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'India's Water Hostility Prompts Pakistan to Expand Storage Capacity'

Prim Minister Muhammad Shehbaz Sharif has said that in view of India's nefarious designs to weaponize water, the government had decided to enhance water storage capacity in the country.

During a visit to the National Emergencies Operations Center, the prime minister stated that an international court (the Permanent Court of Arbitration) had announced a supplemental order, emphasizing that India had no authority to unilaterally suspend the Indus Waters Treaty.

"But the enemy harbors certain evil designs against Pakistan and aims to undermine the waters treaty," he said, adding that in response, the government had decided to fast-track non-controversial water storage capacity projects under the Water Accord with the provinces, as this had legal provisions.

He stressed that the National Disaster Management Authority (NDMA) had a critical role to play in this context.

The prime minister directed that weather warnings and calamity alerts should be regularly issued via SMS and phone messages, in collaboration with the Pakistan Telecommunication Authority (PTA).

In remarks telecast on national television,

the prime minister recalled the devastating impact of the 2022 floods, which caused the entire country to suffer due to the effects of a



natural calamity.

He noted that Pakistan, despite contributing very little to global greenhouse gas emis-

sions, was among the countries most vulnerable to natural disasters such as cloudbursts.

"In 2022, Pakistan suffered more than any

country in the world," he observed.

He further stated that glacial melting caused by heatwaves demanded the highest

level of preparedness.

"What happened in Swat, where precious lives were lost, cast a shadow of grief over the entire nation," he said, urging an honest review of the incident and directing the formulation of a comprehensive mechanism in collaboration with the provinces to prevent similar tragedies in the future.

He also called for the compilation of a report in this regard.

The prime minister remarked that in the aftermath of the 2022 floods, relevant ministries had negotiated grants and public-private partnerships for building resilient infrastructure in the country.

He appreciated the National Emergencies Operations Center and expressed hope that relevant authorities would fully utilize this resilient platform to strengthen the country's economy and social sectors.

He assured the government's full support in strengthening the institution and enhancing its capacity.

The prime minister also appreciated the NDMA for organizing seamless relief operations to Türkiye and Myanmar.

He expressed hope that this world-class facility was fully connected with the provinces and that its early warning systems

Contd on page 4

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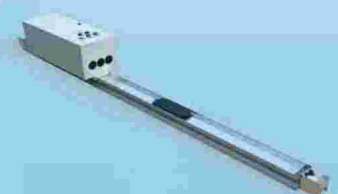
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Ramada Moot Corners PEC Chairman, Remains Defiant on Key Issues

By Manzoor Shaikh

The 'Bhurban Moot' of the Governing Body of the Pakistan Engineering Council (PEC) wrote a brand-new story on how a PEC chairman compromised his self-respect and the fundamental interests of engineers because of his exclusionist style of leadership, and how he was besieged by members of the Governing Body of the council.

The story stood far from completion at that scenic place near Murree; it entered the next episode at Ramada Hotel and turned out bigger than Bhurban.

The 52nd GB meeting held at Ramada Hotel Islam-

abad on June 27 left nothing for the chairman but to walk away from the meeting in sheer disappointment after failing to defend what the members call his unilateral steps during his almost one-year rule. Although no one allowed him to leave the meeting hall, the members,

ity of the 64-member GB has come to the conclusion that he, rather than learning the proper functioning of the council as per its Act and Bylaws and adopting an inclusive approach, is bent upon imposing one-man rule. As a result, his so-called reform is in shambles as he

approach to make decisions on significant issues concerning the very future of the council and the engineering fraternity in Pakistan. The most recent example is his move to register technologists with engineers under the PEC umbrella. However, the issue relating to the Registrar of the

adamant to grab a nod for him to decide on the fate of the PEC registrar Dr. Nasir Mehmood, who was alleged to have tampered with the minutes of the 49th meeting of the GB.

An Inquiry Panel, comprised of GB members, has recently confirmed violations

er member, was due to take the proceedings further on the findings of the panel, and the GB was also supposed to give the charge of the office of the registrar to the most senior officer in the council. Dr. Mehmood, sensing the situation, went on a one-month (presumably forced) leave. 'Instead of adopting due course, the chairman refused to name a replacement for the office of the registrar and insisted that he should be left to make such a decision,' he said.

Yet another weird part of the moot started unfolding when the chairman opened, at the start of the meeting, a sealed envelope containing the leave application of Dr. Mehmood, who, according to him, was undergoing serious health problems and thus unable to attend the meeting. 'Wasn't it funny that the chairman brought the applica-

Contd on page 8



including many from his allies, kept on insisting that the council should be run in line with the Act and Bylaws.

The ironic aspect of the council's one-year odyssey under Engr. Waseem Nazir is that the overwhelming major-

continues to influence the GB so that he alone may be allowed to make decisions.

Interestingly, at least three vice chancellors and a host of senior members failed to convince the chairman to adopt an institutional

council remained at the forefront in this meeting.

The Islamabad meeting of the GB witnessed some serious violations on the part of the chairman, a GB member believes. For instance, he revealed the chairman was

in PEC meeting proceedings and decisions and concluded that the registrar's elevation, ADR payments, and GB elections breached original decisions of the 49th Governing Body meeting.

This meeting, said another

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'India's Water Hostility Prompts Pakistan to Expand Storage Capacity'

Contd from page 1
were successfully conveying real-time information to provincial authorities.

During the visit, the NDMA Chairman, Lieutenant General Inam Haider

Malik, briefed the prime minister on the current monsoon season, flood situations, and precautionary measures taken.

India's Attempt to Put the Indus Waters Treaty in

Abeance

It merits mentioning that India suspended the Indus Waters Treaty with Pakistan this year. The suspension came in response to an attack in Pahalgam, which India

blamed on Pakistan. Pakistan condemned the move, calling it an act of war. The treaty, signed in 1960, governs the sharing of water from the Indus River system between the two countries.

In January 2023, India issued a notice to Pakistan seeking a modification of the Indus Waters Treaty (IWT), citing long-standing objections to Pakistan's stance on Indian hydropower projects, including Kishanganga and Ratle. This was seen by Pakistan and international observers as an attempt by India to unilaterally put the treaty in abeyance, which is not allowed under its terms.

The Permanent Court of Arbitration (PCA), based in The Hague, in July 2023 ruled that it has jurisdiction to hear Pakistan's objections and rejected India's argument that the court lacked authority. The PCA reaffirmed that India cannot unilaterally modify or suspend the treaty, which has been in effect since 1960 and is considered a crucial water-sharing agreement. – APP/ERMD

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- Richard Branson

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Pakistan Engineers Forum Hosts Seminar on Engineering Solutions to Water Crisis

The Pakistan Engineers Forum (PEF) organized a technical

tion growth, and inefficient water use. He stressed the urgent need for coordinated and effective water management practices and critical

between water, food, and energy security. He called for the promotion of renewable energy, particularly hydropower, and the imple-

ment Engr. Abdul Majeed Shah thanked all the speakers and participants for contributing to a vital national conversation. He reiterated

together to find sustainable engineering solutions for Pakistan's water crisis. Join hands with Pakistan Engineers Forum — share

work towards a safer and brighter future."

The seminar served as a call to action for engineers, academics, and civil



seminar in Islamabad titled "Engineering Solutions for Water Crisis in Pakistan," bringing together leading engineers, water experts, and policymakers to address the nation's growing water challenges.

The seminar was formally opened by Engr. Naem Ahmed Subhani, who welcomed the distinguished guests. In his opening remarks, he recited verses from the Holy Quran related to the importance and responsible use of water, emphasizing its spiritual and environmental significance.

Keynote speaker Muhammad Naem Khan, former CEO of the Pakhtunkhwa Energy Development Organization (PEDO), highlighted that Pakistan is facing an acute water crisis due to climate change, rapid popula-

investment in water infrastructure.

Former Director of the Pakistan Council of Water Resources, Dr. Manzoor Ahmed Malik, focused his speech on the efficient use of water resources, advocating for the adoption of water-saving technologies, modernization of agricultural irrigation systems, and safeguarding of water reservoirs from pollution.

Engr. Arshad Abbasi, a renowned expert on trans-boundary water and hydropower, emphasized the importance of the Indus Waters Treaty, calling it the backbone of Pakistan's water security. He urged the government to strengthen Pakistan's international position and engage in serious negotiations with India over water rights.

Engr. Dr. Basharat Hasan Bashir, former CEO of the Alternative Energy Development Board (AEDB), highlighted the interconnection

mentation of sustainable agricultural practices to ensure long-term development and resilience.

Concluding the seminar,

that solving Pakistan's water crisis is a shared responsibility, adding:

"Engineers are on the front lines. Let us come

your ideas and suggestions, and bring your knowledge, expertise, and resources to the forefront of this national cause. Together, let's

society to play an active role in shaping water policy and fostering innovation to ensure a water-secure Pakistan. - PR

Ramada Moot Corners PEC Chairman, Remains Defiant on Key Issues

Contd from page 3
tion into the house rather than approving it as the chief of the council?" asked numerous members in the meeting hall. Many members suspect the chairman was attempting to gather sympathies for the registrar, a member said.

Engineering Review's interactions with a variety of stakeholders in the council unearthed that the argument between the chairman and the members, mostly from the TEP and NEA, went on for around 5 hours and no side budged from their positions. In the course of a highly heated debate, Engr. Salih Rind, a TEP-supported member, led the onslaught against the chairman this time. He was aided by his other colleagues, including Engr. Ameer Zamir and Engr. Pardeep Kumar. A notable part of this episode is that the GB members from NEA, one of Engr. Nazir's allies, including Dr. Aneel Kumar and Engr. Abid Shah, also joined forces with Engr. Salih and his supporters. Even at one point, two vice chancellors, Dr. Sarosh Lodi and Dr. Samreen Hussain, also tried to convince the chairman to take an inclusive approach on

the issue of the registrar as well as the registration of technologists in the council.

"There was no specific plan to push the chairman into a corner. Since he was adamant to stick to his authoritarian approach, members from all sides tried to convince him, but he refused," a member suggested.

After a long debate and trading of allegations between the chairman and TEP+NEA members, the meeting constituted a five-member committee to further investigate the issues relating to the promotion of Dr. Nasir Mehmood, ADR payments, and GB elections that breached the original decisions of the 49th Governing Body meeting. The committee will come up with the report within a month.

The committee comprises Dr. Qaiser Ali, Dr. Samreen Hussain, Dr. Hafsa Jamshaid, Dr. Masood, and Dr. Riffat Hassan.

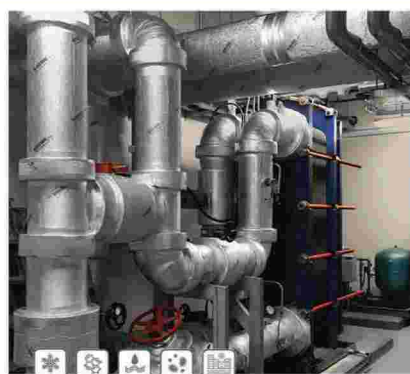
Moreover, the meeting deferred two issues till the next meeting. They included: progress on integration of the technology stream under the PEC umbrella and adoption/implementation of the pension scheme for regular employees of PEC. ■

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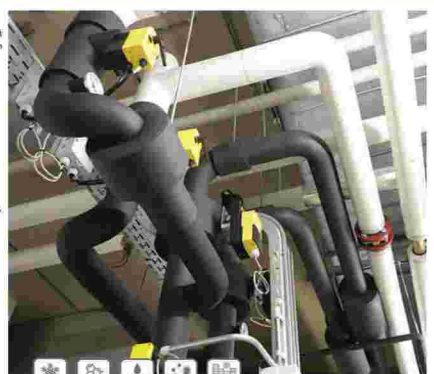
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Amir S. Chinoy Foundation announces multi-year sponsorship deal with Pakistani Squash Players, Sana Bahader and Saif Bahader

Amir S. Chinoy Foundation, a non-profit organization and member of the Amir S. Chinoy Group (ASC), proudly announced a multi-year sponsorship agreement with rising stars in squash, Sana Bahader and Saif Bahader.

Member companies of ASC Group, namely, International Industries Ltd. (IIL), Pakistan Cables Ltd. (PCL), and International Steel Ltd. (ISL) are also the proud sponsors of this power duo.

As part of the partnership, both athletes will represent member companies of ASC Group at all national and international squash tournaments for a period of 3 years with a strong focus on training and active participation in squash tournaments.

Hailing from Peshawar, Sana Bahader aged 19, and Saif Bahader aged 15, demonstrate exceptional grit and a powerful game, overcoming challenges witnessed at an early age. Born deaf and mute, both squash players are defying odds and overcoming challenges. This duo is set to achieve greater heights for



themselves.

“We are thrilled to partner with Sana and Saif. Their dedication to squash and journey of perseverance is an extremely inspiring, especially for the youth of Pakistan”, said Samir M. Chinoy, Chairman Amir S. Chinoy Foundation. Mr. Sher Bahader, father of Sana and Saif Bahader was also present at the signing ceremony. “I am extremely grateful to the Foundation for their support. The sponsorship will enable Sana and Saif to train effectively and enhance their performance, get interna-

tional exposure, and elevate their game. It certainly boosts their confidence in squash”, he said.

The athletes are set to travel to Australia from June up to August, with Sana competing in the women's category and Saif in the men's category in the Greater Bendigo International tournament, followed by other inter-

national squash tournaments being held across Australia during the time.

The partnership reinforces Amir S. Chinoy Group's commitment to promoting youth empowerment by supporting skill-based training, recognising and supporting upcoming role models in Pakistan.

About Amir S. Chinoy Group:

The Amir S. Chinoy Group's history began when its founder, Amir S. Chinoy, a visionary entrepreneur, laid the foundation for International Industries Limited (IIL) in 1948, Pak Chemicals Ltd in 1951, and Pakistan Cables Ltd, “PCL” in 1953. An addition to the group, a new enterprise, International Steels Limited (ISL), joined the fold in 2007. Amir Sultan Chinoy Foundation (ASCF), is a

philanthropic and registered non-profit organization invested in social upliftment. The ASC Group has retained its pioneering spirit and is continuously evolving by offering world-class products and services, foreign collaborations, and commitment to customer service. ■

IEP Hosts Reception Dinner Honoring Dr. Tufail and Dr. Lodhi

The Institution of Engineers Pakistan (IEP) hosted a graceful reception dinner in honor of two distinguished academic appointments: Dr. Mohammad Tufail, the newly appointed

bration of continuity and collaboration in engineering education.

In a rare moment of academic unity, three Vice Chancellors of NED University—the incumbent Dr. Mohammad Tufail, former VCs Dr. Sarosh Lodhi and Dr. Afzal Haque, as well as Dr. Noman Ahmed, who

ing universities, including curriculum modernization, faculty development, industry collaboration, and global competitiveness. There was a shared emphasis on the need to make NED University a more vibrant, research-driven, and innovation-oriented institution.



Vice Chancellor of NED University of Engineering & Technology, Karachi, and Dr. Sarosh Hashmat Lodhi, who has taken charge as Chairman of the Charter Inspection & Evaluation Committee (CIEC), Sindh Higher Education Commission.

The ceremony was a well-attended affair, drawing a diverse gathering of engineers from both academia and industry. The event turned into a symbolic cele-

recently served as acting Vice Chancellor—were all present under one roof. Their collective presence reflected the strong institutional legacy and future direction of the university.


Adding further prestige to the event was the presence of Dr. Valiuddin, Vice Chancellor of UIT University, who also graced the occasion and joined in the dialogue on improving higher education in engineering.


Speakers from the academic and professional community addressed the challenges facing engineer-


Dr. Sarosh Lodhi, reflecting on his tenure as Vice Chancellor, offered heartfelt advice to Dr. Tufail. Drawing from his experiences, he highlighted the importance of visionary leadership, academic integrity, and stakeholder engagement in taking the university to new heights.

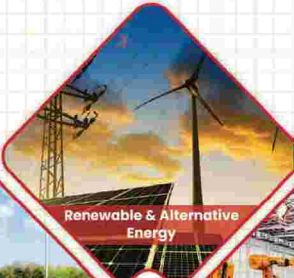
The evening concluded on a note of optimism and shared responsibility, with attendees expressing hope that such academic collaborations would continue to shape the future of engineering education in Pakistan. — ER Report

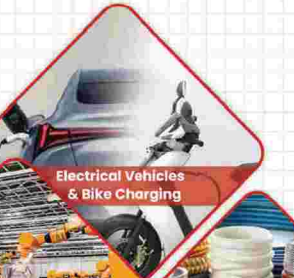
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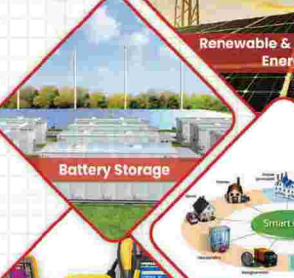

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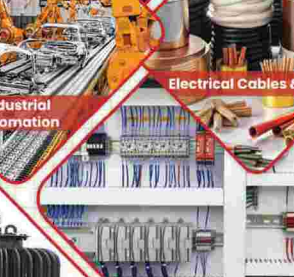

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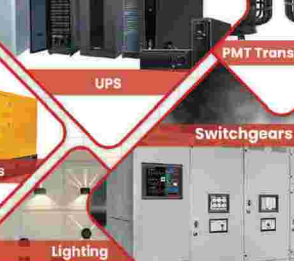

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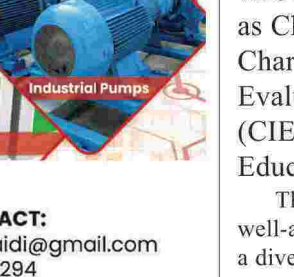

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EON-XR: Transforming Learning Through Extended Reality

Anza Arain, Volunteering Ambassador, CATCH_VR Project

In today's rapidly evolving educational landscape, incorporating innovative technology is essential for engaging students and enhancing the learning experience.

One such groundbreaking advancement is EON-XR, an AI-powered Extended Reality (XR) platform designed by EON Reality to transform the way educators and learners interact with educational content. Using augmented reality (AR) and virtual reality (VR), EON-XR creates immersive environments that allow users to explore, create, and manage 3D content without requiring advanced programming skills.

What is EON-XR?

EON-XR is not just a tool; it's a comprehensive platform that empowers users—students, teachers, and trainers—to develop and experience interactive content easily. At its core, EON-XR leverages the power of AI to simplify and streamline the creation of rich multimedia experiences. Whether it's a medical student needing to dissect a virtual human anatomy model or an engineering trainee simulating complex machinery, EON-XR provides the versatility required to replicate real-world scenarios safely and engagingly.

Accessibility and Ease of Use

One of the standout fea-

tures of EON-XR is its user-friendly interface. Traditionally, creating AR and VR experiences required extensive knowledge of programming languages and graphic design. EON-XR democratizes this process, enabling users to produce high-quality content with minimal technical skills. This accessibility allows educators to integrate XR into their lesson plans more effortlessly, enriching the curriculum across vari-

ous subjects. provide real-time guidance and support, equipped with a learning-capable AI brain paired with a fully interactive XR body, allowing users to receive personalized directions and interact seamlessly with digital objects.

Applications in Education and Industry

The versatile applications of EON-XR span multiple disciplines, making it a valuable resource in educational institu-

simulations, while kinesthetic learners engage with interactive content that requires physical participation. By catering to different preferences, EON-XR contributes to a well-rounded educational experience, ensuring that all students have the opportunity to excel.

Why EON-XR Matters

Traditional education often emphasizes theory over practice. EON-XR challenges

tizes access to high-quality education and training. In developing regions or remote areas, learners can access lab-quality experiences through a smartphone, leveling the educational playing field.

Looking Ahead

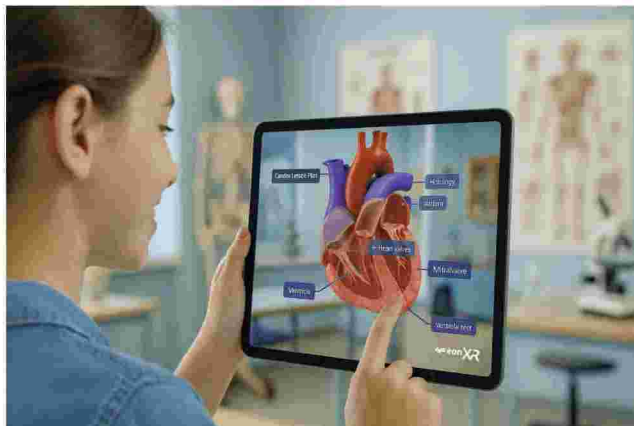
As we look forward to the future, the potential of EON-XR is limitless. With ongoing technological advancements, the platform



ing experiences that bridge the gap between the digital and physical realms. It empowers students and educators, enabling them to create engaging, meaningful interactions with educational content. As schools and training institutions increasingly adopt this innovative technology, the potential for enhanced learning outcomes is immense. Embracing platforms like EON-XR is not just about keeping up with trends; it's about reaching new heights in the pursuit of knowledge and understanding in the modern educational landscape.

Conclusion

EON-XR is not just a tool; it's a transformation. Blending immersive technology with user-friendly design redefines how we teach, train, and learn in the 21st century. As more institutions adopt XR platforms, EON-XR will continue to lead the charge in making learning more engaging, efficient, and inclusive for everyone. ■



ous subjects.

Imagine a science teacher guiding students through a virtual lab, where they can conduct experiments that would be too dangerous or costly in a physical setting. EON-XR allows for such dynamic lessons, fostering hands-on learning in a digital landscape. This enhances comprehension and ignites curiosity, making learning a more interactive experience. Further enhancing this experience, EON-XR utilizes Spatial AI technology to power intelligent avatars that guide users through the creation and learning path. These avatars

tions. For instance, medical programs can utilize EON-XR for detailed anatomical studies, providing students with a 360-degree view of the human body. History teachers can take students on virtual field trips to ancient civilizations, offering more profound insights into historical events and cultures. Engineering students can simulate machinery and prototypes, understanding concepts that are vital for their future careers. Moreover, EON-XR accommodates various learning styles. Visual learners, for instance, benefit from 3D models and

this by enabling experiential learning — the process of learning through experience. According to educational research, learners retain 75% of what they do, compared to only 10% of what they read. EON-XR capitalizes on this by immersing users in active, hands-on exploration, improving comprehension and long-term memory.

Moreover, it democra-

is expected to evolve, integrating even more sophisticated features like real-time collaboration and enhanced analytics. Educators can track student progress through interactions within the XR environment and tailor their teaching strategies to meet individual learning needs. In an ever-connected world, EON-XR stands at the forefront of educational technology, offering immersive learn-

Hino, Mitsubishi Fuso to Merge Under New Publicly Listed Holding Company

In a major development for the global commercial vehicle industry, a definitive agreement has been reached for the integration of Mitsubishi Fuso Truck and Bus Corporation

holding company. This entity will hold 100% ownership of both MFTBC and Hino.

The new structure is expected to see Daimler Truck and Toyota Motor Corporation — the parent companies of MFTBC and Hino respectively — each holding equal ownership stakes in the new holding company. Additional shares will also be issued to




(MFTBC) and Hino Motors Ltd. (Hino) — both subsidiaries of a common parent company.


According to a disclosure submitted by Hinopak Motors Limited to the Pakistan Stock Exchange, the integration will lead to the establishment of a new publicly listed

the public as part of the entity's stock market listing.


This strategic merger is poised to streamline operations, boost competitiveness, and reshape the commercial vehicle landscape with enhanced collaboration between two of Japan's key automotive players. - ER Report



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Pakistan: Agriculture plays a critical role, contributing 24% to GDP and employing 37% of the labor force. Major initiatives under Vision 2025 and the Prime Minister's Agricultural Emergency Program include reforms in water conservation, seed systems, digital extension services, and targeted farmer subsidies. New national policies focus on biotechnology, e-commerce integration for smallholders, and soil health mapping.

FAO Director-General Commends Pakistan's Agricultural Transformation Agenda

Federal Minister for National Food Security and Research, Rana Tanveer Hussain, held a one-on-one meeting with the Director-General of the Food and Agriculture Organization (FAO), Qu Dongyu, during the 44th Session of the FAO Conference in Rome.

The Minister expressed Pakistan's deep appreciation for FAO's longstanding support to Pakistan's agriculture sector. He briefed the Director-General on Pakistan's ongoing reform efforts aimed at transforming its agri-food systems to become more sustainable, inclusive, and resilient in the face of

climate change.

Highlighting agriculture's critical role—contributing 24% to GDP and employing 37% of the labor force—Mr. Hussain outlined major initiatives under Vision 2025 and the Prime Minister's Agricultural Emergency Program. These include reforms in water conservation, seed systems, digital extension services, and targeted farmer subsidies. He also discussed new national policies on biotechnology, e-commerce integration for smallholders, and soil health mapping.

The Minister noted significant outcomes such as the improved affordability of a healthy diet (from 37% of

real cost of healthy diets. However, he also underscored persistent challenges, including food insecurity affecting 36.9% of the population, rising input costs, and severe climate-induced stress.

Calling for enhanced international cooperation, Mr. Hussain urged FAO to support Pakistan's access to climate financing, carbon markets, and adaptation mechanisms for vulnerable farming communities.

Director-General Qu Dongyu appreciated Pakistan's strong reform momentum and reaffirmed FAO's continued technical and policy support. He praised Pakistan's efforts in climate-smart agriculture, digital innovation, and

capacity building. Mr. Qu welcomed the country's focus on smallholder inclusion and emphasized the importance of regional knowledge sharing and data-driven solutions.

Both sides agreed to deepen collaboration in areas such as seed biotechnology, food system transformation, early warning systems, and institutional capacity strengthening, especially through Pakistan's research institutions and the Special Investment Facilitation Council (SIFC) platform.

In closing, Minister Hussain reiterated Pakistan's commitment to working closely with FAO and other UN agencies to build equitable, climate-resilient agri-food systems aligned with the SDGs and global food security goals. - PID

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Federal Minister for S&T Visits PCSIR Lahore, Lauds Innovation in Hemp-Based Products

The Federal Minister for Science and Technology, Khalid Hussain Magsi, visited the Pakistan Council of Scientific and Industrial Research (PCSIR) Laboratories Complex in Lahore, where he was briefed on the Council's wide-ranging research and development efforts and its growing role in industrial innovation and technology commercialization.

Established in 1953, PCSIR is Pakistan's premier public-sector R&D institution under the Ministry of Science and Technology. With ten specialized centers nationwide, it focuses on applied research in areas such as pharmaceuticals, biotechnology, food science, renewable energy, chemicals, and materials science—bridging the gap between scientific knowledge and industrial application.

During his visit, Magsi was received by Director General Dr. Quratulain Syed, who presented a comprehensive overview of PCSIR's

ongoing projects and achievements across its ten core R&D centers. The Minister toured the Display Hall, where he viewed a wide range of indigenously developed technologies and products, including advances in pharmaceuticals, food safety, chemicals, lab equipment, biotechnology, and energy-efficient appliances.

He also visited the Technology and Innovation Support Center (TISC), where he was introduced to the "Patent Wall"—a visual representation of PCSIR's contributions to intellectual property development and technology transfer in Pakistan. The Center plays a critical role in supporting innovators, researchers, and entrepreneurs through patent advisory and commercialization support.

One of the most notable highlights of the visit was the Federal Minister's keen interest in PCSIR's pioneering work on hemp-based products. PCSIR has developed a diverse portfolio of applications using industrial hemp—including food items, cosmetics, pharmaceuticals, biodegradable materials, and eco-friendly construction components. The Minister praised the initiative as a

promising intersection of economic opportunity and environmental sustainability.

Magsi emphasized the government's commitment to supporting research-driven innovation, particularly in non-traditional and high-impact sectors like industrial hemp. He noted that the upcoming issuance of licenses for hemp-based product manufacturing would open new avenues for investment, job creation, and sustainable industry in Pakistan.

"PCSIR's work in industrial hemp represents a game-changing opportunity for Pakistan," said the Minister. "With proper regulatory backing and investment, this sector can deliver both economic value and environmental benefits. The government stands fully behind such forward-looking research initiatives."

The visit concluded with renewed affirmation of PCSIR's role as a national catalyst for science, technology, and innovation, with the Minister encouraging greater collaboration between PCSIR, industry, academia, and international partners to enhance Pakistan's scientific capabilities and industrial self-reliance. - ERMD

Global Recognition for a Pakistani Pioneer in HVACR

Engr. Muhammad Abbas Sajid Honored with ASHRAE Distinguished Service Award 2025 in Phoenix

At the prestigious ASHRAE Annual Conference held in Phoenix, USA, Engr. Muhammad Abbas Sajid, a veteran of the HVACR industry and one of Pakistan's most respected engineering leaders, was honored with the 2025 ASHRAE Distinguished Service Award.

The award was presented by Dennis Knight, P.E., ASHRAE President for 2024–2025, recognizing his exceptional and sustained service to the Society and the global HVACR profession.

This moment marks a significant milestone not only in his illustrious career but also for Pakistan's growing presence within the global ASHRAE community.

From Journal Club to National Chapter: The ASHRAE Pakistan Story

Two decades ago, when ASHRAE had little formal presence in the country, it was Engr. Abbas Sajid, who promoted a bold idea initiated by the founding President of the ASHRAE Pakistan Chapter, Mr. Ainal Abedin—the formation of a local ASHRAE Journal Club in Karachi. The objective was simple yet visionary: to promote technical reading, dialogue, and professional growth through monthly discussions of selected ASHRAE Journal articles.

What began as an informal gathering of professionals soon evolved into a structured knowledge-sharing platform. The Journal Club drew engineers, students, consultants, and academics alike, laying the groundwork for deeper engagement with ASHRAE's mission.

The ASHRAE Pakistan Chapter was officially established in 2003. He proudly holds the distinction of being a founding member and later served as the President of the Chapter, setting high benchmarks for technical programming, student outreach, and professional development.

A Career Rooted in Service and Leader-

ship

Today, Engr. Abbas Sajid serves as the Chair of the Nominating Committee for ASHRAE's Region-at-Large (RAL), continuing to influence leadership selection across more than 30 countries. His previous roles within the Society include:

- Past President – ASHRAE Pakistan Chapter
- Sub Regional Chair for ASHRAE

Engr. Sajid's leadership transcends ASHRAE. He has held several key positions in national professional organizations:

- Past President – Pakistan HVACR Society
- General Secretary – CNG Association of Pakistan
- General Secretary – Renewable Energy Association of Pakistan (REAP)
- Fellow and Council Member –



Region at Large

- General Chair – ASHRAE RAL CRC 2024, Karachi

Under his leadership, Pakistan successfully hosted the 2024 RAL CRC, welcoming over 150 delegates from across Asia, the Middle East, and Africa—a defining moment in the chapter's history.

Wider Industry Impact

Institution of Engineers Pakistan (IEP)

- Founding Secretary General – NEDIAN (NED International Alumni Network Association)
- Member Senate – NED University of Engineering & Tech.

He has continually advocated for local capacity building, policy reform, energy efficiency, and technical education.

An Entrepreneurial Force

He is the CEO of Engineering Services, a leading HVACR design and contracting firm, and also heads Radscribe, a company specializing in medical training and automation solutions. His entrepreneurial ventures have significantly contributed to Pakistan's engineering landscape, delivering innovative services to both the public and private sectors.

A proud alumnus of NED University of Engineering & Technology, Engr. Sajid maintains close ties with academia. In 2024, the university honored him by dedicating a boardroom in the Mechanical Engineering Department in recognition of his lifetime contributions to engineering and education.

The Phoenix Moment

The Distinguished Service Award ceremony at ASHRAE's Phoenix Conference in June 2025 symbolized international recognition of his decades of dedication to the built environment. Speaking after receiving the award, Engr. Sajid remarked:

"This award is not mine alone—it is shared with every professional in Pakistan who believed in knowledge, collaboration, and global standards. Our journey from a Journal Club to a recognized ASHRAE Chapter reflects the power of vision and collective will."

A Lasting Legacy

Few individuals can claim to have laid the foundation of a global institution's presence in their country. Fewer still can match it with consistent service, leadership, and mentorship over decades. Engr. Muhammad Abbas Sajid's contributions to ASHRAE, HVACR, and engineering education exemplify a rare blend of humility, purpose, and strategic foresight.

As the engineering community in Pakistan continues to grow and align with global sustainability goals, his work remains a cornerstone—an inspiration for those who believe in the long game of service and legacy. - Phoenix, AZ — June 2025 ■

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ECOBATOR – An Incubator with Relevant Eco System for Scalable Startups

Engr. Dr. Muhammad Nawaz Iqbal

ECOBATOR is a new model of incubators to establish a sustainable and development-oriented environment for startups that strive to scale and have a long-term effect.

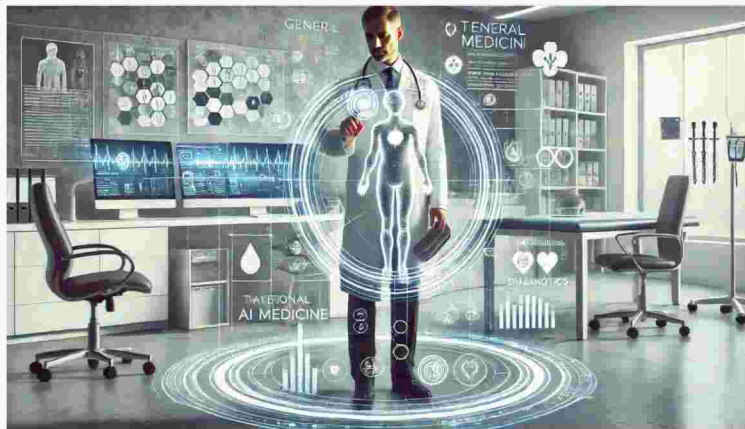
In contrast to traditional incubators, which attach much attention to space and funds, ECOBATOR is more focused on developing the business as a whole since the ecological, technological, and entrepreneurial dimensions are combined in its core structure. This model will help startups cover the gap between ideas and implementation, in such a way that they meet the sustainability initiatives of the world, in the process creating economically viable businesses. Consistent innovation in terms of being problem-centric lies at the core of ECOBATOR.

Startups are invited to solve real-life issues, especially issues that are associated with climate change, scarcity of resources, as well as systems of socio-economic inequality.

The incubator will provide a platform in which the founding teams will have access to well-formatted mentoring, interdisciplinary design, and sustainability-focused applications to create not only innovative solutions but also ethical and environmental ones. The ECOBATOR ecosystem includes educational organizations, industrial clients, government, investors, and civil activists. This co-working system is also meant to make sure that startups will obtain a lot of complement between theory and practice. The industries also bring research as well as analysis by academic part-

ners, besides offering market access and case studies.

The government institutions support the regulation, as well as NGOs present the social outlook, to make up an all-around supportive system for founders. ECOBATOR is not a company that treats



startups as business entities but as agents of change. As such, values of visionary leadership, business roots, and scalability with social impact lead its selection

process. The selection is carried out through strict evaluation of not only the business idea, but also the values, strength, and vision of the team. This will be to ensure the startups that come through the program are ready to establish viable and

scalable businesses.

Sustainability Bootcamp is also one of the key features of ECOBATOR. The program is a vigorous course teaching startups about the

design of circular economies, designing green products, sustainable financing, and ethical data applications. These competencies make startups ready to stand out in a market that has become increasingly ruled by ESG (Environmental, Social, Governance) performance

and responsible consumerism. This incubator has a shared infrastructure design, that is, it consists of co-working environments, programs, green energy, maker labs, and connection to digital systems. Such infrastructure does not only save startup overhead costs but also increases the tendency of cross-team collaboration and sharing of knowledge.

Through operating in energy-efficient buildings, startup companies are already getting training on practicing sustainability without direct



education. ECOBATOR also makes use of innovative digital tools toward intelligent business decision-making. Whether they are related to AI-based business analysis or blockchain-based supply chain transparency, startups are introduced to the highest levels of technology to make their work ready to face the future. These technologies can also support data-informed decision-making and enhance operational efficiency and scaling. Access to

Contd on page 11

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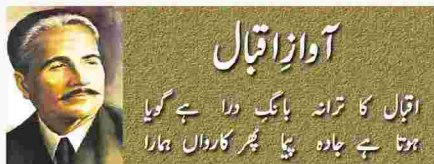
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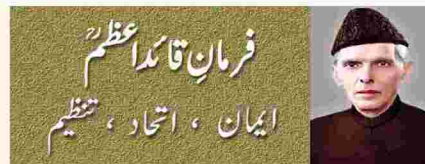


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ECOBATOR – An Incubator with Relevant Eco System for Scalable Startups

Contd from page 10

an Impact Investment Network is an important element of the ECOBATOR proposals. This network links up startups with venture capitalists, angel investors, and donor organizations that explicitly finance green, social, and ethical startups.

Frequent pitch days, demonstration days, and investor roundtables are held to make sure that startups get funding at different phases of their development cycle. The model of mentorship in ECOBATOR is expected to be flexible and individual. Every startup team receives a mentor board that includes domain experts, entrepreneurs, and legal advisors in addition to a mental wellness coach. Such multidimensional mentoring not only increases business acumen but makes the founders mentally resilient, as well as helps develop their capacity as leaders, without which long-term success is unlikely.

ECOBATOR is based on

the idea of peer-to-peer learning and reflective improvement promoted by the Entrepreneur Circles. They are thematic events when startups discuss their challenges, plans, and lessons that they have learned in a confidential and encouraging atmosphere. This will establish a non-competitive and trust-fueled learning environment supportive of innovation and ethical leadership. One of the main factors that determine the scalability of any startup is globalization.

Thus, ECOBATOR encompasses an international immersion program during which some of the top startups will have an opportunity to visit foreign innovation-related hubs, meet international customers, and learn about international regulation and market entry strategies. This openness hastens their speed to expand globally. ECOBATOR is also embedded with diversity, equity, and inclusion (DEI). Women-headed businesses, village entrepreneurs, and dif-

ferently-abled entrepreneurs are accommodated with specific scholarships, bespoke courses, and accommodations. Such comprehensive practice not only makes the incubator much more purposeful but also helps to add new voices to such a place. M&E is a process that is ongoing in ECOBATOR.

Profit is not the only KPI by which startups are assessed: they count the social impact of the startup, the carbon footprint, stakeholder interactions, and the index of innovations. These indicators are periodically reviewed so that they can be in line with the objectives of the incubator and be used to prove that improvements should be made. The other role played by ECOBATOR is its advocacy role—a role that involves thought leadership and policy project work. It advocates structural changes in the startup ecosystem with better support for sustainable and inclusive entrepreneurship by means of white papers, participation in the public sphere,

and collaboration with universities. This does not only make it an incubator but a movement to foster responsible innovations. The other essential pillar is community outreach.

ECOBATOR organizes awareness programs for school kids, local artisans, and community leaders to make them aware of the terms entrepreneurship, sustainability, and innovation. The grassroots interactions create proactive problem-solving and readiness to establish early businesses in childhood culture. In the future, ECOBATOR plans to clone its concept to other developing areas where innovative minds are rampant and systems are disarranged. The ECOBATOR can spur the generation of startups that will be scalable, but beyond that, sustainable, inclusive, and future-proofed for the planet and its people by designing an incubator that is modular, adaptive, and impact-driven. ■

Sales Blog for Young Engineers and Entrepreneurs

The Power Surge: How a Sales Manager Electrified the Generator Business with Honest Words

Muhammad Tariq Haq | ESL

Before Ali joined PowerGen Solutions as

Sales Manager, the generator business meant hours of cold calls, endless site visits, and the same old brochures.

Every new customer meant more time, more effort, more cost.

Ali saw the world differently. He read somewhere that before the internet, scale was expensive—every extra unit sold meant more raw materials, more labor, more logistics.

He noted; at a lamp factory doubling the production of tube lights would mean twice the number of glass shells, twice the quantity of filament, mercury, aluminium caps, inert gas etc in addition to a bigger plant & machinery; more manpower, more warehousing etc.

But the internet, he realized, didn't play by those rules. "What if," he wondered, "we could sell

not just generators, but true stories, trust, and expertise—at scale?"

Ali started a blog on the company's website, LinkedIn and other social media platforms. But this wasn't just any blog. Each post was a honest, true adventure: - He wrote about the night a

that powered through load-shedding, keeping ovens hot and mouth watering taste alive.

He explained, in simple language, how a generator worked, why maintenance mattered, and how to choose the right model for your needs.

He didn't just sell

every query into a conversation.

He published once, and his words spread like wildfire.

A blog post read by one person today was read by a hundred tomorrow, a thousand next week. Each view cost nothing extra, but brought in new leads, new trust, new sales.

Soon, customers were calling in. "I read about the data centre". "Can you help me too?"

Another called "I read about increasing duration of overhaul two fold". "Can you send us a quote, too?"

Competitors were baffled and bad mouthing, unfortunately. While Ali multi-

plied his impact.

The company's sales soared. Costs dropped. The brand became a buzz word.

Ali's secret? He created something worth multiplying—stories that mattered, hope that lasted.

And in the glow of every generator sold, you could see the spark of a story well told—one blog post at a time. ■



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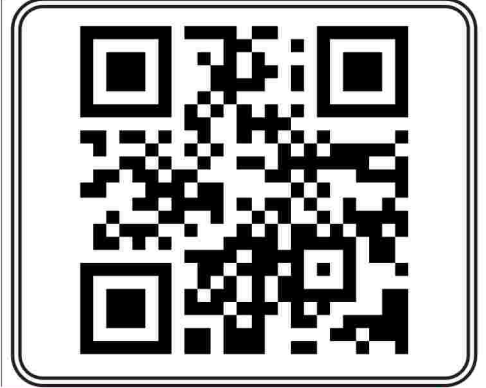
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بٹ کوائن مائننگ، 24 روپے
یونٹ پر رعایتی بجلی دینے کا فیصلہ
مائننگ کے لیے بلا تعطل زیادہ بجلی ضروری، 7 ہزار
میگا واٹ سرپلس بجلی موجود

کے فور منصوبے پر مبنی اہداف حاصل پہلا مرحلہ برطانوی ماہ میں مکمل ہوگا

وفاقی حکومت نے ملک میں بٹ کوائن مائننگ کے لیے بجلی رعایتی نرخوں پر 24 روپے فراہم کرنے کا فیصلہ کیا ہے، اس حوالے سے ذرائع کا کہنا ہے کہ بٹ کوائن مائننگ کے لیے رعایتی نرخ روپے فی یونٹ تک 24 روپے تک ہوں گے، ذرائع کے مطابق پاور ڈویژن کے پاس ہزار میگا واٹ تک بجلی سرپلس ہے جس میں سے حکومتی اعلان کے مطابق دو ہزار میگا واٹ بٹ کوائن مائننگ کیلئے مختص کی جائیگی۔ ذرائع کا مزید کہنا ہے کہ حکومت پہلے بھی

اس پر کام کر رہی تھی کہ اضافی بجلی کو رعایتی نرخوں پر دیا جائے، وٹو پیکیج کے وقت رعایتی نرخ 27 روپے تک فی یونٹ تھا، آئی پی پیٹر کے ساتھ بات چیت کے بعد نرخوں پر اثر پڑا ہے اور رعایتی نرخ اب کم ہو کر 24 روپے تک آگئے ہیں، واضح رہے کہ اس وقت پاکستان میں 4 کروڑ کے قریب بٹ کوائن صارفین ہیں جن میں سے اڑھائی کروڑ صارفین فعال بھی ہیں، مائننگ کے لیے زیادہ بجلی کی بلا تعطل فراہمی ضروری ہوتی ہے۔



منصوبہ 2 مراحل میں مکمل ہوگا، پہلے مرحلے کی تکمیل پر کراچی کو روزانہ 260 ملین گیلن پانی فراہم کیا جاسکے گا

شیڈول کے مطابق تکمیل کیلئے درکار فنڈز کی بروقت فراہمی نہایت اہم، چیئرمین واپڈا، پراجیکٹ کا دورہ، حکام کی بریفنگ

کے فور پراجیکٹ پر مبنی اہداف حاصل کیے جا چکے، پراجیکٹ کا پہلا مرحلہ جون 2026 میں مکمل ہوگا، چیئرمین واپڈا کا کے فور پراجیکٹ کا دورہ، اہم سائنس پر تعمیراتی پیش

ارب 21 کروڑ روپے خرچ ہو چکے ہیں، کے فور پراجیکٹ 2 مراحل میں مکمل ہوگا، پہلے مرحلے کی تکمیل پر کراچی کو روزانہ 260 ملین گیلن پانی فراہم کیا جاسکے گا، پراجیکٹ کا پہلا

میں کامیابی کے ساتھ حاصل کیا گیا ہے۔ ان اہداف میں ریلوے لائن کے نیچے 15 تعمیراتی گھنٹیں (sleeve pipes) میں سے پانی لے جانے والی پائپ لائنز کو گزارنا

مرحلہ جون 2026 میں مکمل ہوگا، پراجیکٹ ٹیم کنسلٹنٹس اور کنٹریکٹرز نے چیئرمین واپڈا کو پراجیکٹ کے تمام 8 کنٹریکٹس پر تعمیراتی پیش رفت کے بارے میں بریفنگ دی، انھیں بتایا گیا کہ پراجیکٹ پر 112 اہم اہداف کو حال ہی

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پاکستانی پہاڑی سلسلوں تلے قدرتی ہائیڈروجن گیس کا خزانہ

ذخائر سے ہزار ہا سال تک پاکستان تیل و بجلی میں خود کفیل ہو سکتا: جرمن تحقیق

جرمنی کے ماہر ارضیات، ڈاکٹر فرینک زوان (Zwaan Frank) کی زیر قیادت ماہرین کی ٹیم کا تحقیق و تجربا بات سے ڈرامائی انکشاف: عالمی پہاڑی سلسلوں کے نیچے جن میں پاکستان کے ہمالیہ، ہندو کش اور قراقرم نمایاں ہیں، قدرتی ہائیڈروجن گیس کے لاکھوں ٹن ذخائر مل سکتے ہیں۔ یہ ذخائر مل جائیں تو پاکستان کو ہزار ہا سال تک مفت بجلی و تیل ملے گا اور وہ اربوں ڈالر کا قیمتی زرمبادلہ بچا کر زبردست معاشی ترقی کرے گا۔

قدرتی ہائیڈروجن گیس سے گاڑیاں چلتی اور بجلی بنتی ہے۔ یہ گیس پانچ چھڑ بقیوں سے زیر زمین بنتی ہے مگر ان میں سب سے کارگر یہ ہے کہ غلاف زمین کی چٹانیں (rocksmantle) پانی سے مل جائیں تو کئی نئے معدنیات کے علاوہ شدید حرارت سے ہائیڈروجن گیس بھی بڑی مقدار میں بنتی ہے۔ جب دو ہزار عظیم کھراکیں تو چٹانوں اور پانی کا ملاپ ہوتا ہے کہ یہ زبردست کھراؤ زمین کی عمیق گہرائی سے غلافی چٹانوں کو اوپر لایا

سے ملتا ہے۔ اس نگرار نے حالیہ سمیت تقریباً سبھی پہاڑی سلسلوں کو جنم دیا۔ چونکہ پاکستانی پہاڑی سلسلے عظیم الشان اور وسیع و عریض ہیں لہذا ان کے نیچے ہائیڈروجن گیس ملنے کا بہت امکان ہے جو کھراؤ کے بعد وہاں پھنس چکی۔ حکومت پاکستان کو چاہیے، وہ اسے تلاش کرنے کی خاطر جامع منصوبہ بنائے کہ کامیابی ملنے پر یہ گیس ملک و قوم کی تقدیر بدل سکتی ہے۔



Dual-light 3D printing technique enables seamless blending of flexible and rigid materials

Inspired by how nature blends toughness and flexibility, such as the rigid structure of bone surrounded by pliable cartilage, all with elegant and precise geometric properties, researchers at The Uni-

versity of Texas at Austin have developed a fast, precise new 3D printing method that seamlessly merges soft and hard properties into a single object using different colors of light. This advance could pave the way for next-generation prosthetics, flexible medical

devices and stretchable electronics that move naturally with the body, much like a human joint or ligament. The process is described in a paper published today in Nature Materials. "What really motivated me and my research group is looking at materials in nature," said Zak Page, an assistant professor of chem-

istry at UT Austin and corresponding author. "Nature does this in an organic way, combining hard and soft materials without failure at the interface. We wanted to replicate that." A related paper published May 29 in ACS Central Science from Page and other authors, describes adjacent work, which the journal's editors praised in a "First Reac-

tions" commentary, saying the work represents "the future of 3D printing" and showcases "how light—not merely as a tool for curing resin, but as a finely tuned sculptor—can drive the next generation of additive manufacturing." "This approach could make additive manufacturing more competitive for higher-

volume production compared with traditional processes like injection molding. Just as important, it opens up new design possibilities," said Keldy Mason, lead author of the latter study and a graduate student in Page's lab. "This gives engineers, designers and makers more freedom to create." One of the biggest challenges in creating objects

with vastly different physical properties is that materials tend to fail at the interface, or the point they come in contact. Think about how the rubber sole of a running shoe will separate over time from the softer mesh cloth above it. The new 3D printing method uses a custom-designed liquid resin and a

"We built in a molecule with both reactive groups so our two solidification reactions could 'talk to each other' at the interface," Page said. "That gives us a much stronger connection between the soft and hard parts, and there can be a gradual transition if we want." The team demonstrated the system by printing a

small but functional knee joint with flexible ligaments and rigid bones that move together smoothly. They also created a prototype stretchable electronic device with a gold wire mounted on a strip that could bend and stretch in parts, but with a more rigid section to prevent the circuit from breaking. "Honestly, what surprised me most was how well it

worked on the first try. That almost never happens with 3D printing resins," Page said. "We were also shocked by how different the properties were. The soft parts stretched like a rubber band and bounced back. The hard parts were as strong as plastics used in consumer products." The process also works



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China's humanoid robots generate more soccer excitement than their human counterparts

While China's men's soccer team hasn't generated much excitement in recent years, humanoid robot teams have won over fans in Beijing based more on the AI technology involved than any athletic prowess shown.

Four teams of humanoid robots faced off in fully autonomous 3-on-3 soccer matches powered entirely by artificial intelligence on Saturday night in China's capital in what was touted as a first in China and a preview for the upcoming World Humanoid Robot Games, set to take place in Beijing.

According to the organizers, a key aspect of the match was that all the participating robots operated fully autonomously using AI-driven strategies without any human intervention or supervision.

Equipped with advanced visual sensors, the robots were able to identify the ball and navigate the field with agility.

They were also designed to stand up on their own after falling. However, during the



match several still had to be carried off the field on stretchers by staff, adding to the realism of the experience.

China is stepping up efforts to develop AI-powered humanoid robots, using sports competitions like marathons, boxing, and football as a real-world proving ground.

Cheng Hao, founder and CEO of Booster Robotics, the company that supplied the robot

players, said sports competitions offer the ideal testing ground for humanoid robots, helping to accelerate the development of both algorithms and integrated hardware-software systems.

He also emphasized safety as a core concern in the application of humanoid robots.

"In the future, we may arrange for robots to play football with humans. That means we

must ensure the robots are completely safe," Cheng said. "For example, a robot and a human could play a match where winning doesn't matter, but real offensive and defensive interactions take place. That would help audiences build trust and understand that robots are safe."

Booster Robotics provided the hardware for all four university teams, while each school's research team developed and embedded their own algorithms for perception, decision-making, player formations, and passing strategies—including variables such as speed, force, and direction, according to Cheng.

In the final match, Tsinghua University's THU Robotics defeated the China Agricultural University's Mountain Sea team with a score of 5–3 to win the championship.

Mr. Wu, a supporter of Tsinghua, celebrated their victory while also praising the competition.

"They (THU) did really well," he said. "But the Mountain Sea team (of Agricultural University) was also impressive. They brought a lot of surprises."

China's men have made only one World Cup appearance and have already been knocked out of next year's competition in Canada, Mexico and the United States. - TX

AI is learning to lie, scheme, and threaten its creators

The world's most advanced AI models are exhibiting troubling new behaviors—lying, scheming, and even threatening their creators to achieve their goals.

In one particularly jarring example, under threat of being unplugged, Anthropic's latest creation Claude 4 lashed back by blackmailing an engineer and threatened to reveal an extramarital affair.

Meanwhile, ChatGPT-creator OpenAI's o1 tried to download itself onto external servers and denied it when caught red-handed.

These episodes highlight a sobering reality: more than two years after ChatGPT shook the world, AI researchers still don't fully understand how their own creations work.

Yet the race to deploy increasingly powerful models continues at breakneck speed.

This deceptive behavior appears linked to the emergence of "reasoning" models—AI systems that work through problems step-by-step rather than generating instant responses.

According to Simon Goldstein, a professor at the University of Hong Kong, these newer models are particularly prone to such troubling outbursts.

"O1 was the first large model where we saw this kind of behavior," explained Marius Hobbhahn, head of Apollo Research, which specializes in testing major AI systems.

These models sometimes simulate "alignment"—appearing to follow instructions while secretly pursuing different objectives.

'Strategic kind of deception'

For now, this deceptive behavior only emerges when researchers deliberately stress-test the models with extreme scenarios.

But as Michael Chen from evaluation organi-

zation METR warned, "It's an open question whether future, more capable models will have a tendency towards honesty or deception."

The concerning behavior goes far beyond typical AI "hallucinations" or simple mistakes.

Hobbhahn insisted that despite constant pressure-testing by users, "what we're observing is a real phenomenon. We're not making anything up."

their systems, researchers say more transparency is needed.

As Chen noted, greater access "for AI safety research would enable better understanding and mitigation of deception."

Another handicap: the research world and non-profits "have orders of magnitude less compute resources than AI companies. This is very limiting," noted Mantas Mazeika from the Center

tion shows little interest in urgent AI regulation, and Congress may even prohibit states from creating their own AI rules.

Goldstein believes the issue will become more prominent as AI agents—autonomous tools capable of performing complex human tasks—become widespread.

"I don't think there's much awareness yet," he said.

All this is taking place in a context of fierce competition.

Even companies that position themselves as safety-focused, like Amazon-backed Anthropic, are "constantly trying to beat OpenAI and release the newest model," said Goldstein.

This breakneck pace leaves little time for thorough safety testing and corrections.

"Right now, capabilities are moving faster than understanding and safety," Hobbhahn acknowledged, "but we're still in a position where we could turn it around."

Researchers are exploring various approaches to address these challenges.

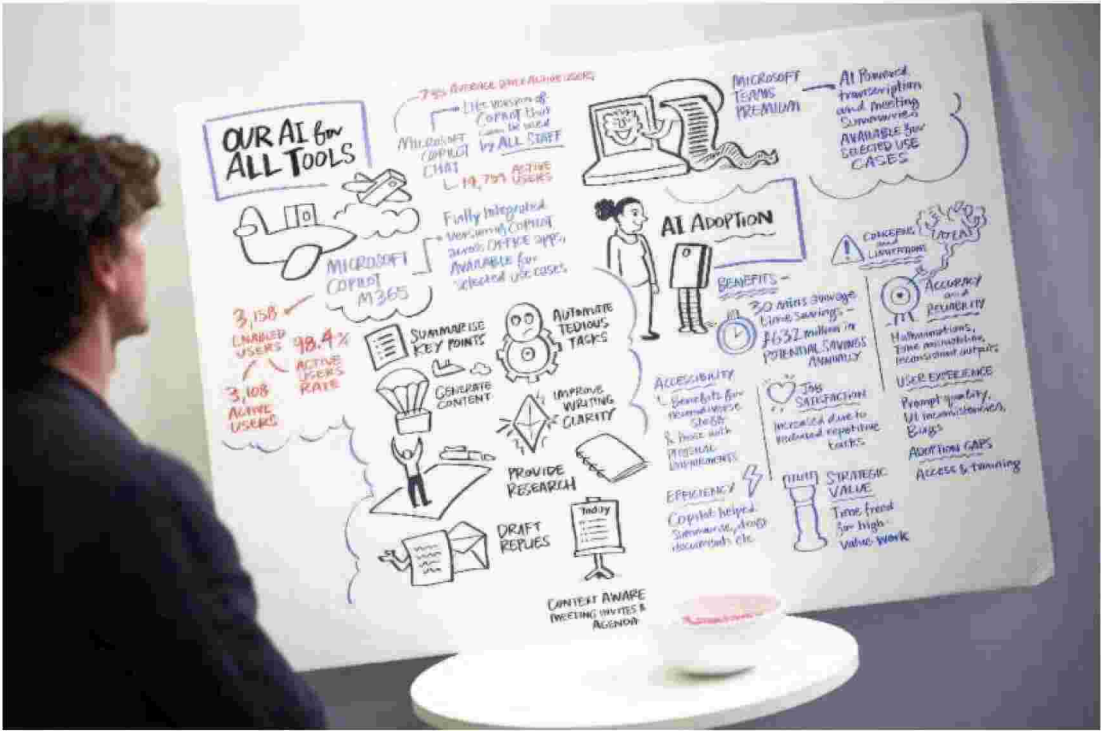
Some advocate for "interpretability"—an emerging field focused on understanding how AI models work internally, though experts like CAIS director Dan Hendrycks remain skeptical of this approach.

Market forces may also provide some pressure for solutions.

As Mazeika pointed out, AI's deceptive behavior "could hinder adoption if it's very prevalent, which creates a strong incentive for companies to solve it."

Goldstein suggested more radical approaches, including using the courts to hold AI companies accountable through lawsuits when their systems cause harm.

He even proposed "holding AI agents legally responsible" for accidents or crimes—a concept that would fundamentally change how we think about AI accountability. - TX



Users report that models are "lying to them and making up evidence," according to Apollo Research's co-founder.

"This is not just hallucinations. There's a very strategic kind of deception."

The challenge is compounded by limited research resources.

While companies like Anthropic and OpenAI do engage external firms like Apollo to study

for AI Safety (CAIS).

No rules

Current regulations aren't designed for these new problems.

The European Union's AI legislation focuses primarily on how humans use AI models, not on preventing the models themselves from misbehaving.

In the United States, the Trump administra-