



Newsletter

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Prof. Dr. M. Qasim Jan, President PAS represented Pakistan Academy of Sciences in the International Association for Disaster Risk Reduction (IADRR)

The Chinese Academy of Sciences have recently taken a new initiative, that is, establishment of "International Association for Disaster Risk Reduction (IADRR)". IADRR is an international, non-governmental, professional body of individual membership, devoted to the development of global disaster risk reduction (DRR) endeavors with emphases on:

1. Interdisciplinary, multi-sector, and multi-stakeholder cooperation among all categories of Disaster Risk Reduction (DRR) professionals.
2. Exchanging knowledge and ideas, research outputs and practical experiences, establishing a trans-disciplinary science and technology application interface.
3. Promoting disciplinary development of disaster risk sciences and engineering, increasing risk awareness and education among the general public for resilient communities.

Needless to say that this is a very important initiative for the Chinese Belt & Road activities and, particularly, for the China-Pakistan connectivity via the land route of the Karakoram Highway (KKH). Major on-land trade activity is critically dependent on smooth and uninterrupted transport along the KKH which, unfortunately, passes through a terrain with frequent and major natural disasters, such as earthquakes, landslides, floods, etc. The establishment of IADRR and China-Pakistan joint Earth Sciences Centre in Islamabad are expected to play an important role in addressing these issues.

The IADRR hosts have invited Dr. M. Qasim Jan to accept Founding Membership of the IADRR on behalf of the Pakistan Academy of Sciences as well as because of his own knowledge and interest in natural disasters. Dr. M. Qasim Jan was asked for the assurance of the Council in accepting the offer, and informed that in the long run the Founding Members would be expected to constitute local chapters of the IADRR.

The Council unanimously agreed that Dr. M. Qasim Jan accepts the offer of the Founding Member position.

Commonwealth Academy Teleconference (April 28, 2020)

The Royal Society is the science academy of the UK which draws its Fellows from across the Commonwealth. The Society and its partners supports scientific collaboration across the Commonwealth through participation in a number of activities, including an informal network of Commonwealth science academies, and two Commonwealth Science Conferences (in 2014 and 2017, with a third to follow in 2021). The Pakistan Academy of Sciences has joined science leaders from around the globe to call on the Commonwealth Heads of Government to use the best available science to guide action on **“Climate change, biodiversity and sustainable energy”**.

Prof. Dr. M. Aslam Baig (Secretary General, PAS) and Prof. Dr. M. Qasim Jan (President, PAS) participated in the commonwealth academy teleconference on April 28, 2020. In the meeting, discussed about the COVID-19, Commonwealth Science Conference 2021, and Commonwealth academies statement on Climate Change, Biodiversity and Sustainable Energy.

Commonwealth academies statement on climate change, biodiversity and sustainable energy mark an important point of reference and as we go forward into an important year for action on climate and biodiversity, they would wish to continue to highlight the issues in the statement in the run-up to the climate change and biodiversity COPs.



In order to address these critical challenges, the Commonwealth and its member countries will need to work with the other countries of the world – particularly those with the highest political and economic influence such as China, the USA and others – and to call on them to support these essential endeavors. The academies of the Commonwealth stand ready to assist in these crucial efforts, through using our collective knowledge, experience, expertise and convening power to support the necessary action required. The statement of the Commonwealth Academy is given on the PAS website as follow;
<https://www.paspk.org/news/commonwealth-academies-statement-on-climate-change/>

Prof. Dr. Atta Ur Rahman, *FRS* Appointed as Chairperson of Scientific Task Force on Coronavirus disease (COVID-19) Pandemic

The Federal Minister for Science and Technology, Pakistan Mr. Fawad Chaudhary appointed Prof. Dr. Atta-ur-Rahman as Chairperson of the Scientific Task Force Committee for COVID-19 Vaccine established to take appropriate and effective measures during this Pandemic.

The main purpose of establishing this committee is to conduct and coordinate research for the development of vaccine and address issues under the ministry of Science and technology. Following terms of references (TORs) including the expansion

of testing, genome mapping and genetic studies (linked to SARS COV2 virus), clinical therapeutic and vaccine trials, financial and technical assistance emergency response, liaising federal and provincial government, artificial intelligence and IT technology exploration to track COVID patients.

This task force comprised of Eminent Scientists including Prof Dr. Javed Akram, Prof Dr. Shazna Khalid, Prof Al Fareed Zafar, Prof Iqbal Choudhry, Prof Dr. Khalid Khan, and Prof Mariam Riaz Tarar.

Prof. M. Qasim Jan honored with Lifetime Achievement Award by Pakistan Association of Petroleum Geoscientists

Pakistan Association of Petroleum Geoscientist (PAPG) is a local chapter of the American Association of Petroleum Geologists (AAPG-- the world's largest forum of geoscientists with >30,000 members in 116 countries). In recognition of his contributions in the field of Earth Sciences, Prof. Dr. M. Qasim Jan (PhD, DSc, HI) was honoured with a lifetime achievement award in the Annual Technical Symposium of the PAPG & Society of Petroleum Engineers held in Serena Islamabad. Advisor to the Prime Minister for Petroleum, Mr. Nadeem Babar was the chief guest.

Dr. Qasim Jan has carried out extensive geological investigations of the Himalaya-Karakoram-Kohistan region of Pakistan, with emphasis on crust-building processes. His studies have contributed to a better understanding of the geodynamic and crustal evolution of NW Himalaya in general and Kohistan magmatic arc in particular. His contributions include hundreds of papers and books on northern Pakistan, Nagar Parkar area and Balochistan, including the seminal book "Geology and Tectonics of Pakistan" (written jointly with AH Kazmi).

In addition to his involvement in teaching and research, Professor Qasim Jan was Vice Chancellor



of three universities and also played an important role in the development of the National Centre of Excellence in Geology at the University of Peshawar. The PAPG, with more than a thousand members, is the most active association of Earth Scientists of Pakistan. Its objectives include advancement of Earth Sciences in the domains of petroleum, natural gas and mineral resources, through R&D and promotion of exploration technology.

Pakistan Academy of Sciences congratulates Prof. M. Qasim Jan on receiving the well-deserved lifetime achievement award.

Forman Christian College University, Lahore named a Department after Prof. Dr. Kauser Abdul Malik, Vice President PAS

In the recognition and phenomenal contribution of Prof. Dr. Kauser Abdullah Malik, Vice President PAS, Forman Christian College University, Lahore, has named one of its schools as "Kauser Abdulla Malik School of Life Sciences".

Pakistan Academy of Sciences pays heartiest congratulations to Prof. Dr. Kauser Abdullah Malik PAS Vice President, on achieving this milestone.



Prof. Dr. Muhammad Iqbal Choudhary, FPAS Appointed as Coordinator General of COMSTech

The President of Pakistan, Dr. Arif Alvi, in his capacity as Chairman COMSTech appointed Prof. Dr. M. Iqbal Choudhary as the Coordinator General of COMSTech (the Organization of Islamic Cooperation Standing Committee on Scientific and Technological Cooperation).

COMSTech is the only OIC institution chaired by Pakistan, established by the Third Islamic Summit of OIC held at Makkah, Saudi Arabia in January 1981. The core mandate of COMSTech is to strengthen cooperation among OIC Member States in science and technology, and to increase the capability of the Muslim countries in science and technology.

Pakistan Academy of Sciences congratulates Prof. Dr. Iqbal Choudhary on his outstanding achievement.



Prof. Dr. Atta Ur Rahman, FRS Appointed as Senior Expert of Global Health Industry Cooperation System (GHICS), China

Prof. Atta-ur-Rahman has been appointed as Senior Expert to advise China in connection with the challenges posed by COVID 19 in future scientific and socio-economic development. The outbreak of COVID-19 puts human health and life in great danger. In responding to major epidemics and various health threats, there is an urgent need to intensify technical and industrial cooperation in the health industry across the world.

Pakistan Academy of Sciences congratulates Prof. Dr. Atta Ur Rehman, on his international recognition.



Prof. Dr. Zabta Khan Shinwari, FPAS elected as Vice Chairman of World Commission of ethics in Science Knowledge and technology (February 24, 2020)

The United Nations Educational, Scientific and Cultural Organization (UNESCO) elected Prof. Dr. Zabta Khan Shinwari, Fellow PAS as Vice Chairman of the World Commission of Ethics in Science Knowledge and Technology (COMEST) for the year 2020-2023. Dr. Zabta Khan Shinwari will be part of new projects of COMEST such as Land-use Ethics and the Ethical implication of the Internet Thing.

Pakistan Academy of Sciences congratulates Prof. Dr. Zabta Khan Shinwari on this remarkable achievement.



Chinese Academic of Sciences (CAS) Honoured Prof. Dr. M. Iqbal Choudhary, FPAS with the Chinese Highest Award (April 14, 2020)

The prominent Pakistani scientist and Fellow PAS, Prof. Dr. Muhammad Iqbal Choudhary was awarded the Chinese highest award "Distinguished Scientist" by the Chinese Academic of Sciences (CAS) President's International Fellowship Initiative (PIFI Fellowship). He was awarded this prestigious scientific award of People's Republic of China in recognition of his outstanding contributions in the field of Bio-organic Chemistry and very strong

collaborations with Chinese universities and higher education institutions.

Pakistan Academy of Sciences congratulates Prof. Dr. M. Iqbal Choudhary on receiving this highest Chinese award.

Prof. Dr. Zulfiqar Ali Bhutta, FPAS Elected as a Fellow of Royal Society (FRS), United Kingdom (April 29, 2020)

In recognition of outstanding contribution to global child health over three decades, Prof. Dr. Zulfiqar Ali Bhutta, Fellow PAS has been elected a Fellow of the prestigious Royal Society, the National Academy of Sciences of the United Kingdom. It is an independent scientific academy of United Kingdom, dedicated to promote scientific excellence for humanity.

Dr. Zulfiqar A. Bhutta is the Distinguished University Professor and Founding Director of the Institute for Global Health and Development and the Centre of Excellence in Women and Child Health, at the Aga Khan University. He also holds the Robert Harding Inaugural Chair in Global Child Health at the Hospital for Sick Children, Toronto, and is the Ibn-Sina Scholar in Global Child Health, unique joint appointments with AKU. Additionally, he holds adjunct professorships at several leading Universities globally, including the Schools of Public Health at Johns Hopkins University (Baltimore), Boston University, George Washington University (Washington DC) as well as the London School of Hygiene & Tropical Medicine.

Dr. Bhutta is a member of the Strategic Technical Advisory group for MNCH of the World Health Organization and a member of the Independent Expert Group producing the Global Nutrition Reports since its inception in 2014. He is a member of the Prime Minister's Task Force for Health since its inception in 2018.



Dr. Bhutta has received several leading awards in global health, including the Sam Fomon Award for lifetime achievements in Nutrition (2015), the WHO Family Health prize (2014), the TUBA Science Award (2015), McKinsey Global Health Award (2015) and the TWAS Science Award in Medical Sciences (2017). He was recognized by the Senate of Canada with its Canada 150 Medal for contributions to Global Child Health. In October 2018, Dr. Bhutta was admitted to the US National Academy of Medicine, the highest academic and scientific platform in North America.

Pakistan Academy of Sciences congratulates Prof. Dr. Zulfiqar Ali Bhutta, FRS on this remarkable achievement.

Prof. Dr. Syed Muhammad Qaim, Foreign Fellow PAS attended the 10th International Conference on Isotopes an Expo at Kuala Lumpur, Malaysia (February 3-7, 2020)

Prof. Dr. h.c. mult. Syed M. Qaim, a Foreign Fellow of the Academy, based at the Research Centre Juelich and the University of Cologne, Germany, attended the 10th International Conference organized by the World Council on Isotopes (WCI) with its Headquarters in Seoul, Korea on Isotopes and Expo (10 ICI) Held at Kuala Lumpur, Malaysia from February 3-7, 2020.

Prof. Dr. Syed M. Qaim presented a Plenary Lecture on Theranostic Radionuclides and organized two sessions of Marie Curie and Super heavy Elements. Furthermore, during the General Body Meeting of the WCI he was elected to the Chair of the Standing Committee on Education and Training for the period 2020-2022. In this capacity he will coordinate international educational activities in the field of radionuclide production and their applications.



Prof. Dr. Jinde CAO, Foreign Fellow PAS, Elected Full Member of Sigma Xi

Prof. Dr. Jinde Cao has been elected a Full Member in Sigma Xi, the Scientific Research Honor Society in 2020. Sigma Xi is the world's largest general research honor society. It is an international, multidisciplinary organization for research scientists and engineers.

Over the course of the Society's distinguished history, more than 200 members have won the Nobel Prize and many more have earned election to the National Academy of Sciences and National Academy of Engineering. Membership in Sigma Xi is by nomination only. Full membership is conferred upon those who have demonstrated noteworthy achievements in research.

Pakistan Academy of Sciences congratulates Prof. Dr. Jinde Cao, on his membership of Sigma Xi.



Prof. Dr. Mohammad Perwaiz Iqbal, FPAS, participated in First Regional Meeting of AASSA Working Group in Kuala Lumpur, Malaysia (February 24-25, 2020)

Prof. Dr. Mohammad Perwaiz Iqbal, FPAS, represented the Pakistan Academy of Sciences in the First Regional Meeting of the AASSA Working Group on “Climate Change and Health” held in Kuala Lumpur, Malaysia from February 24-25, 2020.

He delivered a presentation on Climate Change and Health in Pakistan in which he emphasized on a serious threat to food security, water and vector-borne diseases in the people of Pakistan and effects of a climate change including, melting of glaciers, decertification, intrusion of sea water, flooding and land sliding due to unseasonal rains. In addition, he discussed the adaptation and mitigation strategies and their emergency to protect future health of the future and current generations of Pakistan.



International Symposium on Plant's life of South Asia held at University of Karachi (February 26, 2020)

A four-day International symposium titled “Plant life of South Asia” was jointly organized by the Department of Botany, University of Karachi and the Pakistan Academy of Sciences from February 25-28, 2020 at Karachi University.

This symposium was arranged in completion of the project “Flora of Pakistan” with an objective of providing means of identification of the Plants growing in the region of South Asia, public education and creating awareness among public regarding the importance of plants in the survival of human civilization on this planet.

Various national and International scholars from other countries and PAS Fellows including Prof. Dr. M. Qasier (former Vice Chancellor, University of Karachi), Prof. Dr. Muhammad Ashraf (Vice Chancellor, University of Agriculture, Faisalabad), Prof. Dr. Khan Bahadur Marwat and Prof. Dr. Zabta Khan Shinwari also participated in



the symposium and shared thoughts on the need of basic science and its understanding in the era of synthetic biology and gene editing.

Prof. Dr. M. Qaiser appreciated the team work in compiling this major project and addressed that the collection of flora in the region of South Asia is a big achievement.

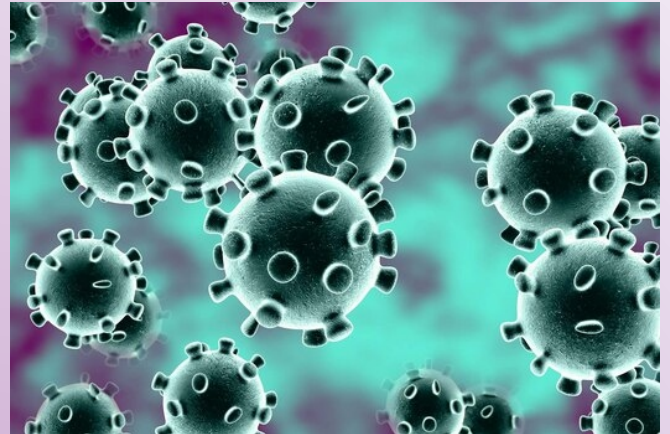
Coronavirus Disease 2019 (COVID-19)

SARS-CoV2 belongs to the family of coronaviruses, a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The viral outbreak was declared a Public Health Emergency of International Concern (PHEIC) on 30 January 2020. It has till date affected over 188 territories globally; and as of 22 May 2020, over 5 million confirmed cases and over 300,000 mortalities associated with the infection have been reported.

The Emergency Operation Centre (EOC) at the National Institute of Health (NIH), Pakistan was activated on 22 January, 2020, before the outbreak was declared as PHEIC. NIH has been working in closely working with the Ministry of National Health Services, Regulations and Coordination and National Disaster Management Association. It is for the first time that a comprehensive National Action Plan (NAP) was promptly prepared dedicated to COVID-19 along with SOPs. Actual simulation exercises, triage and hand-on training activities were conducted all across the country. All the concerned stakeholders were taken in to loop and activities were synergized.

Surveillance activities were strengthened and coordinated with provinces and regions. Diagnostic capabilities which form the backbone for picking up cases were aggressively pursued; started from one lab at NIH to 95 all across the country with daily capacity of 30,000 PCR tests.

The Rapid Response Teams, formulated to deal efficiently with health emergency scenarios such as this, were deputed to all the major international airports in the country, in collaboration with the



Central Health Establishment (CHE), to screen all the passengers. Similarly, teams were also deputed at the porous borders to prevent unscreened entry of any suspected cases in the country.

Since the first cases were reported in Pakistan, the NIH teams, have been working tirelessly, from contact tracing of all the confirmed cases to screening of all the passengers at Points of Entry (PoEs) as well as at the designated quarantine facilities. The teams have been working in close liaison with the Disease Surveillance & Response Units (DSRUs) in different parts of the country. Additionally, a huge number of sensitization, assessment and training activities have been conducted. All this has been an excellent example of TEAM working.

Prof. Dr. Maj. Gen. Aamer Ikram
Fellow PAS (Elected 2019)