

Newsletter

PAKISTAN ACADEMY OF SCIENCES

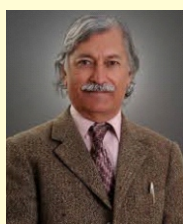
Promoting Science, Technology and Innovation for Socio-economic Development

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Pakistan is facing a second coronavirus wave, with authorities urging the public to follow health guidelines.

Pakistan Academy of Sciences, Sindh Chapter Organized a Web-based Seminar on "COVID-19: 2020 and Beyond" (September 5, 2020)



Prof. Dr. Qasim Jan



Dr. Ejaz Shafi Gilani



Maj. Gen. Aamer Ikram



Prof. Dr. Faisal Mehmood



Dr. Mohammad Wasay



Prof. Dr. M. Aslam Baig



Dr. Rabia Hassan



Prof. Dr. Zulfiqar A. Bhutta



Prof. Dr. Faisal Sultan



Prof. Dr. Iqbal Afridi



Prof. Dr. Iqbal Chaudhary



Prof. Dr. Khalid M. Khan

Pakistan Academy (PAS) of Sciences (Sindh Chapter) and LEJ National Science Information Center, International Center for Chemical and Biological Sciences (ICCBS), University of Karachi jointly organized a web-based seminar on September 5, 2020 to discuss the impact of previous and current pandemics in human history. The discussion was also carried out on impact of COVID-19 on mental health, and economic.

This webinar was held as the initiative of Prof. Dr. Mohammad Wasay, led by Secretary PAS (Sindh Chapter), Prof. Dr. Khalid Mohammed Khan. Prof. Dr. M. Qasim Jan, President PAS greeted the invited speakers and participants in his welcome remarks. Eminent Speakers and the Senior Health Experts including, Dr. Ejaz Shafi Gilani, Chairman Gallup Pakistan; Maj. Gen. Aamer Ikram, National Institute of Health, Islamabad; Prof. Dr. Faisal Mehmood, Aga Khan University, Karachi and Prof. Dr. M. Wasay, Fellow PAS delivered presentations on the taxonomy, immune response, neurotrophic and historic impact of COVID-19 on humans chaired by Rabia Hassan, Fellow PAS. While Prof. Dr. Zulfiqar A. Bhutta *FRS*, Fellow PAS; Prof. Dr. Faisal Sultan, Special Adviser to Prime Minister on National Health Services, Regulation, and Coordination; Prof. Dr. Muhammad Iqbal Afridi, President Pakistan Psychiatry Society and Prof. Dr. M. Iqbal Choudhry, Coordinator General COMSTECH, Fellow PAS discussed the economic and mental impacts and the present and future trends of Pakistan to tackle this pandemic. This event was attended by the faculty members, staff members, research officers, and students across Pakistan.

The webinar was concluded by Prof. Dr. M. Aslam Baig, Secretary General PAS with a vote of thanks to the speakers and the participants.

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Pakistan Academy of Sciences, Lahore Chapter Organized a Series of On-line Webinars on Agriculture (August- October, 2020)

The Pakistan Academy of Sciences (PAS), Lahore Chapter in collaboration with the Partner Organizations organized a series of online Webinars on Agriculture. A webinar series was initiated to compensate for the lack of activities due to COVID19 which has become a success story.

Prof. Dr. Iqrar A. Khan, Secretary PAS (Punjab Chapter), led these webinars. The objectives of organizing the webinars on Agriculture in Pakistan were to identify the issues and challenges in the yield of the crops and negotiations with stakeholders, policymakers, and experts for the possible way outs to improve these challenges. The series had collaborations with several national and international partners and the Chinese Embassy in Islamabad.

The events were chaired by current and former Federal and Provincial Ministers, Governors, and corporate leaders (Syed Babar Ali, Mr. Sartaj Aziz, Gen Khalid Maqbool, Syed Fakhar Imam, Syed Yawar Ali, Hussain Jahania Gardezi, Sardar Husnain Dreshak, to name a few) along with academics from all parts of the world. The international partners included FAO, IFAD, Chinese Academy of Sciences, ACIAR-Australia, COMSTech, ICBA-Dubai, and numerous universities. The events were viewed in more than 30 countries. The Fellows and Members of the Academy participated actively in the webinars.

The keynote speakers (>50) were resourced from across the globe in 20 of the 22 events. They were top names in their respective fields, including the 2020 winner of the World Food Prize (Prof. Ratan Lal, Ohio State University). The total participation in 22 events has exceeded 3500, as well as registrations exceeding 6000. Certificates of participation were issued to those wanting to have one.

The following Zoom PAS Agriculture Webinar Episodes were conducted during August – October as follows:

Episode 3: Genetic Improvement of Dairy Cattle-American and Pakistani Experiences (August 8, 2020)

Episode 4: A Review of Agriculture Policies of Pakistan (August 17, 2020)

Episode 5: Wheat Seed Supply Chain Analysis (August 31, 2020)

Episode 6: Valuing Zinc Nutrition for Better Crop Production and Human Health (August 31, 2020)

Episode 7: Balanced Fertilizer Application in Wheat (September 12, 2020)

Episode 8: Agricultural and Livestock Innovation System (September 19, 2020)

Episode 9: Animal Nutrition and Fodder Science (September 25, 2020)

Episode 10: Saline Agriculture and Global Food Security (September 29, 2020)

Episode 11: Pulses & Chickpeas: The Peoples Protein in Pakistan (October 10, 2020)

Episode 12: World Food Day Webinar - Grow Nourish & Sustain Together (October 16, 2020)

Episode 13: Citrus Genetic Improvement: Seedlessness and Greening Disease (October 17, 2020)

Episode 14: Weeds Ecology and Management (October 24, 2020)

The series is very popular among the industry stakeholders, political leadership, students and academia. A Chinese media house has covered all the events. There is sufficient planning in place to run this work for another year.

The academic participants were encouraged to revisit the online/hybrid education model and to learn novel research ideas. The possibilities of collaboration were explored.

All events were recorded and posted on YouTube. The YouTube visitation runs into 1000s. A Chinese Media House covered all events (<https://www.gwadarpro.pk/>; <http://cen.ce.cn/more/>). Policy briefs (5-10 pages each) were also prepared on all events which are ready for publication as PAS papers or as a compilation in a report form.

Pakistan Academy of Sciences appreciates the efforts of Prof. Dr. Iqrar A. Khan as he continued the scientific activities through on-line webinars during COVID-19.

Web services were provided by Mr. Shehzad Ashraf and Mr. Muhammad Naseer. Webinar design, illustrations, announcements, registration, feedback and analysis, and editorial assistance by Mr. Nehal Ahmad Khan.

Visit of Delegate from the Embassy of the Republic of Uzbekistan (September 30, 2020)

A three members delegation from the Embassy of the Republic of Uzbekistan visited the Pakistan Academy of Sciences (PAS) Headquarters, Islamabad. Prof. Dr. Qasim Jan (President, PAS) and Prof. Dr. Aslam Baig (Secretary General, PAS) led the PAS side. On behalf of the Pakistan Academy of Sciences, Dr. Qasim Jan warmly welcomed the Chinese delegation.

The meeting discussed two collaborative aspects between Uzbekistan and Pakistan: (1) Joint projects and research activities between Uzbekistan and Pakistan; and (2) Signing of MoU with Pakistan Academy of Sciences in future.

In the end, President PAS thanked the participants of the meeting and assured lasting support of PAS for scientific collaboration between Uzbekistan and Pakistan.



The Alliance of International Science organizations (ANSO) Scientific Webinar on Combating COVID-19 (October 9, 2020)

The Alliance of International Science Organizations (ANSO) organized a scientific webinar on the ongoing global pandemic and the joint battle to share the latest scientific achievements and perspectives for international cooperation on October 9, 2020. This online meetup also followed the discussion within the ANSO family on the emphasis of responsibilities and priorities of the post-pandemic world to facilitate international cooperation and exchange both within and with the outside.

Prof. Dr. Jinghua Cao, the Executive Director, ANSO Secretariat gave the opening remarks. Prof. Haiwon Lee, ANSO Special Advisor, co-chaired the webinar with Prof. Cao. and eight distinguished speakers delivered keynote speeches to more than 50 participants from the ANSO member organizations. Prof. Dr. Zulfiqar A. Bhutta and

Prof. Dr. Zabta Khan Shinwari, Fellows PAS shared their views on combating COVID-19. Prof. Bhutta also shared his team's latest study on the impacts of COVID-19 on children.

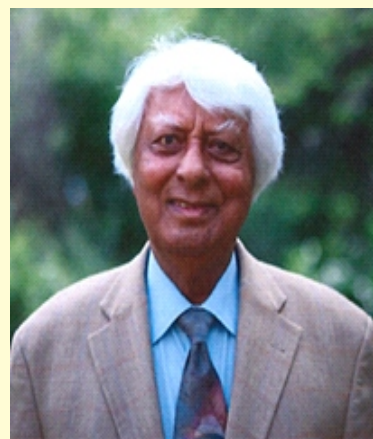


Forschungszentrum Juelich (FZJ), Germany Endorses Prof. Syed M. Qaim (Foreign FPAS) for On Campus 50 Years at FZJ

The Forschungszentrum Juelich (FZJ), Germany arranged an interview honoring the Nuclear Chemist, Prof. Dr. Syed M. Qaim (Foreign Fellow PAS) for his on-campus 50 years' services at the INM-5 Laboratory, Juelich as Institute Director since 1970. The FZJ arranged a symposium in the appreciation of Prof. Dr. Syed M. Qaim, but due to COVID-19, they arranged this interview via Forschungszentrum Juelich Media.

Furthermore, the FZJ endorsed his tireless contributions in various research projects between Germany and other countries and representing the Federal Republic of Germany at the Organization of Economic Cooperation and Development (OECD), Paris, and at the International Atomic Energy Agency (IAEA), Vienna for more than 20 years.

The Pakistan Academy of Sciences appreciates and congratulates Prof. Dr. Syed M. Qaim's affiliation with the Forschungszentrum Juelich, Germany for 50 years.



Prof. Dr. Jinde CAO, Foreign Fellow PAS, Elected as a Foreign Member of the Lithuanian Academy of Sciences (LAS) (September 22, 2020)

The Lithuanian Academy of Sciences (LAS) elected Prof. Dr. Jinde CAO, Foreign Fellow PAS as a Foreign member on September 22, 2020.

The Lithuanian Academy of Sciences (LAS) founded in 1941, is an independent expert and consultant of the Seimas, the Government, and its agencies based on research and higher education, culture, social development, economy, environmental protection, health care, technology, and other issues.

The LAS aims to gather the most distinguished Lithuanian and foreign scientists whose academic interests and activities are related to Lithuania.



The 2020 Nobel Laureates

Nobel Prize in Physics

The 2020 Nobel Prize in Physics was awarded to **Roger Penrose** (one half) for the discovery of black hole formation as a robust prediction of the general theory of relativity, and the other half jointly to **Reinhard Genzel** and **Andrea Ghez** for the discovery of a supermassive compact object at the center of our galaxy.



Roger Penrose



Reinhard Genzel



Andrea Ghez

Nobel Prize in Chemistry

The 2020 Nobel Prize in Chemistry was jointly awarded to **Emmanuelle Charpentier** and **Jennifer A. Doudna** for the development of a method for genome editing.



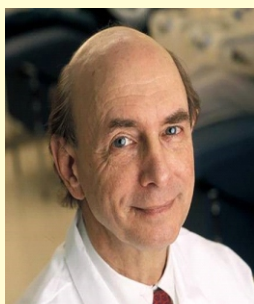
Jennifer A. Doudna



Emmanuelle Charpentier

Nobel Prize in Physiology/Medicine

The 2020 Nobel Prize in Physiology/Medicine was jointly awarded to **Harvey J. Alter**, **Michael Houghton** and **Charles M. Rice** for the discovery of Hepatitis C virus.



Harvey J. Alter



Michael Houghton



Charles M. Rice

Nobel Prize in Economics

The Royal Swedish Academy of Sciences awarded the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2020 to **Paul R. Milgrom** and **Robert B. Wilson** for improvements to auction theory and inventions of new auction formats.



Paul R. Milgrom



Robert B. Wilson