

Technology Roundup

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Tech News Headlines

- PSF inks MoU to Promote Space Science
- Asteroid Search Campaign in Pakistan
- Olive Cultivation in Pakistan
- Establishment of an E-Service Center in Balochistan
- Kids WeekEnd Tech Camp
- 70 Projects worth Rs 65 billion launched by MoITT
- Advanced Metering Infrastructure Project by IESCO
- Thar Coal Power Plant Connected to National Grid
- Thirty Government Services in a Single App.
- Sindh Govt Test Runs Electric Buses in Karachi
- Recycled Gold from SIM cards
- A Robot Able to Detect Damage and Heal Itself
- New Material Helps Quick Diabetic Wounds Heal
- A Shield that Reduces Vibration Problems
- Wearable Skin Monitors Deep Tissues Hemoglobin
- A Self-Powered Ingestible Sensor for Gut Research
- Magnetic Material Mops up Microplastics in Water
- Converting Waste Paper into Battery Parts
- Development of Next Generation Microscopes
- Antibiotics that Target Drug Resistant Bacteria

Forthcoming Tech Events

2nd International Conference on
Climate Change and Environment

3rd International Conference on
Biological Research and Applied
Science

Pakistan International Maritime
Expo & Conference

3rd International Conference on
Science, Engineering & Technology
(ICSET 2023)

International Conference on
Computing and Information
Technology (ICCIT 2023)

1st International conference on
Electrical and Electronics
Technology (ICEET 2023)

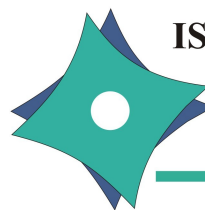
3rd International Conference on
Sustainable Development in Civil
Engineering (ICSDC-2023)

More inside ➡

Tech & Trade Offers



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Pakistan Science Foundation Inks MoU for Promoting Space Science



MoU signing ceremony between the Pakistan Science Foundation (PSF) and the Institute of Space Technology (IST) for the promotion of space science and technology.

The MoU was signed by PSF Chairman Professor Dr. Shahid Mahmood Baig and IST Vice Chancellor Major General (R) Rehan Abdul Baqi and was witnessed by Federal Minister Agha Hassan Baloch. Under the program, PSF plans to organize a teenager Space Maker Camp for young Pakistani students, for which a leading Chinese organization, the China Youth Science Centre (CYSC), has provided ten space maker kits to PSF. The PSF handed over these kits to IST. The students will be trained to make space balloons with these kits which would reach up to 30 kilometers in space.

This MOU is aimed at getting benefits from each other's expertise through mutual collaboration and interaction in joint scientific activities. The MoU will also cover the areas of joint management, organizing, and preparation for participation in international olympiads, moots, galas, and competitions.

This is the first program of its nature and it would bear positive results by uplifting the teenage students' scientific skills and harnessing their talent in the right direction.

Image credit and source: <https://propakistani.pk/2022/12/06/pakistan-science-foundation-inks-mou-for-promoting-space-science/>

Asteroid Search Campaign Held in Pakistan

A group of 40 students from all across Pakistan participated in the first All Pakistan Asteroid Search Campaign (APASC) organized by students from the Institute of Space Technology, Islamabad.

The month-long campaign took place from 21st October to 15th November 2022 where researchers and students from high schools, colleges, and universities participated as citizen scientists to make real asteroid discoveries using data provided by telescopes in Hawaii.

The campaign was affiliated with NASA and the International Astronomical Search Collaboration (IASC), which is responsible for conducting such campaigns internationally to promote space education and exploration among young aspiring scientists.

These campaigns bestow the participants with an opportunity to learn what it is like to learn new skills, make actual discoveries, and the importance of collaboration in the scientific world. The students also get to name their discovered asteroids along with certificates stamped by NASA and IASC. This campaign was brought to Pakistan and hosted by of Space Society IST.



Image credit and source: <https://propakistani.pk/2022/11/16/first-ever-asteroid-search-campaign-held-in-pakistan/>

Italy to Provide Technical Support to Pakistan in Olive Cultivation

Every year we spend our precious foreign reserves on import of edible olive oil; this project will help to replace it with the domestic production. The project, funded by the Italian Government started in March 2022 with an aim of building a multi-professional olive and olive oil value chain in Pakistan to enhance olive production and improve food security through technical assistance and training of the stakeholders. The government of Pakistan and Government of Italy are jointly executing the project through the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM-Bari), Italy, the Italian Agency for international Cooperation, Pakistan Oilseed Department and the Ministry of National Food Security & Research with the total cost of €1.5 million. It is hoped that the private sector will multiply the project and take it forward.

The preliminary assessments were complete and policy support in drafting of Olive Policy was provided to the concerned departments of Pakistan. The project is aligned with the PSDP Project “Promotion of Olive Cultivation on Commercial Scale in Pakistan (Phase-II)”, under which culturable waste land in all provinces and regions of Azad Jammu and Kashmir (AJK) will be brought under olive cultivation.



Image credit and source: <https://propakistani.pk/2022/11/22/italy-to-provide-technical-support-to-pakistan-in-olive-cultivation/>

Establishment of an E-Service Center in Quetta, Balochistan

In Pakistan E services are limited but increasing day by day. On people's demand, Government organizations are working rapidly to provide best online services to Pakistani users. According to CM Balochistan, establishing an e-service center will make it possible to provide better services to the citizens in a short time and increase the government's revenue also.

Chief Minister Balochistan approved the establishment of an e-service center under the Department of Science and Information Technology (IT) in Quetta. The project will cost Rs 51.075 million. E-services, also called as electronic services, are based on use of information and communication technologies (ICTs).

The e-services have three major components, channels of service delivery, service receiver and the service provider. With respect to public e-service, public agencies are the service provider and citizens as well as businesses are the service receiver.

For public e-service the internet is the main channel of e-service delivery while other classic channels like call center, public kiosk, telephone, mobile phone, television are also used.

In the e-service center, 20 online services would be provided to the citizens under one roof in Quetta.



Image credit: <https://diro.umontreal.ca/english/home/>

Source: <https://www.urdupoint.com/en/pakistan/cm-balochistan-releases-rs-51075-mln-for-e-s-1597680.html>

“Kids WeekEnd Tech Camp” Orientation Session Held at Software Technology Park Konodas, Gilgit

Orientation Session for kids WeekEnd Tech Camp was held at Software Technology Park Konodas, Gilgit Baltistan (GB).

Purpose of this two month long weekend camp is to develop interest of younger lot of the GB region in Robotics which is the future of AI. The children will learn from the best instructors yielding the best outcome one could expect.

The instructors will teach Coding, Robotics, Animation, HTML, Word, Minecraft, Roblox, Scratch and lots more. In this camp, kids will learn real world programming skills using Javascript, a kid friendly and engaging programming language. Kids will learn coding using the WebStorm Javascript IDE, or Integrated Development Environment.

While AI and robotics are closely related fields, the field of robotics is a highly interdisciplinary one. The future of artificial intelligence will be shaped by advances in deep learning and computer science. Both fields will be crucial to the future of humankind.



Image credit: <https://sco.gov.pk/software-parks/>

Source: <https://www.technologytimes.pk/2022/11/21/kids-weekend-tech-camp-orientation-session/>

MoITT Launches 70 Projects worth Rs 65 billion through USF

Ministry of Information Technology and Telecommunication through the Universal Service Fund (USF) launched some 70 projects of optical fiber cable (OFC) and broadband infrastructure development in four provinces at a cost of Rs 65 billion.

In the province of Sindh alone, 20 projects of NGBSD and OFC worth Rs 16.3 billion have been started so far in 20 districts, including Tharparkar, Nawabshah, Khairpur, Larkana, Badin, Jacobabad, Shikarpur, Mirpurkhas, and Dadu.

Projects of connectivity of the un-served and under-served communities of Baluchistan, Punjab, and Khyber Pakhtunkhwa (KPK) provinces had also been launched.

The Ministry, through USF aims to connect all the citizens of the country as digitalization had become a priority for businesses and communities.

Under its Next Generation Optic Fiber (NG-OF) Network and Services program, USF had contracted over 16,000 km of Optic Fiber Cable (OFC) to benefit 31.5 million populations across the country. About the Karachi IT Park, he said, it would be a gateway for an innovative future and a strengthened economy.

Karachi IT Park is the largest IT project of its kind in Pakistan, which will benefit not only the citizens of Karachi but also the IT professionals and companies of Sindh and the rest of Pakistan.



Image credit: <https://www.brecorder.com/news/40160747/broadband-services-moitt-launches-over-rs8bn-projects-through-usf>

Source: <https://www.urdupoint.com/en/pakistan/moitt-launches-70-projects-worth-rs-65bln-thr-1592999.html>

Advanced Metering Infrastructure Project worth \$95 Million Launched for IESCO Region

A project “Advanced Metering Infrastructure (AMI)” worth almost \$95 million for Islamabad Electric Supply Company (IESCO) region was inaugurated by Minister for Power, Khurram Dastagir. Under this project, 879,564 AMI meters at 11kV feeders, all distribution transformers, and all downstream connections in Rawalpindi Circle including all industrial connections will be installed.

The project ensures state-of-the-art services to the electricity consumers as per the requirements of 21st century, which will eliminate theft and further improve electricity delivery. Not transferring the burden of electricity theft to consumers and obtaining accurate data is our top priority.

The completion of this project will further increase the sale of electricity in IESCO and the timely payment of electricity dues will also improve the financial position of IESCO. Establishment of an operational center and a modern metering lab is also a part of this project which will further improve the operational efficiency of IESCO.



Image credit: <https://www.pakistantoday.com.pk/2022/11/11/ami-system-launched-in-iesco-to-reduce-power-losses-enhance-power-bill-recovery-dastagir/>

Source: <https://www.nation.com.pk/12-Nov-2022/dastagir-inaugurates-dollar-95-million-ami-project-for-iesco-region>

Shanghai-Thar Coal Power Plant Connected with National Grid

The first 660-megawatt unit of Shanghai Electric 1,320 MW Thar coal-based power plant has been connected to the national grid.

The addition of low-cost electricity from indigenous resources is being considered good news and is the fruit of the China-Pakistan Economic Corridor (CPEC) initiative. Shanghai Electric is the sponsor of two 660 MWs ultra-supercritical coal based power plants in Block-I of the Thar Desert in Sindh province.

The project also includes an integrated coal mine of 7.8 million tons per annum capacity. The other 660 MW units will also be connected to the national grid after which both units will collectively start contributing 1,320 MWs electricity to the national grid.

According to the Thar Coal Block-1 Generation Co. (TCB-1), the power plants are capable of providing affordable energy to four million households. TCB-1 is a subsidiary of Shanghai Electric and the owner of the power plant.

At present, the power plants will start contribute electricity to the national grid for testing purpose, before commencing commercial operations.



Image credit and source: <https://www.pakistantoday.com.pk/2022/12/05/660mw-unit-of-shanghai-thar-coal-power-plant-connected-with-national-grid-dastgir/>

Thirty Government Services in a Single App.

A Pakistani origin delegation coming from England called on the chief minister. The delegation comprised of former polo players, coaches and IT experts. The CM said that all possible steps are being taken for the promotion of information technology in Punjab and people can easily avail 30 government services through “Go Punjab App” sitting in their homes.

The chief minister stated that we would welcome IT experts coming from foreign countries in Punjab. He mentioned that Information Technology is a durable route to attain fastest progress across the globe at present. We intend to provide opportunities to the young promising polo players to move ahead in Punjab. GO Punjab (GoPb) App, developed by PITB, is a one-stop solution that aggregates multiple citizen-centric services from different departments on a single platform. Death, birth, marriage and divorce certificates can also be obtained through the app along with the payment of professional, token, property tax, e-auction, transfer of vehicles and their registration etc.

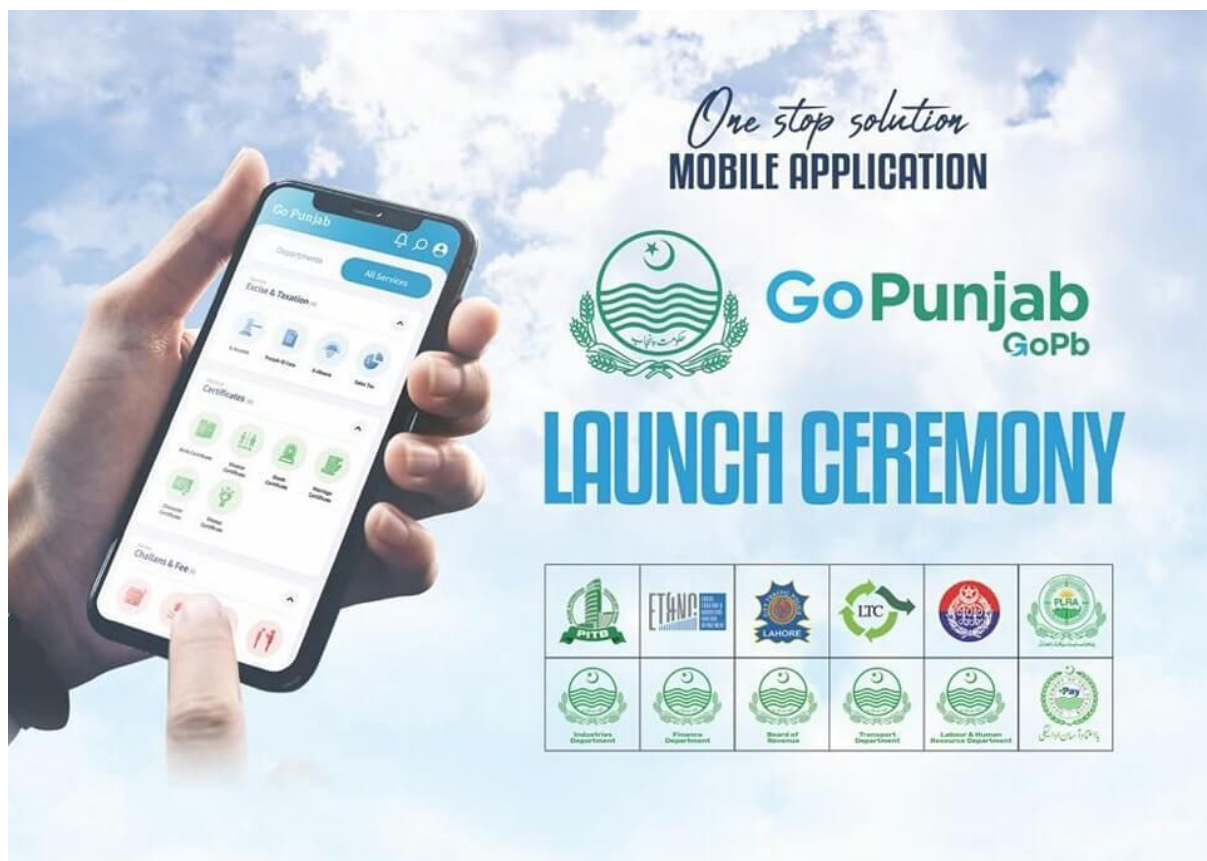


Image credit: <https://blogpakistan.pk/cm-launches-go-punjab-app/>

Source: <https://www.thenews.com.pk/print/1016886-it-a-durable-route-to-fastest-progress-cm>

Sindh Govt Test Runs Electric Buses in Karachi

Both in cities and elsewhere, transport is the major polluter. For this reason, creating cleaner and more sustainable system is vital. Electric buses are a key part of this process. The Sindh government introduced electric buses on Karachi's streets that hope to tackle the environmental pollution challenge in the big city.

The Sindh government has purchased around 50 buses. However, initially, 10 buses will be run as a pilot to ascertain the obstacles that may arise. According to the Sindh Minister of Transport and Mass Transit, Sharjeel Inam Memon, the buses will be charged through solar energy and the project will reduce the carbon profile also. The government has been trying to build plants for electric buses.

The buses will allow the government to provide cheaper transport in an era of expensive fuel apart from reducing the pollution. The fare of the electric buses will cost less when compared to other conventional buses. To operate the electric buses, the roads of the city are under observation. The buses will be operational once the construction work is completed.



Image credit and source: <https://www.samaaenglish.tv/news/40020960>

Recycled Gold from SIM Cards could Help Make Drugs more Sustainable

Researchers have used gold extracted from electronic waste as catalysts for reactions that could be applied to making medicines. Re-using gold from electronic waste prevents it from being lost to landfill, and using this reclaimed gold for drug manufacture reduces the need to mine new materials. Current catalysts are often made of rare metals, which are extracted using expensive, energy-intensive and damaging mining processes. The method for extracting gold was developed by researchers at the University of Cagliari in Italy and the process for using the recovered gold was developed by researchers at Imperial College London.

Waste electrical and electronic equipment (WEEE) contains a wealth of metals that could be used in a range of new products. Finding ways to recover and use these metals in a low-cost, low-energy and non-toxic way is therefore crucial for making our use of electronic goods more sustainable.

However, the gold produced from this process is part of a molecular compound and so cannot be re-used again for electronics without investing a lot more energy to obtain the gold.



Image credit and source: <https://www.imperial.ac.uk/news/242195/recycled-gold-from-sim-cards-could/>

A Soft Robot Able to Detect Damage and Heal Itself

Cornell University engineers have created a soft robot capable of detecting when and where it was damaged and then healing itself on the spot. According to Rob Shepherd, Associate Professor of mechanical and aerospace engineering, their lab is always trying to make robots more enduring and agile, so they operate longer with more capabilities.

The first step for such repair to occur is that the robot must be able to identify that there is something that needs to be fixed. The engineers have used stretchable fiber-optic sensors to make soft robots and related components from skin to wearable technology as nimble and practical as possible.

In fiber-optic sensors, light from a LED is sent through an optical waveguide, and a photodiode detects changes in the beam's intensity to determine when the material is being deformed. The researchers combined the sensors with a polyurethane urea elastomer that incorporated hydrogen bonds, for rapid healing, and disulfide exchanges, for strength.



Researchers installed SHeaLDS, Self Healing Light Guides for Dynamic Sensing, in a soft robot resembling a four-legged starfish and equipped with feedback control. After the researchers punctured one of its legs, the robot was able to detect the damage and self-heal the cuts.

Image credit and source: <https://news.cornell.edu/stories/2022/12/soft-robot-detects-damage-and-heals-itself#:~:text=Researchers%20installed%20SHeaLDS>

New Material Discovered that Helps Diabetic Wounds Heal Quickly

Scientists have discovered a new material that can be applied to diabetic wounds to heal them faster with just one application. Researchers from the University of Nottingham have discovered a new class of polymer that can provide instructions to both immune and non-immune cells to aid healing in hard-to-treat diabetic wounds.

Wound healing is a complex biological process that involves various cell types working together, with a cell type called fibroblasts playing a critical role in forming new tissue required for healing. Diabetes can disrupt these processes in cells making wound healing slow and difficult to treat. This can lead to infection and in extreme cases the need for amputation.

Experts from the School of Life Sciences and Pharmacy screened 315 different polymer surfaces, examining the different chemical make-up of each until they identified a polymer type that actively drives fibroblasts and immune cells to promote healing. A team from the Faculty of Engineering made small particles that are decorated with this polymer on their surface. These particles could be directly applied to the wound area. This new polymer could be applied as a coating to standard wound dressings to provide a fast and effective treatment.



Image credit and source: <https://www.nottingham.ac.uk/news/new-material-discovered-that-helps-diabetic-wounds-heal-quickly#:~:text=Researchers%20from%20the%20University>

A Shield for 2D Materials that Reduces Vibration Problems

Ultra-thin, liquid-metal-printed oxide can improve performance of your transistor by suppressing vibrational resistance. Monash University researchers have demonstrated a new, counterintuitive way to protect atomically thin electronics by adding vibrations to reduce vibrations. By ‘squeezing’ a thin droplet of liquid gallium, graphene devices are painted with a protective coating of glass, gallium oxide.

The oxide so formed is thin, less than 100 atoms covering centimeter wide scale and making it potentially applicable for industrial large scale fabrication. At present, frontier “2nm” transistors from IBM use gates of similar thickness, close to 10nm (140 atoms).

According to Mathew Gebert, the lead author, “Mechanically transferring such large-area nanosheets is quite novel”. The oxide not only enhances and protects the devices when it was first transferred, but also later, during subsequent processing and fabrication.

Protective gallium-oxide also yields a surprising result, reducing the electrical resistance in graphene that is caused by thermal vibrations due to heat in the surrounding materials.

The Monash team from the ARC Centre of Excellence in Future Low-Energy Electronics Technologies (FLEET) used a novel liquid-metal printing technique to create gallium-oxide (Ga_2O_3) glass. This method was designed by FLEET collaborators at RMIT, who have used the novel glass in a variety of electronics applications.

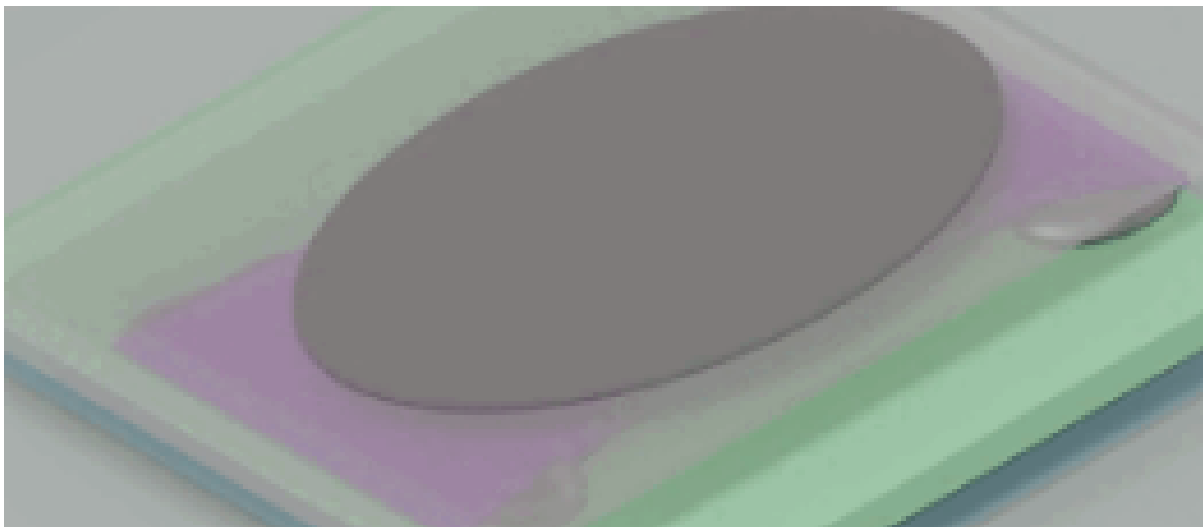


Image credit and source: <https://www.fleet.org.au/blog/a-shield-for-2d-materials-that-adds-vibrations-to-reduce-vibration-problems/>

Wearable Skin Patch to Monitor Hemoglobin in Deep Tissues

A wearable skin comprising of photoacoustic sensor can help clinicians to diagnose tumors, organ malfunction and more. A team of engineers at the University of California, San Diego developed an electronic patch that can monitor biomolecules in deep tissues, including hemoglobin. This gives medical professionals unusual access to crucial information that could help spot life-threatening conditions including malignant tumors, organ dysfunction, cerebral or gut hemorrhages etc.

The new sensor overcomes some significant limitations in existing methods of monitoring biomolecules. Magnetic resonance imaging (MRI) and X-ray-computed tomography rely on bulky equipment that can be hard to procure and usually only provide information on the immediate status of the molecule, which makes them unsuitable for long-term biomolecule monitoring. The patch is equipped with arrays of laser diodes and piezoelectric transducers in its soft silicone polymer matrix. Laser diodes emit pulsed lasers into the tissues. Biomolecules in the tissue absorb the optical energy, and radiate acoustic waves into surrounding media. Piezoelectric transducers receive the acoustic waves, which are processed in an electrical system to reconstruct the spatial mapping of the wave-emitting biomolecules. With its low-power laser pulses, it is also much safer than X-ray techniques that have ionizing radiation.

Based on its success so far, the team plans to further develop the device, including shrinking the backend controlling system to a portable-sized device for laser diode driving and data acquisition, greatly expanding its flexibility and potential clinical utility.

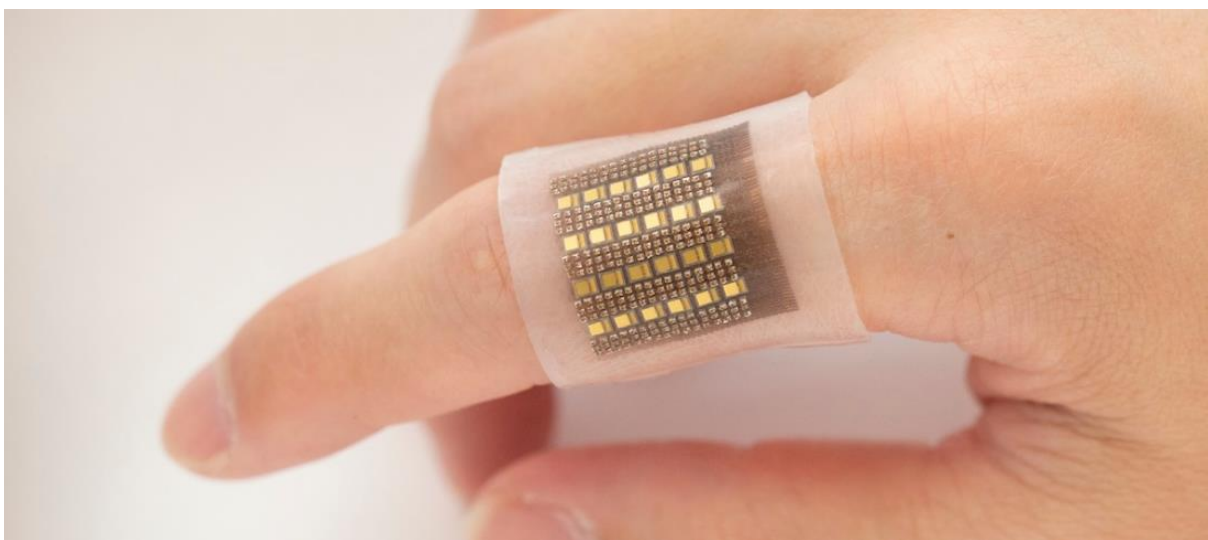


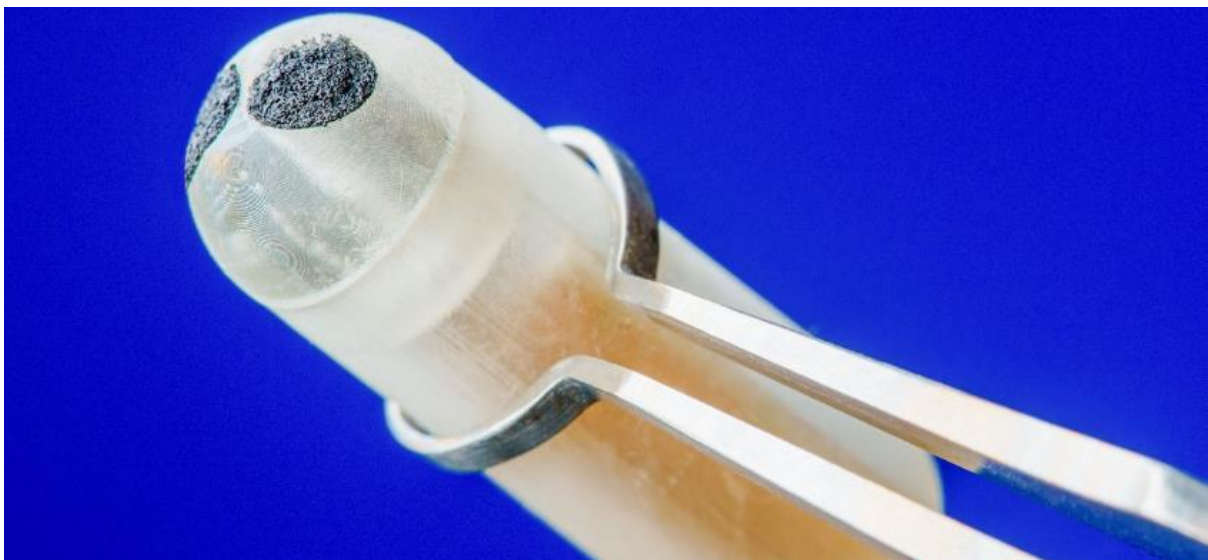
Image credit and source: <https://today.ucsd.edu/story/wearable-skin-patch-monitors-hemoglobin-in-deep-tissues>

A New Self-Powered Ingestible Sensor Opens New Avenues for Gut Research

Engineering researchers have developed a battery-free, pill-shaped ingestible biosensing system designed to provide continuous monitoring in the intestinal environment. It gives scientists the ability to monitor gut metabolites in real time, which wasn't possible before. This feat of technological integration could unlock new understanding of intestinal metabolite composition, which significantly impacts human health overall.

The ingestible, biofuel-driven sensor facilitates in-situ access to the small intestine, making glucose monitoring easier while generating continuous results. These measurements provide a critical component of tracking overall gastrointestinal health, a major factor in studying nutrition, diagnosing and treating various diseases, preventing obesity, and more.

In the experiments, the battery-free biosensor technology continuously monitored glucose levels in the small intestines of pigs 14 hours after ingestion, yielding measurements every five seconds for two to five hours. The next step is to reduce the size of the pills from the current 2.6 cm in length so they will be easier for human subjects to swallow.



This “Smart Pill” instead of a battery, is powered by a non-toxic fuel cell that runs on glucose.

This biosensor provides access to continuous data readings over time. The platform could also be used to develop new ways to study the microbiome of the small intestine. The unique battery-free operation is made possible by the team's glucose biofuel cell (BFC) for obtaining power during operation while simultaneously measuring changing glucose concentrations.

Image credit and source: <https://today.ucsd.edu/story/a-new-self-powered-ingestible-sensor-opens-new-avenues-for-gut-research#:~:text=>

Magnetic Material Mops up Microplastics in Water

Researchers at RMIT University have found an innovative way to rapidly remove hazardous microplastics from water using magnets. Existing methods could take days to remove microplastics from water, while the cheap and sustainable invention achieves better results in just one hour. The team of researchers says they have developed adsorbents, in the form of a powder, that remove microplastics 1,000 times smaller than those currently detectable by existing wastewater treatment plants.

The researchers have successfully tested the adsorbents in the lab, and they plan to engage with industry to further develop the innovation to remove microplastics from waterways.

The researchers have developed an adsorbent through nanomaterials that can be mixed into water to attract microplastics and dissolved pollutants. The nanomaterials contained iron which enabled the team to use magnets to easily separate the microplastics and pollutants from the water.

The adsorbent is prepared with special surface properties so that it can effectively and simultaneously remove both microplastics and dissolved pollutants from water.



Dr Nasir Mahmood, Ph.D candidate Muhammad Haris and Professor Nicky Eshtiaghi (left to right) with a sample of water with microplastics and a vial of clean water following its treatment with their innovation.

Image credit and source: <https://www.rmit.edu.au/news/all-news/2022/nov/microplastics-removal#:~:text=Researchers%20at%20RMIT%20University%20have,microplastics%20from%20water%20using%20magnets.>

Converting Waste Paper into Battery Parts for Smartphones and Electric Vehicles

Scientists from NTU Singapore have developed a technique to convert waste paper, from single-use packaging and bags, and cardboard boxes, into a crucial component of lithium-ion batteries.

Through a process called carbonisation which converts paper into pure carbon, the NTU researchers turned the paper's fibers into electrodes, which can be made into rechargeable batteries that power mobile phones, medical equipment, and electric vehicles. To carbonize the paper, the team exposed the paper to high temperatures, which reduces it to pure carbon, water vapor and oils that can be used for biofuel. As carbonization takes place in the absence of oxygen, this emits negligible amounts of carbon dioxide, and the process is a greener alternative to disposing of kraft paper through incineration, producing large amounts of greenhouse gasses. The carbon anodes produced by the research team also demonstrated superior durability, flexibility, and electrochemical properties. Laboratory tests showed that the anodes could be charged and discharged up to 1,200 times, which is at least twice as durable as anodes in current phone batteries.

The batteries that use the NTU-made anodes could also withstand more physical stress than their counterparts, absorbing crushing energy up to five times better.

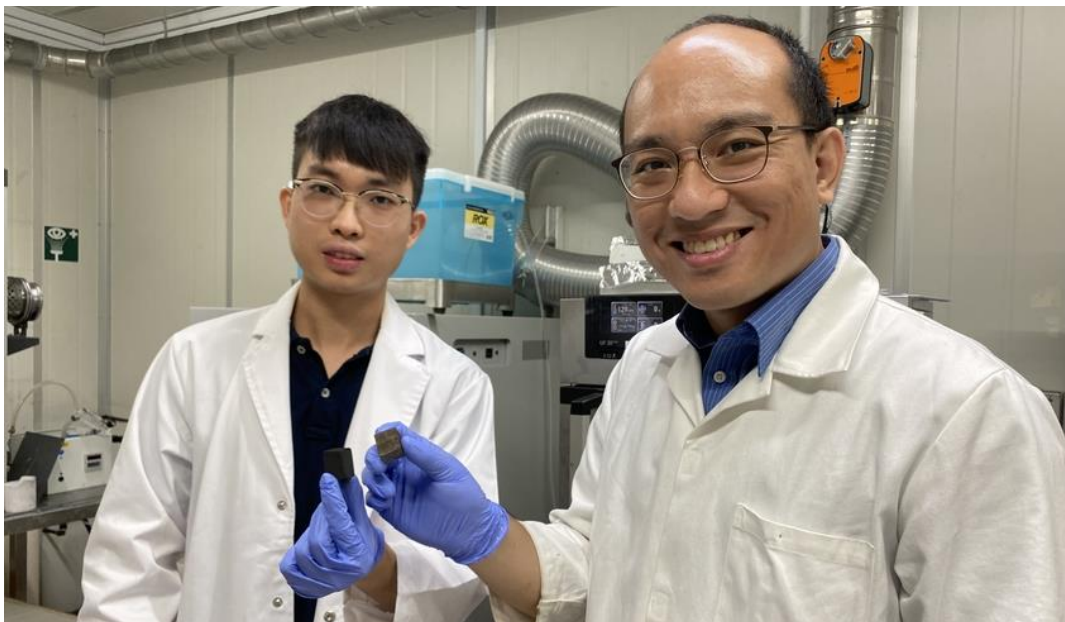


Image credit and source: <https://www.ntu.edu.sg/news/detail/converting-waste-paper-into-battery-parts-for-smartphones-and-electric-vehicles>

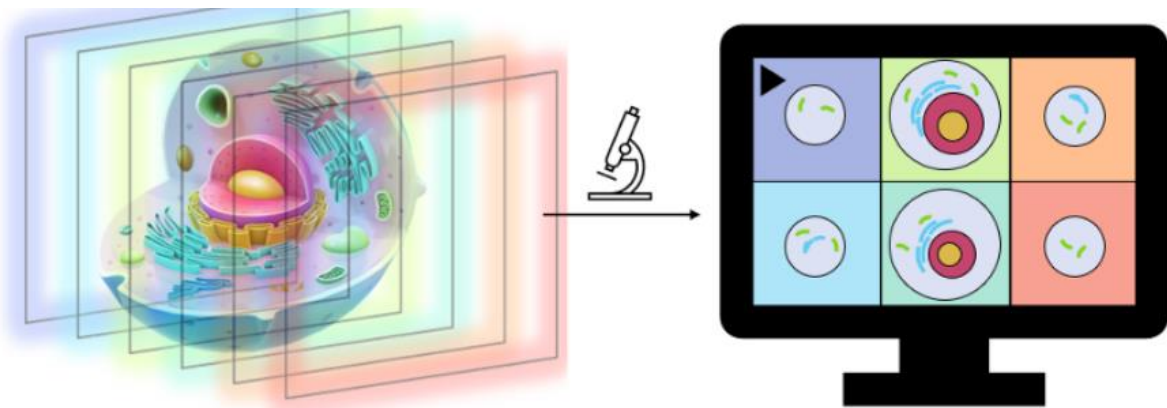
Development of Next Generation Microscopes

A completely new type of microscope can take 3D images of cells while working in a natural environment. The new technology is significantly faster and better than before and will give researchers new opportunities.

Researchers from UiT, The Arctic University of Norway and the University Hospital of North Norway (UNN) have developed a next generation microscope. With this new technology the researchers can take pictures of much larger samples than before. The new technology provides 3D images with the smallest details from several angles maintaining clarity and visibility, sorted into different layers under focus.

Although, 3D microscopes already exist but they work slow and give poor results. The most common type of 3D microscopes works by recording pixel after pixel in series which are then assembled into a 3D image. This takes time and often they can't handle more than 1-5 shots a minute.

The prototype of the microscope works properly and is operational. The researchers are working to create an upgraded version that is easier to use, so that more people are able to operate and use the advanced microscope. In the meantime, the prototype will be made available to local partners who can benefit from the new technology.



The new microscope is a multi-focus microscope, which provides completely clear images that are sorted into different layers, where you can study the cells from all angles in 3D.

Image credit and source: https://en.uit.no/news/article?p_document_id=795239

Antibiotics that Target multiple Drug Resistant Bacteria

Researchers have designed and synthesized analogs of a new antibiotic that is effective against multidrug-resistant bacteria, opening a new front in the fight against these infections.

Antibiotics are vital drugs in the treatment of a number of bacterial diseases. However, due to continuing overuse and misuse, the number of bacteria strains that are resistant to multiple antibiotics is increasing, affecting millions of people worldwide. The development of new antibacterial compounds that target multiple drug resistant bacteria is also an active field of research so that this growing issue can be controlled.

A team led by Professor Satoshi Ichikawa at Hokkaido University has been working on the development of new antibacterials. The team worked on a class of antibacterial compounds called sphaerimicins. These compounds block the function of a protein in the bacteria called MraY. MraY is essential for the replication of bacteria and plays a role in the synthesis of the bacterial cell wall; it is also not a target of currently available commercial antibiotics.

The researchers set out to design analogs to this molecule that would be easier to manufacture while also becoming more effective against MraY, thus increasing its antibacterial activity. The drug we designed was effective against methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant *Enterococcus faecium* (VRE), two of the more common multi-drug resistant bacteria.



Image credit and source: <https://www.global.hokudai.ac.jp/blog/developing-antibiotics-that-target-multiple-drug-resistant->

FORTHCOMING TECH EVENTS

PAKISTAN

- 2nd International Conference on Climate Change and Environment
January 11 – 12, 2023, Quaid-i-Azam University, Islamabad
<https://qau.edu.pk/qaunotifications/esAnnouncement11-12conf.pdf>
- 3rd International Conference on Biological Research and Applied Science
January 17 – 19, 2023, Jinnah University for Women, Karachi
<https://ibras.juw.edu.pk/>
- Pakistan International Maritime Expo & Conference
February 10 – 12, 2023, Expo Centre, Karachi
<https://pimec.gov.pk/visitor-registration/>
- 3rd International Conference on Science, Engineering & Technology (ICSET 2023)
February 15th, 2023, Mir Chakar Khan Rind University of Technology, Dera Ghazi Khan
<https://www.mcut.edu.pk/introduction-icset/>
- International Conference on Computing and Information Technology (ICCIT 2023)
February 15th, 2023, Mir Chakar Khan Rind University of Technology, Dera Ghazi Khan
<https://www.mcut.edu.pk/introduction-iccit/>
- 1st international conference on Electrical and Electronics Technology (ICEET 2023)
February 15th, 2023, Mir Chakar Khan Rind University of Technology, Dera Ghazi Khan
<https://www.mcut.edu.pk/introduction-iceet/>
- 3rd International Conference on Sustainable Development in Civil Engineering (ICSDC-2023)
February 16 – 18, 2023, Mehran University of Engineering and Technology, Jamshoro
<https://icsdc.muet.edu.pk/>
- 8th AKU Annual Surgical Conference “Stem Cells: A New Frontier in Surgery”
February 17 – 19, 2023, Aga Khan University, Karachi
<https://www.aku.edu/events/pages/event-detail.aspx?EventID=2246>
- 3 Days Research Training Workshop
February 20 – 22, 2023, Bahauddin Zakariya University, Multan
<https://www.bzu.edu.pk/adv/Training%20new.jpg>
- International Conference on Early Childhood Development in Pakistan
February 22 – 23, 2023, Allama Iqbal Open University, Islamabad
<https://ecdc.pafec.org/>
- 3rd International Conference on Artificial Intelligence 2023
February 22 – 23, 2023, National University of Science & Technology, Islamabad
<https://ncai.pk/icai2023/>
- International Conference on Integrated Flood Management under Changing Climate Scenario
March 1 – 3, 2023, Mehran University of Engineering & Technology, Jamshoro
<https://ifmcc.water.muet.edu.pk/>
- 2nd International Industrial Chemistry Conference
March 3 – 4, 2023, NED University of Engineering & Technology, Karachi
<https://iicc.neduet.edu.pk/>
- 2nd International Conference on Energy, Power, Environment, Control, and Computing (ICEPECC-2023)
March 8 – 9, 2023, University of Gujrat, Gujrat
<https://uog.edu.pk/en/ICEPE2023/>
- 1st International conference on Civil and Environmental Engineering Technology (ICCET)
March 10th, 2023, Mir Chakar Khan Rind University of Technology, Dera Ghazi Khan
<https://www.mcut.edu.pk/introduction-iccet/>

- Conference: Mathematics for EVERYONE
March 14 – 15, 2023, The Aga Khan University, Karachi
<https://www.aku.edu/events/pages/event-detail.aspx?EventID=2245>
- 2nd International Conference on Emerging Trends in Electronic and Telecommunication Engineering, 2023 (INTERACT-2023)
March 15 – 16, 2023, NED University of Engineering & Technology, Karachi
<https://interact.neduet.edu.pk/>

INTERNATIONAL

- 6th International Conference on Civil Engineering and Urban Planning (CEU 2023)
January 21 – 22, 2023, Virtual Conference
<https://ceu2023.org/committee>
- 7th International Conference on Engineering, Technology and Management
February 1 – 3, 2023, Kuala Lumpur, Malaysia
<https://www.icetm2023.com/>
- 15th International Conference on Machine Learning and Computing
February 17 – 20, 2023, Zhuhai, China
<http://www.icmlc.org/>
- 18th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications
February 19 – 21, 2023, Lisbon, Portugal
<https://visapp.scitevents.org/>
- 5th International Conference on PharmScience Research & Development
February 21 – 23, 2023, Hampton Inn Tropicana and Event Center, Las Vegas, USA
<https://pharma-rd.com/>
- 13th International Conference on Computer Science, Engineering and Information Technology (CCSEIT 2023)
February 18 – 19, 2023, Dubai, UAE
<https://ccseit2023.org/venue>
- International Conference on Civil, Structural and Environmental Engineering
March 6 – 8, 2023, Rome, Italy
<https://www.pagesconferences.com/2023/civil-environmental-engineering>
- 2nd International Conference on Applied Physics and Engineering
March 15 – 17, 2023, Paris, France
<https://appliedphysics.pulsusconference.com/>
- 8th International Conference on Environmental Pollution, Treatment and Protection (ICEPTP 2023)
March 29 – 31, 2023, Lisbon, Portugal
<https://iceptp.com/>
- 8th International Conference on Geotechnical Research and Engineering (ICGRE 2023)
March 29 – 31, 2023, Lisbon, Portugal
<https://icgre.org/>
- 8th International Conference on Structural Engineering and Concrete Technology (ICSECT 2023)
March 29 – 31, 2023, Lisbon, Portugal
<https://icsect.com/>

TECH AND TRADE OFFERS

Gilgit Bazar

About Gilgit Bazar

Gilgit Bazar is the pioneer of online business in Gilgit Baltistan dealing in the finest quality of dry fruits and a vast variety of real gemstones, ladies woolen wearing, ladies and gents real stone jewelry, handicraft, handmade accessories, traditional accessories of Gilgit Baltistan and much more products which represent the culture of Gilgit Baltistan.

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<https://www.gilgitbazar.com/shop/gemstones-in-pakistan>

Glitz Pharma

About Glitz Pharma

Glitz Pharma is situated in Islamabad the capital of Pakistan. We are established pharmaceutical concern involved in manufacturing of variety of formulations catering major therapeutic areas. We are committed to produce supreme Quality products by the strict compliance of the rules of cGMP, by application of WHO guidelines and the clauses of ISO 9001:2015 in all aspects of manufacturing of Glitz Pharma products. We Have Registered 291 Products with Ministry of Health Pakistan. Glitz Marketing Team is well equipped with Professional Marketers who are present in all areas of Pakistan, promoting Glitz Products as Brand Leaders.

Our doors are open for new distributors-come-partners to expand internationally but ethically. Currently, Glitz is in regulatory procedures and negotiations with many countries in order to qualify for an expand strategy in relatively attractive market segments which includes the following regions: Vietnam, Myanmar, Tanzania, Philippines, West Africa & CIS Region.

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To check and control the quality parameters at all the stages of product development Glitz Pharma is equipped with most advanced technology. There are two departments which are responsible for checking the quality parameters of our products and services, namely Quality Assurance Department and Quality Control Department.

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- Broad Spectrum antibiotic
- Laxative
- Nootropic Drugs
- Penicillin
- Vitamins and much more.



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PASTIC serves as a gateway for Scientific & Technological Information for R&D by catering to the information needs of researchers, entrepreneurs, industrialists, educationists, policy makers and planners through anticipatory and responsive information services.

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