



PAKISTAN ACADEMY OF SCIENCES Promoting Science, Technology and Innovation for Socio-economic Development

## 2019 General Body Meeting of the Pakistan Academy of Sciences (December 3, 2019)

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President Prof. Dr. M. Qasim Jan

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The General Body Meeting of the Pakistan Academy of Sciences (PAS) was held on December 3, 2019 at the PAS Secretariat, Islamabad. The meeting comprised of the induction of a PAS Fellow elected in 2018, Foreign Fellows, Members (elected in 2019) and the conferment of Gold Medals and Cash Prizes to the winning scientists for their contribution in Science and Technology (S & T).

Fatiha and condolence was offered for the departed souls of the Fellows namely, Prof. Dr. Khairat M. Ibne Rasa (Past Treasurer and Senior PAS Fellow) and Prof. Dr. Vigar Uddin Ahmad, Council Member and Senior PAS Fellow.

Dr. M. Aslam Baig, Secretary General, Pakistan Academy of Sciences gave a presentation portraying the contribution of PAS including the collaborative events with other scientific institutions in the country and global partners (International Scientific Forums) during November 2018 - November 2019. It also included visits of foreign scientists to the Academy, representation of PAS Fellows at national and International events, recognition of PAS Fellows, Foreign Fellows and Members at National and International level, workshops/ conferences/ seminars organized by Fellows and Popular Science Lecture series.

Moreover, The Secretary General PAS, informed about the submission of Revised PC-1s on: a) Up gradation and Capacity Building of Pakistan Academy of Sciences (Natural and Social Sciences) to HEC for CDWP meeting at Planning Commission; b) Science Diplomacy Initiative-SDI: Strengthening of International Collaboration of the Pakistan Academy of Sciences" jointly compiled by the Pakistan Academy of Sciences (PAS) and Science Diplomacy Division of the Ministry of Foreign Affairs (MoFA) and was submitted to MoFA for endorsement. The General Body appreciated the activities performed by the PAS during 2019.

## Induction of Fellow Elected during 2019

Prof. Dr. Hassan Amir Ali Shah *S.I.*, Former Vice Chancellor of Government College University (GCU), Lahore was elected by the General Body as a Fellow in the year 2018 and formally inducted as PAS Fellow in December 2019. The Secretary General introduced

Prof. Dr. Hassan Amir Ali Shah by sharing his brief citation. The President of Pakistan Academy of Sciences, Prof. Dr. M. Qasim Jan, presented a Medal and Certificate followed with a signature of Prof. Dr. Hassan Amir Ali Shah on the PAS Charter Book.

# **New Fellows of PAS Elected during 2019**

The Following eminent scientists were elected as Fellows of the Pakistan Academy of Sciences during the year 2019:

**Prof. Dr. Habib Ahmad** Vice Chancellor Islamia University Peshawar, KP

**Prof. Dr. Aamer Saeed Bhatti** Professor, Department of Chemistry Quaid e Azam university, Islamabad

**Prof. Dr. Arshad Saleem Bhatti** Dean Faculty of Sciences COMSATS University, Islamabad **Prof. Dr. Aamer Ikram** Executive Director National Institute of Health (NIH) Park Road, Chak Shahzad, Islamabad

**Prof. Dr. Sohail Nadeem** Professor Department of Mathematics Quaid-i-Azam University, Islamabad

# **New Foreign Fellows of PAS Elected during 2019**

The Following eminent scientists were elected as Foreign Fellows of the Pakistan Academy of Sciences during the year 2019:

**Prof. Dr. Khalid Iqbal** NYS Institute for Basic Research In Developmental Disabilities New York, USA Prof. Dr. J. Niemela

The Abdus Salam International Center for Theoretical Physics (ICTP-UNESCO) Trieste- Italy

**Prof. Dr. Christian Betzel** Professor Institute of Biochemistry and Molecular Biology University of Hamburg, Hamburg, Germany

# **New Members of PAS Elected during 2019**

The Following eminent scientists were elected as Members of the Pakistan Academy of Sciences during the year 2019:

Dr. Shujaul Mulk Khan

Assistant Professor Department of the Plant Sciences Quaid-i-Azam University, Islamabad

**Dr. Muhammad Arif Nadeem** Assistant Professor Department of Chemistry, Quaid-i-Azam University, Islamabad **Dr. Muhamad Usman** Head Ion Beam Applications Division National Center for Physics, Islamabad

# **PAS Gold Medals, Prizes and Certificates 2019**

The following scientists were conferred upon PAS Gold Medals, Cash Prizes and Certificates by Prof. Dr. M. Qasim Jan, President PAS, during the PAS General Body Meeting in Islamabad on December 3, 2019.

### **Agriculture Sciences**

**Dr. Masroor Ellahi Babar** Professor/Dean Faculty of Science and Technology Virtual University, Lahore

### **Chemical Sciences**

**Dr. Syed Ghulam Musharraf** Professor Dr. Panjwani Centre for Molecular Medicine and Drug Research University of Karachi, Karachi

### **Biological Sciences**

**Dr. Habib Ahmad** Professor/Vice Chancellor Islamia College, Peshawar

### Dr. Atta-ur-Rahman Gold Medal (under 40)

**Dr. Muhammad Naeem Ashiq** Associate Professor Institute of Chemical Sciences Bahauddin Zakariya University (BZU), Multan

# **Dr. Shah Jahan Prize for Scientists** (under 40)

**Dr. Faheem Khurshied Butt** Assistant Professor Division of Science and Technology University of Education, Lahore

### **Prof. Zabta K. Shinwari Gold Medal** in Biotechnology (under 50)

**Dr. Muhammad Imran Qadir** Assistant Professor Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University (BZU), Multan

### **Earth and Environmental Sciences**

**Dr. Muhammad Rizwan** Assistant Professor Department of Environmental Sciences and Engineering, Government College University(GCU), Faisalabad

#### **Emerging Technologies**

**Dr. Iftikhar Ahmed** Principal Scientific Officer National Agriculture Research Center (NARC) Islamabad

### **Engineering Sciences**

**Dr. M. Sajid Hamid Akash** Associate Professor Department of Pharmaceutical Chemistry, Government College University(GCU), Faisalabad

# Abdus Salam Prize in Basic Sciences (under 40)

**Dr. Munawar Iqbal** Assistant Professor Department of Chemistry, University of Lahore, Lahore

### Salimuzzaman Siddiqui Prize in Applied Science-Technology (under 40)

**Dr. Muhammad Naveed** Assistant Professor Institute of soil and Environment Sciences University of Agriculture, Faisalabad

## World Science Day Celebrated at Pakistan Science Foundation (PSF) (November 11, 2019)

World Science Day was celebrated in a befitting manner at Pakistan Science Foundation (PSF) on November 11, 2019. Theme of the World Science Day 2019 was "Open Science, Leaving No One Behind".

Dr. M. Aslam Baig, Secretary General PAS was the chief Guest. PSF Chairman Major (Retd) Qaiser Majeed Malik, National Center for Physics (NCP) Ex-Director General Prof. Dr. Hamid Saleem, Dr. Mirza Habib Ali, Director Research Support PSF addressed the Convention and highlighted the importance of science. Dr. M. Aslam Baig (Chief Guest) shared his thoughts about the peaceful usage of science for the development and benefit of mankind. He also added that Pakistan is blessed with young talent but there is need coordination among various organizations to tell the youth about the opportunities available for them.

Dr. Hamid Saleem, the Keynote Speaker, said that science is something that not only changes the destiny of nations but also promotes peace as he considers science as a great instrument of peace.



# One – Health (1 - H) Research Symposium (November 17, 2019)

Pakistan Academy of Sciences (PAS) in collaboration with U.S. National Academy of Sciences (NAS) organized one-day symposium entitled "One – Health (1-H) Research Symposium" under US-NAS One-Health Research Fellowships-Pakistan on November 17, 2019 at PAS Auditorium. The symposium focused on transnational, collaborative and multi disciplinary efforts to solve global health issues by nurturing connections among countries and building up interdisciplinary cadres of skilled and trained individuals at the country level takes time and resources. This event was attended by the young researchers from different universities like Quaid-i-Azam University, Islamabad, National University of Sciences and Technology (NUST), Islamabad, Qarshi University, Lahore and One - Health current, and former fellows, mentors, dignitaries and representatives of One-Health related research organizations and institutes including National Institutes of Health, Islamabad (NIH) and National Agriculture Research Center (NARC) participated in this event.



### Seminar on Science Diplomacy (November 27, 2019)

A one day seminar on Science Diplomacy was jointly organized by the Ministry of Foreign Affairs of Pakistan, Pakistan Academy of Sciences and COMSTECH at the COMSTECH Secretariat, Islamabad. The event was supported by COMSATS, ECO Science Foundation and Technology Times. This seminar focused on the role of science in diplomacy noting that science, technology and innovation, the key drivers in achieving the United Nations (UN) 2030 Sustainable Development Agenda.

Dr. Aslam Baig, Secretary General PAS, welcomed the Chief Guest, Dr. Tariq Banuri, Chairman HEC and Coordinator General COMSTECH, participants and audience in the inaugural session.

The expert/speakers included Prof. Dr. M. Aslam Baig (Secretary, General, Pakistan Academy of Sciences), Muhammad Kamran Akhter (DG ACDIS/Science Diplomacy, MoFA), Prof. Dr. M. Qasim Jan (Advisor COMSTECH and President PAS), Prof. Dr. Manzoor Hussain Soomro (President ECOSF), Dr. S. M. Junaid Zaidi (Executive Director COMSATS), Syed Ammar Jaffry (Former Additional DG FIA and CEO Security Experts Pakistan), Dr. Zaigham Abbas (Deputy Director IC Wing, Ministry of Climate Change) and Sayyed Paras Ali (CEO/Editor Technology Times).

The seminar was attended by the members of diplomatic corps, the think tank community, public and private sector civil society organizations, members of academia and students from various universities in Islamabad.

The Additional Secretary, Ministry of Foreign Affairs, Aftab Khokhar also attended the seminar and appreciated this event in his concluding remarks.



### Visit of Yunnan Academy of Sciences and Technology Development (YASTD) Delegates to Pakistan Academy of Sciences (January 06, 2020)

A 3-member delegation from Yunnan Academy of Science and Technology development (YASTD) led by the Deputy Dean (YASTD), Pu Weidong, visited the Pakistan Academy of Sciences (PAS) on January 06, 2020 and had a meeting with the PAS Officials and Fellows.

Dr. M. Aslam Baig, Secretary General, PAS welcomed and briefed the delegation about PAS. They had a meeting on the following five aspects: 1) Disciplinary layout of various scientific and technological fields in Pakistan; 2) The role and influence of Pakistan Academy of Sciences in Pakistan's development; 3) Major research results of Pakistan Academy of Sciences; 4) Specific introduction of cooperation with other countries; and 5) The areas that Pakistan Academy of Sciences hope to cooperate with China; Suggestions on cooperation methods and channels.

The delegation appreciated the progress made by the Pakistan Academy of Sciences and hoped to work in collaboration in future.



# Popular Science Lecture by Prof. Dr. Mustafa ERGUN (January 16, 2020)

Prof. Dr. Mustafa ERGUN, Executive Director, Inter-Islamic Science & Technology Network on Oceanography (INOC), Izmir, Republic of Turkey delivered a lecture on Caspian Sea, Water Fluctuations and the Effects on the Human History on January 16, 2020 at the Pakistan Academy of Sciences (PAS) auditorium.

Dr. Ergun was specially invited by Dr. M. Qasim Jan, President PAS for this popular talk to benefit scientists and academicians in Pakistan. Prof. Dr. Mustafa ERGUN described about the Caspian Sea geography and formation, climate change and Caspian Sea level fluctuations, Noah's floods, civilizations created by the Caspian region and arkeological and language connections.

Over 70 participant including, scientists, engineers, educationists, academicians and students from various Universities and Scientific Organizations attended the lecture.



## Second ANSO Governing Board Meeting (November 6, 2019)

Prof. Dr. M. Qasim Jan, President PAS and Prof. Dr. Zabta Khan Shinwari, Fellow PAS were invited as important partners and collaborators of Alliance of International Science Organizations (ANSO) in its 2<sup>nd</sup> ANSO Governing Board Meeting held on November 06, 2020 at Beijing, China. Sixty participants from seven governing body organizations, Bureau of International Cooperation/CAS and ANSO Secretariat joined the meeting. ANSO President, Prof. Chunli Bai extended his warm welcome to the participants and the Vice-President, ANSO, Prof. Alexander Sergeev expressed his gratitude to the attendees. Prof. Dr. Qasim Jan, Vice-President ANSO, President PAS, recognized the progress of ANSO and hoped for a positive impact in Science, Technology and Innovation(STI) especially in the developing countries and regions.



## The First ANSO Young Scientists Forum held in Hangzhou-China (November 9-10, 2019)

The ANSO Young Scientists Forum and Zhejiang International Science and Technology Cooperation Conference, hosted by the Chinese Academy of Sciences (CAS) and the People's Government of Zhejiang Province, took place in Hilton East, Hangzhou-China on November 9-10, 2019. More than 500 representatives from more than 30 countries and regions around the world attended the meeting. Prof. Chunli Bai, President of ANSO and CAS, and Jiajun Yuan, Governor of Zhejiang Provincial People's Government attended the meeting and delivered opening speeches.

Prof. Chunli Bai, President ANSO, shared the achievements and future targets of ANSO. He also emphasized the important role of young scientists in promoting scientific and technological progress. Nobel Prize laureate Barry Sharpless and Prof. Zabta Shinwari,

Special Advisor pf ANSO Secretariat also gave speeches.

Prof. Zabta Khan Shinwari, Fellow PAS, presented a talk on From Ethno to Nano; Basic to Applied: Success story from Pakistan in a session "How Basic Sciences support Sustainable Development in ANSO World Youth Forum".



## Prof. Dr. M. Asif Khan Elected as a Foreign Member of Chinese Academy of Sciences (November, 2019)

Prof. Dr. M. Asif Khan (Fellow PAS) has been elected as a foreign member of Chinese Academy of Sciences (CAS) on November 08, 2019. He has become the 2<sup>nd</sup> Pakistani after Prof. Dr. Atta ur Rehman to be elected as such. President of the Chinese Academy of Sciences (CAS) and Chairman of the Presidium of the Academic Divisions of CAS (CASAD) elected Dr. Muhammad Asif Khan a Foreign Member of CAS, based on his scientific achievements and contributions to the promotion and development of science and technology in China.

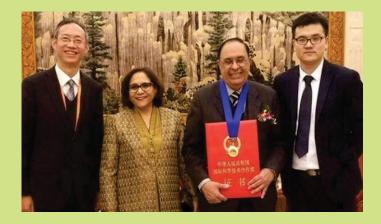


## **Prof. Dr. Atta ur Rahman**, *FRS* **Received Highest Chinese Scientific** Award by the Chinese President in Beijing, China (January 10, 2020)

The President of China Xi Jinping has conferred the highest scientific award of China to the famous Pakistani Scientist, Prof. Dr. Atta-ur-Rahman in the Great Peoples Hall in Beijing on January 10, 2020.

Prof. Dr. Atta-ur-Rahman is the only Muslim Scientist who has been honored with the prestigious award of China International Science and Technology Cooperation. This award is conferred in recognition of his monumental contributions in the field of chemistry.

This top international award has previously been given to several leading scientists of the world including the Nobel Laureates, Dr. Carlo Rubbia (Nobel Prize in physics, 1984) and Dr. Zhores I. Alferov (Nobel Prize in physics, 2000). This award is an honor not only for the Pakistan Academy of Sciences but also for the entire nation.



### Seminar on Plant Biodiversity in Wake of Climate Change at Shaheed Benazir Bhutto Women University Peshawar (December 23, 2019)

Pakistan Academy of Sciences (Peshawar Chapter) organized a one day event on December 23, 2019 at Shaheed Benazir Bhutto Women University, Peshawar.

Prof. Khan Bahadar Marwat, Fellow PAS delivered a lecture on Plant Bio-diversity in Wake of Climate Change. He discussed the indicators and the causes of climate change and global warming and delineated the importance of plant and their role to mitigate the global warming.

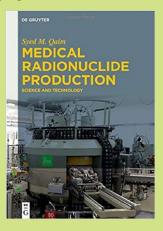
This seminar was attended by a large of number students and faculty members of the university.



## Prof. Dr. Syed M. Qaim, Foreign FPAS Published a Book entitled "Medical Radionuclide Production: Science and Technology"

Professor Dr. Dr. h. c. mult. Syed M. Qaim, a Foreign Fellow, PAS based at the University of Cologne, Research Centre Juelich, Germany, wrote a new book entitled "Medical Radionuclide Production: Science and Technology" and recently published by the traditional German Publisher De Gruyter, Berlin/Boston (ISBN-10: 3110601567). The work describes the production technology of standard medical radionuclides using reactors and cyclotrons for patient diagnosis and therapy.

A special focus lies on the science and technology involved in the development of novel metallic radionuclides for positron emission tomography (PET) and internal targeted radiotherapy. The availability of those radionuclides is opening up new potentials, especially in radio immunotherapy, theranostics and multimode imaging.



# Obituary

## Lt. Gen. Muhammad Saleem HI(M) (1937- 2019)

On December 24, 2019, Lt. General Muhammad Saleem, Fellow PAS left this world forever. He was born in New Delhi, British India in 1937. Dr. M. Saleem was one of the notable luminaries in the field of pathology and hematology in Pakistan served in different capacities like, Professor and Head Department of Hematology, Armed Forces Institute of Pathology, Rawalpindi, Consultant Hematologist, Riyadh Military Hospital, Riyadh, Saudi Arabia, Senior Registrar and Honorary Clinical Tutor, Queen Elizabeth Hospital, Surgeon General Army & Director General Medical Services (Inter-Services) etc. On retirement from Army, he took charge of National Institute of Health (NIH), Islamabad as the Executive Director from where he eventually retired after two years of spell in preventive medicine, serology and vaccines manufacturing.

Lt. General M. Saleem is the recipient of Hilal-i-Imtiaz (Military) from the Govt. of Pakistan and was elected as Fellow of the Pakistan Academy of Sciences in 1999. He will be missed by the PAS Fellows.



May the departed soul rest in eternal peace, Ameen!