



# Newsletter

## PAKISTAN ACADEMY OF SCIENCES

*Promoting Science, Technology and Innovation for Socio-economic Development*

January 2019

Volume 14, No. 1

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*HI, SI, TI*

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## 2018 General Body Meeting of Pakistan Academy of Sciences



The General Body Meeting of the Pakistan Academy of Sciences (PAS) was held on 20th November 2018. The meeting comprised of the induction of PAS Fellows elected in 2018, Foreign Fellows and Members elected in 2018 and bestowment of Gold Medals and Prizes to the Pakistani winning scientists for their contributions to Science.

Prof. Dr. M. Aslam Baig, Secretary General, Pakistan Academy of Sciences delivered a presentation illustrating the salient achievements & contributions of PAS in terms of collaborations with other scientific institutions in the country and international scientific forums during 2017-2018. It also included an overview of MoUs, Conferences, Seminars, Visits of Foreign Scientists to the Academy since its inception.

Prof. Dr. M. Qasim Jan, President Pakistan Academy of Sciences gave a brief account of the situation prevailing in the Academy. The major positive matters, according to him, include: 1) PAS becoming a founding member academy of the Alliance of the International Science Organizations of the Road & Belt Initiative (ANSO), Chinese Academy of Sciences, & election of the President of PAS as Vice President of ANSO (the other being the President of the Russian Academy of Sciences), 2) Decision of the Inter Academy Partnership (IAP), and the Associations of Academies & Societies of Sciences in Asia (AASSA), to fund an International conference in the PAS and 3) Allocating a room with computer facility in the PAS Secretariat for the Fellows of the Academy. He further added that there are accomplished scientists & Academicians as fellows & young members of the Academy who are capable of steering it to new heights, but this can only be achieved with strong determination and active participation. Dr. M. Qasim Jan thanked the Fellows for their support to the Council.

## Induction of Fellows Elected during 2018

Dr. Hafeez-ur-Rehman Hoorani *S.I.*, Director General, National Center for Physics, QAU Campus, Islamabad and Dr. Mohammad Wasay, Professor, Department of Medicine, Aga Khan University, Karachi were elected by the General Body as Fellows in the year 2017 and were formally inducted as PAS Fellows. The Secretary General PAS introduced Dr. Hafeez-ur-Rehman Hoorani by reading his brief citation. He was also presented a Medal and Certificate by the President PAS. Dr. Hafeez-ur-Rehman Hoorani then signed the PAS Charter Book.

Dr. Mohammad Wassay could not attend the meeting.



## New Fellows of PAS Elected during 2018

### Foreign Fellow

Prof. Dr. Wei Huang, an eminent scientist, Provost & Deputy President North Western Poly Technical University (NPU), China was elected as Foreign Fellow of the Pakistan Academy of Sciences during the year 2018.



### Local Fellow

Prof. Dr. Hassan Amir Ali Shah *S.I.*, an eminent physicist and Vice Chancellor of Government College University (GCU), Lahore was elected as Local Fellow of the Pakistan Academy of Sciences during the year 2018.



## New Members of PAS Elected during 2018

The Following eminent scientists were elected as Members of the Pakistan Academy of Sciences during the year 2018:

### Dr. Syed Sikander Azam

Assistant Professor  
National Center of Bioinformatics  
Quaid-i-Azam University  
Islamabad



### Dr. Imran Arshad

Assistant Professor  
Institute of Microbiology,  
University of Agriculture  
Faisalabad



### Dr. Aqeel Javed

Assistant Professor  
Department of Pharmacology  
University of Veterinary & Animal  
Sciences (UVAS), Lahore



# PAS Gold Medals, Prizes and Certificates 2018

The following scientists were conferred upon PAS Gold Medals, Cash Prizes (35,000/- PKR, each), and Certificates by Prof. Dr. M. Qasim Jan, President PAS, during the PAS General Body Meeting in Islamabad on November 20, 2018.

## Agriculture

### Dr. Jehan Bakht

Vice Chancellor

Khushal Khan Khattak University, Karak



## Chemical Sciences

### Dr. Sirajuddin

Professor

National Center of Excellence in Analytical Chemistry

University of Sindh, Jamshoro



## Biological Sciences

### Dr. Muhammad Asgher

Tenured Professor

Dean, Faculty of Sciences

Department of Biochemistry

University of Agriculture, Faisalabad



### Dr. Aamer Ali Shah

Associate Professor

Faculty of Biological Sciences

Department of Microbiology

Quaid-i-Azam University, Islamabad



## Earth and Environmental Sciences

### Dr. Sardar Khan

Professor

Department of Environmental Sciences

University of Peshawar, Peshawar



## Emerging Technologies

### Dr. M. Maroof Shah

Professor

Department of Environmental Sciences,

COMSATS University, Islamabad



## Engineering Sciences

### Dr. Rizwan Raza

Assistant Professor

Department of Physics

COMSATS University, Islamabad



## Physics

### Dr. Riaz Ahmad

Professor

Head of Physics Department

Dean Faculty of Engineering

GC University, Lahore



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

Dr. Atta-ur-Rahman Gold Medal in Chemistry for young Scientists, under 40, for the year 2018 was awarded to **Dr. Hassan Imran Afridi**, Associate Professor National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro. The award comprised of a Gold Medal, Certificate and Cash Prize of Pak Rs. 35,000/-.



### Dr. Raziuddin Siddiqi Prize (under 40)

Dr. Raziuddin Siddiqi Prize in Chemistry for young Scientists, under 40, for the year 2018 was awarded to **Dr. Muhammad Asif Hanif**, Assistant Professor, Department of Chemistry, University of Agriculture, Faisalabad. The award comprised of a Gold Medal, Certificate and Cash Prize of Pak Rs. 35000/-.



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

Prof. Zabta K. Shinwari Gold Medal in Biotechnology for Scientists under 50, for year 2018 was awarded to **Dr. Moaz ur Rahman**, Principal Scientist, National Institute for Biotechnology and Genetic Engineering, Faisalabad. The award comprised of a Gold Medal, Certificate and Cash Prize of Pak Rs. 30,000/-.



### Abdus Salam Prize in Basic Sciences (under 40)

Abdus Salam Prize in Basic Sciences in the field of Physics for Scientists under 40 for the year 2018 was awarded to **Dr. Muhammad Tahir**, Assistant Professor, University of Lahore, Lahore Campus. The award comprised of a Certificate and Cash Prize of US\$1800/-.



### Dr. Shah Jahan Prize

Dr. Shah Jahan Prize in Mathematics for young Scientists under 40, for the year 2018 was awarded to **Dr. Zafar Hayat Khan**, Assistant Professor, Department of Mathematics, University of Malakand, Chakdara, Dir Lower.

The award comprised of a Gold Medal, Certificate and Cash Prize of Pak Rs. 35000/- . Dr. Zafar couldn't attend the meeting.

## MoU signed between Pakistan Academy of Sciences & Alliance of International Science Organization in the Belt & Road Region (ANSO)

Prof. Dr. M. Qasim Jan, President PAS attended the First General Assembly of Alliance of International Sciences Organizations (ANSO) in the Belt and Road Region & The Second International Science Forum of Scientific Organizations on the Belt and Road Initiative on

November 3-5, 2018. Prof. Dr. M. Qasim Jan was elected as Vice President of ANSO in the Belt and Road Region. On behalf of the Pakistan Academy of Sciences (PAS), he signed an agreement on November 3, 2018, whereby PAS became a Founding Member of ANSO.

## Popular Science Lecture Series at PAS

### Lecture by Dr. Mushtaq Ahmad, Member PAS:

Dr. Mushtaq Ahmad (Member PAS), Associate Professor of Plant Sciences & Director, Herbarium & Botanical Garden, Quaid-i-Azam University, Islamabad delivered a lecture on "Emerging Research trends for sustainable utilization of

Plant Diversity to Industry in Pakistan" at PAS Auditorium on 6th November 2018. This informative lecture was well attended by PAS Fellows, Research Scholars & Faculty of Plant Sciences and Microbiology Department, QAU, Islamabad



### Lecture by Dr. Bob Raynolds & Dr. G. Sarwar:

The Pakistan Academy of Sciences organized two lectures following the Popular Science Lecture Series on 23rd November 2018 in PAS Auditorium. Dr. Bob Raynolds gave a talk on Global Warming & Impact on South Asia while Dr. G. Sarwar lectured on Plate Tectonics: Concepts & Issues.

Professionals from various organizations/ Institutions including Pakistan Council of Renewable Energy Technologies (PCRET), Geological Survey of Pakistan, Department of Earth & Environmental Sciences, Bahria University, Islamabad, OGDCL and University of Peshawar attended the lecture.



### Lecture by Prof. Dr. Sayed Amjad Hussain:

Prof. Dr. Sayed Amjad Hussain (*MBBS, FRCSC, FACS*) Emeritus Professor of Cardiovascular Surgery and Emeritus Professor of Humanities at the University of Toledo, USA delivered an invited popular lecture on “Science and Humanities” at the Pakistan Academy of Sciences (PAS) on January 8, 2019. He was specially invited by Prof. Dr. M. Qasim Jan, President PAS to deliver this popular talk for the benefit of scientists and academicians in Pakistan. Over 70 participants comprising of scientists, engineers, educationists, academicians and students from various Universities and Scientific Organizations attended the lecture. In his introductory welcome, Prof. Qasim Jan highlighted that for the first time through this popular lecture, PAS is opening the door for social sciences at the platform of PAS. In his

lecture, Prof. Amjad Hussain described humanities as words that help us to make sense of our lives and the world. He emphasized upon the need for academicians, scientists and doctors to let a little more sunshine in their life by learning humanities and social sciences in their life so that they can play a better role to make positive contributions for the uplift of the society. The lecture was followed by a spirited question/answer and discussion session.



### Tribute to Dr. Ishfaq Ahmad (Late)

To pay a rich tribute to late Dr. Ishfaq Ahmad (*NI, HI, SI*), Former President of Pakistan Academy of Sciences (PAS), a condolence reference was jointly organized by the Pakistan Academy of Sciences (PAS) and Pakistan Nuclear Society (PNS). The event was attended by a large number of senior scientists, engineers and related professionals.

Various colleagues & friends shared their personal experiences for being close to late Dr. Ishfaq Ahmad in the past & expressed that Dr. Ishfaq had a mesmerizing and towering personality and he will always be remembered as an affectionate, loving and hardworking person. Dr. Qasim Jan, President PAS said that Dr. Ishfaq Ahmad was one of the most decorated and seasoned scientists of Pakistan, a very humble & dedicated person with extraordinary science administration skills. Dr. Muhammad Ashraf Chaudary, the President PNS, Dr. Samar Mubarakmand, former Chairman

NESCOM, and Engineer Pervez Butt, Former Chairman PAEC lauded the efforts of Dr. Ishfaq Ahmad for devoting his entire life for the promotion of science in the country and for making Pakistan the seventh atomic power and the First in Islamic World.



The other speakers who expressed views recalling their association with Dr. Ishfaq included Mr. Ghulam Nabi, Former Member Tech PAEC, Dr. Arshad M. Khan, Dr. N.M. Butt, Dr. Abdullah Sadiq, Dr. Zafarullah & Waqar Ahmad Butt.

### Professor Jinde Cao elected academician of the International Academy for Systems and Cybernetic Sciences

Professor Jinde Cao, (Foreign Fellow PAS), Dean and endowed Chair Professor of the School of Mathematics, Southeast University (SEU) China, has been elected as an Academician of the International Academy for Systems and Cybernetic Sciences (IASCYS) in recognition of his outstanding contributions to the research and practice of systems and cybernetic sciences.

Jinde Cao is a Director of the Jiangsu Provincial Key Laboratory of Networked Collective Intelligence of China

and the Director of the Research Center for Complex Systems and Network Sciences at SEU.



## Prof. Dr. Sayed M. Qaim, Foreign Fellow PAS, Honoured in Pakistan

Prof. Dr. S. M. Qaim, a Foreign Fellow of PAS visited Pakistan in December 2018 under Foreign Faculty Program of the Higher Education Commission (HEC), Pakistan and conducted a condensed course on “Neutron Induced Reaction Cross Sections” at Government College University (GCU), Lahore and seminar lectures at several other institutions. He also delivered a keynote address at the national symposia held at GC University, Lahore on “Applications of Radioisotopes”. The Vice Chancellor of GC University, Lahore presented “University Medal of Honour” to Prof. Qaim for his honorary services in the development of teaching & research at GCUL over a period of more than 15 years.

Prof. Qaim also attended a National Symposium on “Medical Physics” at the Atomic Energy Cancer Hospital GINUM in Gujranwala. The Director GINUM presented a souvenir



“Sword” to Prof. Qaim for his extraordinary contributions in development of science & technology of radionuclide production for medical applications, both in Pakistan and at the International level.

## National Workshop Organized by National Council for Tibb, Islamabad in collaboration with the Pakistan Academy of Sciences

The National Council for Tibb (NCT), Islamabad in collaboration with the Pakistan Academy of Sciences organized a two day national workshop titled “Need and Importance of Innovation in Tibbi Education System” at PAS Auditorium on 19-20 December 2018.

The honourable Zartaj Gul Wazir, Minister of State for Climate Change chaired this workshop as Chief Guest Prof. Dr. Zabta Khan Shinwari (S.I, T.I, UNESCO LAUREATE), President NCT, was the chief organizer of this workshop.



## Workshop on Plant Biotechnology for Food & Security organized by Dr. Kauser A. Malik at FCCU, Lahore

A two day workshop on Plant Biotechnology for Food Security was organized at the Forman Christian (FC) College Lahore in collaboration with Pakistan Biotechnology Information Center (PABIC), PAS Lahore Chapter on Tuesday 28 November, 2018. Dr. Kauser Abdullah Malik, Fellow and Vice President PAS, was the chief organizer of the workshop. The main theme of this workshop was the manipulation of biotechnology in sustainable agriculture sciences during the year 2018.



## MUSTAFA Science & Technology Foundation, KANS awarded Prize to Dr. M. Zaffar Hashmi (Member, PAS) in Water & Environment

The MUSTAFA Science and Technology Foundation, KANS awarded prize to Dr. Muhammad Zaffar Hashmi PAS Member in the category of "Water and Environment". Dr. M. Zaffar

Hashmi is currently serving as Assistant Professor of Environmental Sciences at the Department of Metrology, COMSATS University, Islamabad.



## Springer Publishes Book Series of Dr. Zaffar Hashmi (Member, PAS)

Springer published book series of Dr. M. Zaffar Hashmi titled as "Emerging Contaminants and Associated Treatment Technologies" on Springer landing page. This series include critical environmental issues of emerging contaminants at national and regional level.

Dr. Hashmi published his third book with Springer titled: "Environmental Pollution of Paddy Soils". The book provides an overview of our current understanding of paddy soil pollution, factors effecting paddy soil, Impact of heavy metals pollution on rice quality, and bio-remediation approaches for the management of paddy soils.

## Elsevier Accepted to Launch Book Series

Dr. Hashmi has got acceptance from Elsevier to launch book series of "Advances in Environmental Pollution Research".



More than hundred books will be published under this series.

## Appointment of Administrative Officer, PAS

Dr. Riffat Mahmood Qureshi joined Pakistan Academy of Sciences on 17 December, 2018 as Administrative Officer. He entered the Academy with a rich experience of research and management at the Pakistan Institute of Nuclear Science & Technology (PINSTECH)/PAEC as Chief Scientist and Director Coordination and at the National Centre for Physics (NCP), Islamabad where he served as Director, Collaboration and Academic Activities Department, Advisor (Technical), and Secretary Board of Governors, NCP. He also worked as Member, Editorial Board of "The Nucleus", a Quarterly Scientific Journal of PAEC (from 2002 – 2012). Dr. Riffat has served as Pakistan National Coordinator in several IAEA / RCA Regional Projects related to application of isotope/nuclear techniques for assessment of marine contamination and transport phenomena as well as aquatic

environment emergencies etc. He compiled the first ever marine radioactivity database (seawater, sediments and biota) for the entire coast of Pakistan under the IAEA/RCA Project "ASPAMRD". He also performed IAEA expert assignments in Bangladesh, Indonesia, Philippines, Saudi Arabia, Sri Lanka, and UAE in the field of Isotope Hydrology.



Dr. Riffat has supervised thesis research work of 30 postgraduate students including 4 PhD students. He has 65 research publications to his credit.