



Newsletter

PAKISTAN ACADEMY OF SCIENCES

Promoting Science, Technology and Innovation for Socio-economic Development

**“Hybrid Seminar on Emerging Health Technologies” Jointly Organized
by Pakistan Academy of Sciences and the Aga Khan University in
Islamabad (June 15, 2026)**

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The Pakistan Academy of Sciences (PAS), Islamabad and The Aga Khan University (AKU), Karachi jointly organized a Hybrid Seminar on “Emerging Health Technologies” on Monday June 15, 2026 at the A.Q. Khan Auditorium of the Academy in Islamabad. The main objective of the event was to promote health sciences education and research, and contribute to developing a regulatory framework for National Health Plan.

Over 85 scientists, academicians, medical practitioners, and scholars from various Universities (Quaid-i-Azam University, Aga Khan University, NUST, Riphah International University, City University, Islamabad Medical and Dental College, Virtual University, NUTECH); Healthcare Institutions (Helping Hand Institute of Rehabilitation Sciences, GAK HealthCare International); International Organizations (OIC-COMSTECH, ECOSF), Government Organizations (PSF); R&D Institutions/Organizations (NILOP, PINSTECH, PNRA), Hospitals-Health Institutions & clinical laboratories (Health Science Academy), and NGOS (NAYS) attended the event physically; while over 40 researchers attended the event online.

In his opening address, Dr. Muhammad Wasay (Prof. AKU & Fellow, Pakistan Academy of Sciences) highlighted the distinctive challenges confronting Pakistani population in the domain of health and life sciences and the urgent need to address these challenges through integrated and innovative approaches to ensure sustainable resource management. The expert speakers related to the theme of the seminar included Major General[®] Prof. Muhammad Aslam (VCCity University-Islamabad Medical & Dental College); Prof. Noor Muhammad Butt, Fellow PAS (Chairman PINSAT-Islamabad); Dr. Muhammad Saleem (NILOP/PAEC); Dr. Shahid Mahmood Baig (Dean Health Science Academy-Islamabad); Dr. Sajid Hamed (AKU-Karachi), Prof. Dr. M. Aslam Baig (Secretary General, PAS-Islamabad); and Prof. Dr. Sakandar Rauf (University of The Punjab). Their technical presentations highlighted the role of nano-medicine in health care; evolution of nanotechnology in Pakistan; indigenous development

and applications of clinical lasers in Pakistan; genomic technologies in precision medicines; focused ultrasound in neurological diseases; drugs evaluation using laser breakdown spectroscopy; and, printed wearable ECG electrodes and wireless readout. Shields were distributed among speakers as a token of appreciation.

The event was concluded with the address by the Co-Chair of the Seminar Prof. Dr. Anwar-ul- Hassan Gilani (Fellow PAS) who congratulated the organizers for holding this important seminar and emphasized the need for innovative research in Pakistan in the domain of health/clinical sciences, training and as well as national and international collaboration. The gathering recognized the need and importance to organize another serial seminar on the safety aspects of clinical practices, diagnostics and tools.

A visit of Chinese Delegation from Wuhan Textile University, China to the Pakistan Academy of Sciences (July 8, 2026)



On the invitation of PSF, a 4-member Chinese delegation from the School of Biomedical Engineering, Wuhan Textile University (WTU), People's Republic of China, visited the Pakistan Academy of Sciences (PAS) on July 8, 2026. The delegation was led by Dr. Zhaowei Zhang, Dean; Dr. Zareen Zuhra, Associate Professor; Dr. Tang Yun; and Dr. Wajid Hussain, School of Biomedical Engineering and Health, Wuhan Textile University, China. The main objective of the visit was to interact with relevant researchers, scientists

and academicians, etc., working at esteemed Pakistani Universities and institutions, and to discuss scientific cooperation, collaborative research, academic networking, and future partnerships with a view to having joint collaboration in the promotion of science in future. Chairman PSF, Member Science PSF, PAS Fellows & Officials, PAS Members from Quaid-i-Azam University Islamabad (QAU) participated in discussion with the Chinese delegation in the PAS Video Conference Room.

Scientific Visit of Delegate from Iran to Pakistan Academy of Sciences (July 24, 2026)

✍ On the invitation of Prof. Seyed Komail Taybei, President -ECO Science Foundation (ECOSF)-Islamabad, Ministry of Science & Technology (MoST), a high-level delegation from Iran visited the Secretariat of the Pakistan Academy of Sciences (PAS) on July 24, 2026. The Iranian Delegate included the following officials from Iran

- ✓ Prof. Mehdi Abtahi, Deputy Minister for Research (MSRT),
- ✓ Prof. Mohammad Roshan, Advisor to the Minister
- ✓ Mr. Mahmoud Hojjati, ECO Coordinator at Iran's MoFA,
- ✓ (accompanied the delegates) President ECOSF Prof. Dr. Seyed Komail Taybei

The main objective of the visit was to discuss prospects of collaborative academic and research projects in the domain of science and technology under the umbrella of MoU between Pakistan Academy of Sciences and the Academies of Sciences of the Islamic Republic of Iran as well as at the platform of ECO Science Foundation (ECOSF)-Islamabad. Prof. Dr. Muhammad Aslam Baig, Secretary General-PAS welcomed the delegate at the PAS Podium. He apprised them about the need and motivations behind creation of the Pakistan Academy of Sciences in 1953 and introduced the delegates with the past and current Leadership of the Academy through a pictorial round-up in the Lobby of the Academy Secretariat including the Founding Members of the Academy, Presidents of the Academy, Secretary Generals of the Academy, Foreign Fellows as well as the National Fellows of the Pakistan Academy of Sciences. The formal meeting with the Iranian delegation was held in the Office of the Sec. General PAS. The Sec. General PAS apprised the delegates about the mission and objectives of the Academy and an overview of its level of

engagements and scientific exchange with other Academies of Sciences such as CAS, ANSO, AASSA, NASB, NAST etc. through organization of joint Symposiums, Conferences and Workshops in the domain of S&T. He informed the delegates that the history of S&T collaboration of Pakistan Academy of Sciences (PAS) dates back to July 19, 2016 when PAS signed a MoU with the "Regional Information Centre for Science and Technology (RICEST) Shiraz, Islamic Republic of Iran" which remained valid for a period of 5 Years. Later, PAS signed a MoU with the Academy of Sciences of the Islamic Republic of Iran for Academic, Scientific and Technical Cooperation in September 2022. He also appreciated the recent contacts of PAS with the President-ECOSF in his Office at the Ministry of Science and Technology (MoST) - Islamabad on matters related to Concept Note for Establishing Potential Collaboration Between the Academies of Sciences of the Islamic Republic of Iran and ECO Science Foundation (ECOSF) on Organizing the Summit for ECO Academies of Sciences. Dr. Riffat Mahmood Qureshi, Director Administration-PAS also accompanied the Sec. General PAS in discussions on innovative ideas and future prospects of collaboration with academicians and researchers from Islamic Republic of Iran under the MoU with Iran. The meeting also explored collaborative engagements such as prospects for joint academic and research Programs with Pakistan Academy of Sciences. Prof. Mehdi Abtahi, Deputy Minister for Research (MSRT)-Iran thanked the Secretary General PAS for his heartfelt welcome and productive discussion on prospects of scientific and academic exchange between Pakistan and Iran. The meeting concluded with presentation of Souvenir (PAS Shield) to Prof. Mehdi Abtahi, Deputy Minister for Research (MSRT)-Iran on behalf of Pakistan Academy of Sciences.



PAS Secretary General Delivers Global Master Lecture at Nanjing University of Aeronautics and Astronautics, China

Prof. Dr. M. Aslam Baig (Secretary General, PAS) visited the Nanjing University of Aeronautics and Astronautics (NUAA), China, on the invitation of Prof. Chen Ti, Vice Dean, where he delivered a Global Master Lecture on recent developments in atomic and laser-assisted photoionization measurements. The visit was marked by warm hospitality, particularly from Dr. Muhammad Bilal, who extended excellent arrangements and support during the Secretary General's visit. The lecture, titled "Laser-Assisted Photoionization Cross-Section Measurements from the Excited States of Atoms," was attended by Chinese professors, researchers and academic members. The presentation was highly appreciated by the participating faculty, who expressed keen interest in the research and its potential

applications. Following the lecture, the Chinese professors invited the Secretary General to visit their research and academic facilities. The visit provided an opportunity to observe the university's impressive laboratories and advanced research infrastructure, highlighting the strong academic and scientific capabilities of NUAA. The engagement also provided a valuable platform for strengthening academic and scientific collaboration between Pakistan and China, particularly in the fields of physics, aerospace-related sciences, advanced research and higher education. The visit reflects the growing opportunities for cooperation between Pakistani and Chinese scientific institutions and underscores the importance of international academic exchanges in promoting research and innovation.



Pakistan Academy of Sciences Sponsored a One-day Symposium on Hudiera and 12 Other Wastewater Drains of Lahore, held at Forman Christian College University (FCCU), Lahore

The One-day Symposium on Hudiera and 12 Other Wastewater Drains of Lahore, sponsored by Pakistan Academy of Sciences and organized by the Kauser Abdulla Malik School of Life Sciences (KAM-SLS), the Department of Environmental Sciences, and the Centre of Public Policy & Governance (CPPG) at Forman Christian College University (FCCU) in collaboration with the WWF-Pakistan, the University of Lahore, and the National Institute for Biotechnology and Genetic Engineering (NIBGE). The Symposium brought together the renowned researchers, policymakers, government officials, environmental experts, and industry representatives to address the growing environmental and public health concerns associated with the wastewater pollution in Lahore. The symposium commenced with welcome remarks by Dr. Jonathan Addleton, Rector, FCCU, followed by Dr. Noel Khokhar, Director CPPG, and an introductory address by Prof. Dr. Kauser Abdulla Malik, Professor Emeritus, KAM-

SLS, FCCU, and President of the Pakistan Academy of Sciences. Expert technical sessions featured presentations by Dr. Safee Ullah Chaudhary (LUMS) on the characteristics and environmental impacts of Hudiera pollution, Dr. Muhammad Afzal (NIBGE) on bioremediation through floating wetlands, Mr. Vaqar Zakria (Hagler Bailly Pakistan) on proposed projects for the revitalization of the Ravi River, Dr. Derk Bakker (FCCU) on constructed wetlands as sustainable wastewater treatment solutions, and Dr. Ghulam Zakir Hassan Sial (Punjab Irrigation Department) on the broader challenges posed by Hudiera and Lahore's wastewater drains. The symposium also featured two high-level panel discussions moderated by Mr. Ahmad Rafay Alam, Advocate, and Dr. Shazia Ilyas, Associate Professor, FCCU, focusing on developing actionable roadmaps for wastewater management and enhancing urban water security.

Distinguished panellists included Mr. Zahid Aziz (PMDFC), Prof M. Ashraf (University of Lahore), Engr. Faakhar Raza (PCRWR), Mr. Abid Shah Hussainy (The Urban Unit), Engr. Sohail Ali Naqvi (WWF-Pakistan), and Dr. Saira Afzal (Institute of Public Health). It was followed by an active discussion between the panelists and the participants. The Symposium was also attended by Prof Dr Aslam Baig, Sec. Gen. PAS and Prof. Dr. M. Waheed Akhtar, Secretary,

Lahore Chapter PAS. Through these expert deliberations, the symposium fostered collaboration among academia, government, industry, and civil society, culminating in practical recommendations for evidence-based policymaking, sustainable wastewater management, and the long-term restoration of the Hudaira Drain, the Ravi River, and Lahore's urban water ecosystems.



National Conference on “Function and Services of Ecosystem and Biodiversity” held at University of Shangla (May 05, 2026)

The University of Shangla, in collaboration with the Pakistan Academy of Sciences, successfully hosted a National Conference titled “Function and Services of Ecosystem and Biodiversity” on May 05, 2026. The conference brought together leading academics, researchers, and environmental experts to discuss critical issues related to ecosystem functions, biodiversity conservation, and sustainable environmental practices. The event provided a valuable platform for knowledge exchange and collaborative dialogue aimed at addressing pressing ecological challenges.

The keynote speakers included Prof. Dr. Muhammad Qasim, Pro-Vice Chancellor, University of Swat, Dr. Anwar Zeb Khan Assistant Professor, University of Swat, Dr. Muhammad Nabi, Assistant Professor, University of Shangla, and Dr. Attaur Rahman, Assistant Professor, University of Shangla. The speakers delivered insightful presentations and engaged in discussions on ecosystem services and biodiversity.

Prof. Dr. Sardar Khan (TI), Vice Chancellor of the University of Shangla, served as Chief Organizer of the

conference. His leadership and commitment were instrumental in ensuring the success of the event and fostering meaningful academic engagement. The conference emphasized the importance of preserving biodiversity and highlighted innovative research and policy approaches to sustain ecosystem services. Participants appreciated the opportunity to engage in thoughtful discussions and share their expertise.

The event was formally supported by the Pakistan Academy of Sciences, reaffirming its commitment to promoting scientific research and environmental awareness across the country. At the conclusion of the conference, shields and certificates were distributed among keynote speakers and organizers by the Vice Chancellor in recognition of their contributions.

In his closing remarks, the Vice Chancellor expressed his gratitude to all keynote speakers, faculty members, and students for their active participation and valuable contributions. The University of Shangla continues to strengthen its role as a center for academic excellence and environmental stewardship through such impactful initiatives.



Seminar on “World Environment Day 2026” at University of Shangla (June 09, 2026)

The University of Shangla in collaboration with the Pakistan Academy of Sciences (PAS) organized a seminar to commemorate World Environment Day 2026 under the theme “Inspired by Nature, for Climate, for our Future.” The event brought together faculty members, students, and environmental experts to discuss the critical role of nature in addressing climate change and promoting sustainable development. The seminar was organized by the Department of Environmental Sciences, ORIC, University of Shangla with the support of the Pakistan Academy of Sciences. The keynote speakers included Dr. Ata Ur Rahman, Assistant Professor, and Dr. Muhammad Nabi, Assistant Professor, who highlighted the importance of environmental conservation, climate resilience, and sustainable practices for safeguarding the future of humanity. The Patron-in-Chief and Chief Guest, Prof. Dr. Sardar Khan (TI), Vice Chancellor, University of Shangla, addressed the participants and emphasized the growing environmental challenges faced by society, including pollution, deforestation, biodiversity loss, and climate change. He stressed the need for collective action and environmental responsibility at both individual and institutional levels. Speaking on the significance of the 2026 theme, the speakers noted that the Nature-inspired solutions recognize the central role of ecosystems in combating climate change and underscore that meaningful climate action extends beyond reducing carbon emissions. It requires restoring humanity's relationship with nature and investing in nature-based solutions.

The seminar highlighted several key objectives:

Nature-Based Resilience: Promoting the protection and restoration of ecosystems such as forests, wetlands, and mangroves as effective tools for combating climate change.

Systemic Economic Rethink: Encouraging the development of sustainable economic and social models that balance environmental protection with human progress.

Global Collaboration: Calling upon governments, businesses, scientists, educational institutions, and local communities to work collectively in addressing environmental challenges and mitigating climate-related disasters.

The participants engaged in meaningful discussions on environmental sustainability and explored practical approaches to promoting climate awareness within communities. At the conclusion of the seminar, the Honorable Vice Chancellor expressed his appreciation to the organizers, faculty members, and students for their active participation and commitment to environmental stewardship. He reaffirmed the University of Shangla's dedication to fostering environmental awareness, research, and sustainable practices for a greener and more resilient future.



Seminar on “Narcotic Drugs: Awareness, Control and Prevention” at University of Shangla (June 10, 2026)

The University of Shangla with the financial support of Pakistan Academy of Sciences, organized a seminar on “Narcotic Drugs: Awareness, Control and Prevention” to raise awareness about the harmful effects of drug abuse and promote a healthy, drug free society. The event brought together faculty members, students, and staff to discuss the growing challenges posed by narcotic drugs and the importance of preventive measures.

The Chief Guest, Prof. Dr. Sardar Khan (TI), Vice Chancellor, University of Shangla, addressed the participants and highlighted the significance of awareness, control, and prevention in combating drug abuse. He emphasized the role of educational institutions in guiding youth towards healthy lifestyles and protecting them from the adverse impact of narcotic substances.

The Keynote Speakers, Dr. Faiz Ur Rahman, Assistant Professor, and Dr. Ikram Ullah, Assistant Professor, Institute of Zoological Sciences, University of Shangla, delivered detailed presentations on narcotic drugs, their harmful effects on individuals and society, and effective strategies for prevention and control. They also discussed the causes, consequences, and preventive measures related to drug abuse, while stressing the importance of awareness, counseling, and rehabilitation services.

The seminar aimed to educate students and the wider community about the risks associated with narcotic drug use and to promote informed decision making. The speakers highlighted the collective responsibility of individuals, families, educational institutions, and government agencies in preventing substance abuse and supporting rehabilitation efforts.

As part of the awareness campaign, a walk session was organized under the leadership of the Honorable Vice Chancellor, in which students, faculty members, and staff actively participated to demonstrate their commitment to a drug free society. At the conclusion of the event, certificates were distributed among the keynote speakers and organizers in recognition of their valuable contributions to the seminar.

In his closing remarks, Prof. Dr. Sardar Khan (TI), Vice Chancellor, University of Shangla, thanked the Pakistan Academy of Sciences, keynote speakers, organizers, faculty members, and students for their active participation in the important awareness seminar and appreciated their efforts in promoting a healthier and safer society free from the menace of drugs.



Three-Day International Seminar on “Earth Sciences Pakistan 2026” held in Baragali (June 12-14, 2026)

The Three-Day International Conference on Earth Sciences Pakistan 2026 (ESP-2026) was organized by the National Centre of Excellence in Geology (NCEG), University of Peshawar, from 12–14 June 2026 at the Baragali Summer Campus, University of Peshawar. The conference received financial support from the Pakistan Academy of Sciences (PAS) and the Pakistan Science Foundation (PSF). Prof. Muhammad Qasim Jan, Professor Emiratus and Ex Vice Chancellor of QAU and UOP, Ex President of the PAS was also attended this conference as keynote speaker.

The opening ceremony was graced by Prof. Dr.

Muhammad Akmal, Chairman of the Pakistan Science Foundation (PSF), as the Chief Guest. Prof. Dr. Akram Sheikh, Director General of PASTIC, and Dr. Ghazala Ali Khan, Additional Director (PASTIC–PSF), attended the ceremony as Guests of Honour.

The successful organization of the conference was made possible under the mentorship of Prof. Dr. Liaqat Ali, Director, NCEG, University of Peshawar, while Prof. Dr. Khalid Latif served as the Chief Organizer of ESP-2026. As part of its contribution, PASTIC published the conference proceedings, facilitating the wider dissemination of the research presented during the event.



Professor Jinde Cao (Foreign Fellow, PAS) Elected as a Foreign Member of Polish Academy of Sciences

On 26 June 2026, the List of newly elected foreign members of the Polish Academy of Sciences (Polish: Polska Akademia Nauk, PAN) was announced. Dr. Jinde Cao, Endowed Chair Professor from Southeast University, has been elected. The election is the highest lifetime honors bestowed by the Polish government. Professor Cao has been elected on the basis of his exceptional contributions to science and engineering, and his extensive research collaborations with Polish scientists. Congratulations to Prof. Jinde Cao!

Professor Cao is an Endowed Chair Professor, the Dean of Science Department and the Director of the Research Center for Complex Systems and Network Sciences at Southeast University (SEU). He is also the Director of the National Center for Applied Mathematics at SEU-Jiangsu of China and the Director of the Jiangsu Provincial Key Laboratory of Networked Collective Intelligence of China. He is also Honorable Professor of Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.

Prof. Cao was a recipient of the National Innovation Award of China, Obada Prize and the Highly Cited

Researcher Award in Engineering, Computer Science, and Mathematics by Clarivate Analytics. He is elected as a fellow of IEEE, a member of Russian Academy of Sciences, a member of the Academia Europaea (Academy of Europe), a member of the Polish Academy of Sciences, a member of the European Academy of Sciences and Arts, a member of the Lithuanian Academy of Sciences, a fellow of African Academy of Sciences, and a fellow of Pakistan Academy of Sciences.

The full list of new foreign members of the Polish Academy of Sciences can be found on the website of the Polish Academy of Sciences <https://pan.pl/czlonkowie-zagraniczni-pan-wybrani-podczas-zgromadzenia-ogolnego-akademii/>.

Among the new foreign members are, m.in. Prof. Victor Ambros, molecular biologist from the University of Massachusetts Medical School, winner of the Nobel Prize in Medicine or Physiology for 2024; Prof. Anton Zeilinger, an experimental physicist from the University of Vienna, winner of the Nobel Prize in Physics for 2022; Prof. Artur Ekert from the University of Oxford, one of the pioneers of quantum information theory.

