strain, this innovation

marks the first time a human vaccine in Pakistan has been created entirely from domestic resources. Previously, Pakistan depended heavily on imported raw materials, costing the exchequer billions and exposing the country to supply chain risks. With GAVI's support set to end by 2031, vaccine costs were projected to rise sharply. This local breakthrough could redefine national health security, offering sustainable protection against a disease that claims thousands of lives annually. The next stage involves clinical trial batch production and approval from the Drug Regulatory Authority of Pakistan (DRAP), paving the way for national deployment. Experts describe the purified, inactivated, lyophilized vaccine as a foundation for future independence in vaccine production—positioning Pakistan to not only meet domestic demand but also emerge as a regional hub in biomedical innovation.



Dexter 6 Pro: Pakistan's First Welding Robot Unveiled

On Independence Day, Pakistan marked a new technological breakthrough with the unveiling of first indigenously developed welding robot, Dexter 6 Pro, designed and manufactured by engineers at the University of Engineering and Technology (UET) Lahore. The launch ceremony was attended by Punjab Minister for Education while UET Vice Chancellor Prof. Dr. Shahid Munir lauded his team for achieving what he called a “historic step in Pakistan's engineering journey.” Dexter 6 Pro is a state-of-the-art system engineered for industrial-grade MIG welding, offering unmatched precision, speed, and reliability. Built to meet international standards, it is capable of transforming welding practices across small workshops and large industries alike, enabling safer and more efficient production. According to UET officials, this innovation reflects not just technical mastery but also a growing culture of self-reliance and industrial modernization. The project is expected to boost productivity, reduce dependence on imported machinery, and inspire future advancements in Pakistan's manufacturing ecosystem.



Digital Economy Drives Pakistan's Export Growth

Pakistan's information and communication technology (ICT) sector maintained its strong growth momentum in July 2025, with exports climbing to \$354 million, a 23.8 percent increase compared to \$286 million in the same month last year. On a month-to-month basis, exports also rose by 4.4 percent from June's \$338 million, reflecting continued global demand for Pakistan's digital services. This performance pushed the ICT trade surplus to \$317 million, the highest among all service categories and 25.8 percent higher than July 2024. With ICT now contributing 47.5 percent of the country's total services exports, the sector has reinforced its role as the



backbone of Pakistan's services economy. The next largest contributor, "Other Business Services," generated \$151 million during the month, far behind ICT's share. While the ICT industry surged ahead, the broader services sector reported a deficit of \$126 million in July, underlining the digital economy's critical role in stabilizing Pakistan's external trade. Analysts believe the sector's rising global footprint is positioning Pakistan as a competitive digital hub.

Japan–Punjab Collaboration to Advance Treatment and Research

Punjab's leadership has announced a major step to modernize the province's healthcare system by adopting Japan's advanced medical and treatment management practices. During



an official visit to Japan, the Chief Minister toured the National Center for Global Health, a globally recognized facility specializing in infectious disease treatment. As part of the collaboration, Punjab's public hospitals will be equipped with high-tech Japanese medical devices, diagnostic systems, and treatment methods. Plans are also underway to establish a state-of-the-art medical district modeled on Japan's healthcare framework. The Chief Minister further revealed that a

new health insurance scheme will be introduced in Punjab, drawing inspiration from Japan's successful system. The initiative will provide affordable access to quality treatment while ensuring financial protection for citizens. Both sides agreed to expand cooperation in medical research, particularly for diabetes, liver disorders, and infectious diseases. The delegation also received detailed briefings on Japan's advanced clinical practices, marking the beginning of a transformative partnership aimed at reshaping Punjab's healthcare future.

Holographic Policing in Action

In an innovative step towards smarter policing, Seoul has deployed life-sized holographic police officers in public spaces to strengthen community safety. A 3D hologram of a uniformed officer, standing over 170 centimetres tall, now appears each evening in Jodong No. 3 Park from 7 to 10 pm. The virtual officer issues reminders about swift emergency responses and the presence of surveillance systems, aiming to deter crime while reassuring visitors. Developed by Hologramica, a company specialising in advanced holographic solutions, the prototype was first introduced on a trial basis in October last year.



Recent evaluations suggest that the project has been effective: police data shows a nearly 22 percent drop in criminal incidents reported in the park following installation. Although the hologram cannot physically intervene, officials emphasise its role as a "smart security device" that reduces disorderly behaviour through psychological influence. Authorities are considering wider adoption of similar technologies, supported by artificial intelligence, to create safer urban environments and build greater public confidence in law enforcement.

Beijing Hosts First Robot Olympics

Beijing has hosted the world's first Humanoid Robot Games, where more than 500 androids showcased both awkward stumbles and flashes of remarkable capability. Held at the National

Speed Skating Oval, originally built for the 2022 Winter Olympics, the event brought together 280 robotics teams from 16 countries. Competitions ranged from athletics, basketball, and



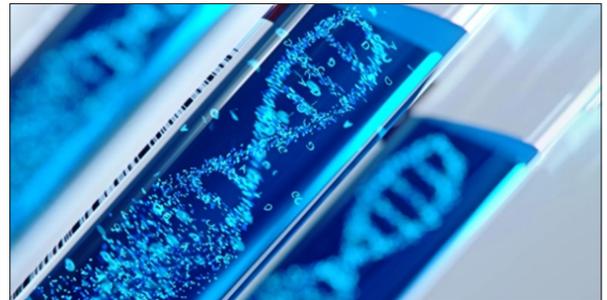
football to applied tasks such as sorting medicines and cleaning, offering a glimpse into how humanoids may contribute in future society. While some robots struggled to stay upright, others demonstrated notable progress. In a 1,500-metre race, Unitree's humanoid robot impressed by outpacing rivals, finishing in just over six minutes. Other performances, including five-a-side football matches, provided equal parts entertainment and technological insight.

Organizers emphasized that this was the first global contest devoted exclusively to humanoid robots. China's government has identified humanoid robotics as central to its national strategy, supported by major investment in artificial intelligence and automation. Experts suggest the games not only highlight technological advances but also underscore China's ambition to lead the global robotics industry.

Ultra-Fast Protein Engineering

Scientists at a leading U.S. research institute have introduced T7-ORACLE, a groundbreaking platform that accelerates protein evolution up to 100,000 times faster than natural processes. The work represents a major step in synthetic biology and therapeutic innovation. The platform operates by engineering *E. coli* with an artificial replication system derived from bacteriophage T7. This orthogonal system drives continuous hypermutation of plasmid DNA while keeping the host genome intact. As a result, new protein variants can be generated in days rather than months. In proof-of-concept studies, the system produced antibiotic-resistant enzyme variants capable of surviving drug concentrations thousands of times higher than baseline levels. The President and CEO of the institute described the technology as a “fast-forward button for evolution,” highlighting its broad utility for therapeutic proteins targeting cancer, neurodegenerative conditions, and beyond. An Assistant Professor of Chemistry emphasized its adaptability, ease of use with standard lab workflows, and potential to evolve proteins from diverse genetic sources. Funded by the National Institutes of Health, this innovation opens new horizons for protein engineering, drug development, and synthetic genomics.

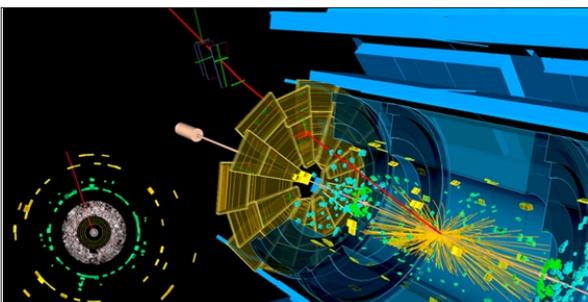
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Columbia Researchers Build Chips for CERN Upgrade

Columbia Engineering researchers have created specialized silicon analog-to-digital converter (ADC) chips designed for the ATLAS detector at CERN's Large Hadron Collider (LHC), enabling measurement of 1.5 billion particle collisions per second. These custom-built chips are engineered to withstand extreme radiation levels and incorporate advanced error-correction methods, ensuring precise data capture essential for cutting-edge particle physics research. This collaboration highlights the critical role of aca-



demic research in advancing highly specialized technologies often overlooked by commercial investment. The work represents a multi-year design effort that supports the upcoming upgrade of the LHC, marking a major step forward for experimental physics. Beyond particle research, the Columbia team is also advancing electrical engineering education with MOSbius, a programmable, breadboard-friendly transistor array designed for hands-on learning in analog system design. MOSbius has been adopted in the IEEE Solid-State Circuits Society Chipathon 2025, allowing students worldwide to design and fabricate their own chips, fostering innovation and accessibility in engineering education.

AI Creates Ultra-Durable, Carbon-Trapping Concrete

Researchers at the USC Viterbi School of Engineering have developed an advanced AI-powered model, Allegro-FM, capable of simulating billions of atoms simultaneously to



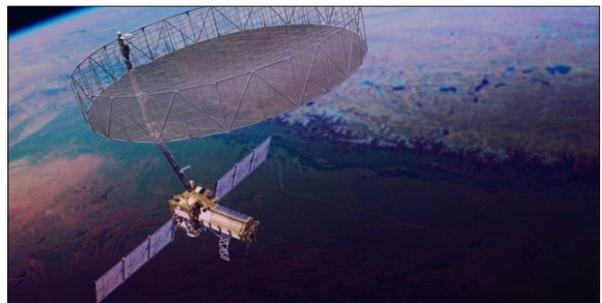
design next-generation concrete. This breakthrough paves the way for eco-friendly construction materials that are stronger, more durable, and capable of capturing carbon dioxide rather than emitting it. Concrete is the world's most widely used man-made material but contributes nearly 8% of global CO₂ emissions through cement production. Allegro-FM allows scientists to virtually test molecular combinations, accelerating the development of carbon-neutral, fire-resistant, and longer-lasting concrete without costly laboratory experiments.

Using the Aurora supercomputer at Argonne National Laboratory, the system successfully simulated more than 4 billion atoms with over 97% efficiency, an unprecedented scale in materials science. The technology suggests concrete could trap CO₂ within its structure, potentially lasting centuries and rivaling the durability of ancient Roman concrete. Beyond construction, Allegro-FM's ability to model 89 chemical elements could also transform fields such as energy storage, medicine, and environmental materials research.

World's Biggest Space Radar Antenna Now Operational

The NASA–ISRO Synthetic Aperture Radar (NISAR) mission has reached a historic milestone with the successful deployment of its massive 33-foot radar antenna reflector in orbit.

The structure, the largest ever used on a NASA Earth science mission, will enable highly detailed 3D imaging of Earth's surface ushering in a new era of climate, disaster, and agricultural monitoring. Orbiting 460 miles above Earth, NISAR carries dual-frequency L- and S-band radar, allowing it to capture precise data through clouds, day or night. This consistency makes it invaluable for tracking glacier shifts, seismic activity, deforestation, and crop patterns.



Scientists say the data will strengthen disaster preparedness, food security, and infrastructure planning worldwide. The reflector developed by Astro Aerospace (Northrop Grumman), folds into a compact canister for launch but expands into a 39-foot aperture once in orbit. Its engineering had to overcome challenges of launch stresses, space vacuum, and constant rotation at 4.5 revolutions per minute. Jointly managed by NASA's Jet Propulsion Laboratory and ISRO, NISAR is set to begin delivering science data later this year marking a breakthrough in global Earth observation.

Next-Gen Food Packaging with GO-Eco Nanomaterials

Plastic and PFAS-based coatings have long dominated food packaging due to their strong resistance to moisture, oils, and gases. However, growing evidence of their persistence in the environment and links to serious health risks has led to strict new regulations in the U.S. and Europe. These “forever chemicals” are increasingly being phased out, raising the urgent need for safe, scalable alternatives. A major breakthrough comes with GO-Eco™, a graphene-oxide-based barrier coating developed by researchers at a leading U.S. university and commercialized with industry partners.



Graphene oxide, composed of ultra-thin carbon sheets, binds seamlessly to paper fibres, creating a durable, non-toxic, and biodegradable protective layer. Unlike PFAS, it does not leach into food and fully integrates with packaging material. Independent studies confirm GO-Eco's superior water and oil resistance, while also improving paper strength. Several global companies are already piloting its use across food-grade packaging, molded fibre products, and sustainable tableware. With regulatory pressure mounting, GO-Eco is positioned as a promising next-generation solution for safe and sustainable packaging worldwide.

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Sustainable Sugars from Agricultural Residue

Researchers at Washington State University, in collaboration with partner institutions, have developed an innovative process to transform leftover corn stalks, husks, and leaves into affordable sugar, creating new opportunities for sustainable biofuel production. The study, published in *Bioresource Technology*, details how the team used ammonium sulfite and potassium hydroxide at relatively mild temperatures to pretreat corn stover. This step made it easier for enzymes to break down the tough cellulosic material into fermentable sugars. Unlike conventional methods, the approach does not require chemical recovery, reducing both cost and complexity. According to lead researcher Bin Yang, producing low-cost sugar is crucial for advancing renewable energy technologies. The new process could reduce sugar costs to as little as 28 cents per pound, making it competitive with imported supplies. In addition to biofuels, the byproducts can be used as fertilizer, minimizing waste. The project, funded by the U.S. Department of Energy, is now moving towards pilot-scale testing to further explore its industrial potential.



Geometric Motion Remapping for Inclusive VR

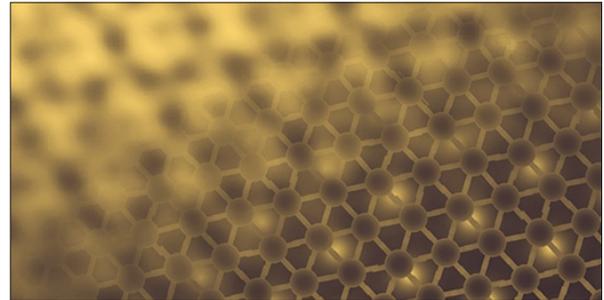
Researchers at the University of Waterloo have developed MotionBlocks, a tool that enhances virtual reality (VR) accessibility for individuals with limited mobility. VR games often require large movements that can be challenging for wheelchair users or those with restricted motion. MotionBlocks allows players to customize controls by mapping their available movements such as small wrist rotations or desk-level motions onto the expansive gestures typically required in VR games like *Beat Saber*. Tested with participants who have mobility limitations, the system improved enjoyment, reduced fatigue, and fostered

inclusivity in virtual social spaces. The researchers aim for VR companies to adopt this approach as a standard accessibility feature. The findings were presented at the CHI Conference on Human Factors in Computing Systems in Japan.



[Intercrystals: A New Phase of Matter](#)

Rutgers University researchers have discovered a new class of materials, called intercrystals, which exhibit electronic properties unlike those found in conventional or quasicrystals. By stacking ultrathin graphene layers on hexagonal boron nitride at precise angles, the team generated moiré patterns that altered how electrons move through the material. This breakthrough, published in *Nature Materials*, opens new directions in twistrionics, a field that engineers materials by twisting atomically thin layers. According to lead author, intercrystals enable scientists to control electronic behavior through geometry rather than chemical composition, paving the way for efficient electronics, quantum computing, superconductivity, and sustainable device technologies. Because they can be made from abundant, non-toxic elements such as carbon, boron, and nitrogen, intercrystals offer a scalable, environmentally friendly alternative to rare-earth based materials. Researchers believe these findings could form the foundation for low-loss electronics, advanced sensors, and future quantum technologies.



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Forthcoming Tech Events

PAKISTAN

- 4th International Conference on Innovation in Teaching and Learning (ICITL-2025) September 10 – 11, 2025, International Islamic University, Islamabad
<https://www.iiu.edu.pk/seminars-conferences/4th-international-conference-on-innovation-in-teaching-and-learning-icitl-2025/>
- International Conference on Integrative Research in Biosciences September 23, 2025, Allma Iqbal Open University, Islamabad. <https://icirb2025.aiou.edu.pk/>
- 5th NUST Flagship International Conference on Water, Energy and Environment for Sustainability (IC-WEES) September 24 – 25, 2025, National University of Sciences and Technology (NUST), Islamabad. <https://icwees.nust.edu.pk/>
- 4th International Conference on Communication, Computing and Digital Systems (C-CODE) October 01 – 02, 2025, Bahria University, Islamabad. <https://ccode.bahria.edu.pk/>
- 8th International Conference on Applies Zoology – Interdisciplinary Approaches for Sustainable World: Fostering Innovative Solutions for Food, Medicine and Industry. October 13 – 14, 2025, The University of Punjab, Lahore
<https://pu.edu.pk/home/section/conferences/16329>
- International Additive Manufacturing & Vacuum Technology Conference - 2025 (IAMVT Conference) October 21 – 23, 2025, National Centre for Physics, Islamabad
<https://www.ncp.edu.pk/iamvt-2025.php>

- 23rd International & 35th National Chemistry Conference - Role of Chemistry For Sustainable Development October 21 – 23, 2025, Government College University, Faisalabad
<https://chemcon2025.gcuf.edu.pk/>
- International Conference on Engineering & Computing Technologies (ICECT) November 13 – 14, 2025, National University of Modern Languages (NUML), Islamabad
<https://numl.edu.pk/icect/>
- International Additive Manufacturing & Vacuum Technology Conference - 2025 (IAMVT Conference) October 21 – 23, 2025, National Centre for Physics, Islamabad
<https://www.ncp.edu.pk/iamvt-2025.php>
- International Conference on Engineering & Computing Technologies (ICECT) November 13 – 14, 2025, National University of Modern Languages (NUML), Islamabad
<https://numl.edu.pk/icect/>
- International Conference on Applications of Space Science and Technology (ICAST) November 18 – 20, 2025, Institute of Space Technology, Islamabad
<https://icast.pk/>
- 15th International Conference on Mathematics, Actuarial Science, Computer Science, & Statistics (MACS 15) December 06 – 07, 2025, Institute of Business Management, Karachi
<https://macs.iobm.edu.pk/>
- 22nd International Conference on Frontiers of Information Technology (FIT'25) December 15 – 16, 2025, COMSATS, Islamabad <https://fit.edu.pk/>
- 5th International Conference on Computational Intelligence & Internet of Things (ICCIOT), 2025 December 16 – 17, 2025, University of Engineering and Technology, Peshawar
<https://www.uetpeshawar.edu.pk/icciot/index.html>

INTERNATIONAL

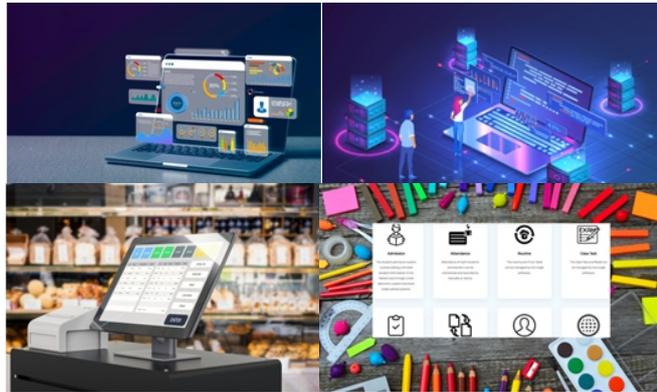
- [The Middle East Oil, Gas and Geosciences Show \(MEOS GEO\)](https://www.meos-geo.com/en/home.html)
September 16 – 18, Bahrain. <https://www.meos-geo.com/en/home.html>
- 17th International Conference on Education Technology and Computers (ICETC)
September 18 – 21, Barcelona, Spain. <https://www.icetc.org/>
- 5th International Training Course on Industrial Synthetic Biotechnology, CCIB, Tianjin, China
October 01 – 15, Tianjin, China. <https://comsats.org/event/fifth-international-training-course-on-industrial-synthetic-biotechnology-ccib-tianjin-china/>
- 23rd International Symposium on Power Electronics Ee2025
October 08 – 10, Novi Sad/Belgrade, Serbia. <https://www.dee.uns.ac.rs/?r>
- 14th International Conference on Computing and Pattern Recognition (ICCP 2025)
October 24 – 26, Beijing, China. <https://iccp.org/>
- The Global Conference on Sustainable Energy and Net-Zero Emissions
October 28 – 29, 2025, Hail City, Saudi Arabia
<https://conferences.uoh.edu.sa/Conference/SENZE'25>
- The International Conference on Engineering Advancements, Science and Technology (ICEAST) November 03 – 06, 2025, Muscat, Oman
<https://iceast.mtc.edu.om/>
- 7th International Conference on Frontier Technologies of Information and Computer (ICFTIC 2025), November 07 – 09, 2025, Qingdao, China. <https://www.icftic.org/>
- 7th EAGE Rock Physics Workshop November 10 – 12, 2025, Cape Town, South Africa
<https://eage.eventsair.com/seventh-eage-rock-physics-workshop/>
- 4th International Conference on Computational Intelligence and Knowledge Economy
November 27 – 28, 2025, Dubai, UAE. <https://amityuniversity.ae/ICCIKE2025/>
- 2nd International Symposium on Civil Engineering and Smart Structure Technology
December 05 – 07, 2025, Zhengzhou, China. <http://www.iccesst.com/>
- 4th International Conference on Modelling, Simulation & Intelligent Computing (MoSiCom 2025) December 10 – 12, 2025, Dubai, UAE. <https://mosicom2025.com/>
- International Conference on Materials, Mechanical, and Civil Engineering Technologies
December 17 – 19, 2025, Tokyo, Japan. <https://mmcet.com/>
- International Conference on Computational Intelligence, Security, and Artificial Intelligence (IEEE-IntelliSecAI 2025) December 17 – 18, 2025, Al Khobar, Kingdom of Saudi Arabia
<https://intellisecai.org/>
- 13th International Conference on Geological and Civil Engineering March 06 – 08, 2026, Fukuoka, Japan. <https://www.icgce.org/>

TECH AND TRADE OFFERS

The Cyber Solution

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- Accounting and Installment Software
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TECH AND TRADE OFFERS

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- Cleaning service
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- Mail handling
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- Power supply
- Locker and storage and event space.



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