



# Newsletter

## PAKISTAN ACADEMY OF SCIENCES

Promoting Science, Technology and Innovation for Socio-economic Development

### Association of Academies & Societies of Sciences in Asia (AASSA) and Pakistan Academy of Sciences (PAS) Joint Workshop at PAS Secretariat, Islamabad (August 19-21, 2019)

October 2019

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The Pakistan Academy of Sciences (PAS) and the Association of Academies & Societies of Sciences in Asia (AASSA) jointly organized a three day Regional Workshop on Complementary Medicine as an Answer to the Challenges Faced in Achieving Sustainable Goals in Health held from August 19-21, 2019 at the PAS Secretariat, Islamabad. The workshop focused on: (a) Complementary Medicine and SDGs; (b) Media & Complementary Medicine; (c) Land Tenure & Sustainable use of Medicinal Plants and; (d) Role of practitioners in maximizing benefits of Herbal Medicine, with the objective to conduct a survey among the herbal practitioners & scientists about SDGs, current issues, challenges in Asia for herbal medicine. The workshop was attended by young researchers and experts from academia, industries and research institutes from within Pakistan as well as from participant countries naming, Malaysia, Bangladesh, Japan, Russia, Turkey, Korea, Indonesia, Sri Lanka and China. The workshop comprised of Technical Sessions, Poster Competition, Group discussions and Post Workshop Special Lecture organized at the National Institute of Health (NIH), Islamabad. This event provided an excellent opportunity to the local researchers to exchange knowledge through interaction with the foreign experts at the workshop.

In his opening address, Prof. Dr. M. Aslam Baig, Secretary General, PAS welcomed the diverse gathering of the workshop and thanked the Chief Guest, H.E. Zartaj Gul Wazir, Minister of State for Climate Change for her gracious presence to inaugurate the event. H.E. Zartaj Gul congratulated PAS for organizing the immensely important workshop. Prof. Dr. M. Qasim Jan, President PAS delivered the welcome address and expressed gratitude to the speakers, participants and dignitaries for making this event successful. Prof. Dr. Yoo Hang Kim, President AASSA appreciated the incredible efforts of the local organizing committee. Prof. Dr. Atta ur Rahman, FRS Chairman Prime Minister's Task Force on Science and Technology presented Key Note address.

## C o n t . . .

For poster competition, twenty-two posters were short listed. A four member evaluation committee was formulated comprising of Dato Dr Khairul Anuar Bin Abdullah (Malaysia); Dr. Sri Fatmawati (Indonesia) and Prof. Dr. Masoom Yasinzai and Prof. Asma Gul from Pakistan. This poster money was basically donated by President AASSA from his personal pocket money. Partial contribution was made by organisers of the workshop.

The Federal Minister (S&T), H.E. Chaudhry Fawad Hussain concluded the regional workshop as Chief Guest. In his address, he remarked that this regional workshop will provide excellent opportunity for herbal industry and R & D. Prof. Dr. Zabta Khan Shinwari (FPAS), the Convener of this scientific forum presented vote of thanks and acknowledged the AASSA- PAS for organizing, sponsoring and facilitating the event.

The following recommendations are based on the presentations and discussion during the workshop and are in line with the strategies recommended in the WHO 2014 – 2023 Strategic Frame Work.

1. Establish Higher Education and Research to enhance quality and expand the knowledge base of T&CM
2. Integrate Traditional Medicine with Primary Health Care (PHC)
3. Suppliers of medicines based on natural products must ensure that harvesting of the products from the animal/organisms species providing the source compounds is sustainable or the animals are domesticated in order to meet demands.



Speakers and Group Photo of participants with Chief Guest Federal Minister S & T, H.E. Chaudhry Fawad Hussain

## Post-Workshop Special Lectures at NIH, Islamabad

An important aspect of this workshop was post workshop special lectures on August 21, 2019, by three experts at National Institute of Health, Islamabad. The first presentation was given by Prof. Dr. Zabta K. Shinwari, on “Science & Higher Education: A tool for peace & Prosperity”, followed by a key note address by former Minister of S & T, Prof. Dr. Atta ur Rehman on knowledge economy and frontier technologies and President Elect AASSA Dato Dr. Khairul Anuar Bin Abdullah in which he showed role of emerging technologies especially Artificial Intelligence (AI) in health care system in future.

The Executive Director, NIH, Major General Aamer Ikram, had welcome remarks and briefed the guests, researchers

and notable national and international academician about various functions of NIH and role of NIH in the provision of public health services in Pakistan.

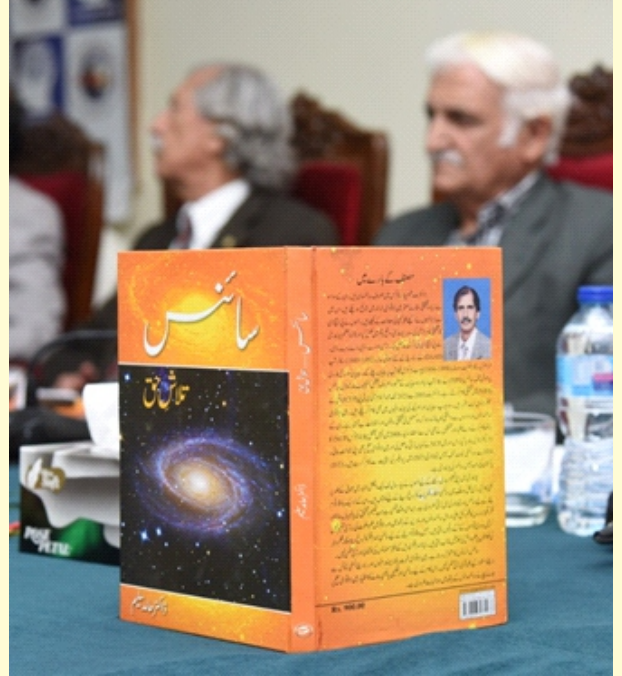


## Book Launching, Science: Talash-e-Haq by the Pakistan Academy of Sciences (PAS) and Islamabad Circle (October 18, 2019)

The debut of the book titled, Science: Talash-e-Haq was launched by the "Islamabad Circle" in collaboration with the "Pakistan Academy of Sciences" on October 18, 2019 at the PAS, Secretariat Islamabad authored by Prof. Dr. Hamid Saleem, Fellow PAS. This book intends to introduce modern theories about the universe and fundamental principles of physics to the reader in Urdu language with the aim to promote scientific thinking and disseminate thought provoking ideas in the society. Various notable scientists, scholars and writers including Prof. Dr. M. Qasim Jan, Prof. Dr. Pervez Hoodbhoy, Dr. Saqib Akbar, and Mr. Farhatullah Babar participated as guest speakers and lauded the great input of the author. Prof. Dr. M. Qasim Jan, President PAS deliberated his generous thoughts for the efforts in consolidation of science, religion, philosophy and literature in this hardcover.

Dr. Riffat Mehmood Qureshi, Administrative Officer PAS welcomed the audience in this launching ceremony and Mr. Almas Haider Naqvi, Executive Director, Regional

Rapport, Coordinator, Islamabad Circle expressed vote of thanks to the guest speakers and the participants for their time in making this event outstanding.



### Speakers of the Book Launching Ceremony



Dr. Hamid Saleem

Mr. Farhatullah Babar

Dr. M. Qasim Jan

Dr. Saqib Akbar

Dr. Pervez Hoodbhoy

### 2018-2019 Year Book of PAS: Updation of Fellows Profile

The Pakistan Academy of Sciences publishes its Year Book every two year. The year Book 2018-2019 is currently being compiled for publication. The Fellows of the PAS, who have not updated their profiles as yet, are requested send us their updated profiles by January 31, 2020 to enable us to include in this year Book.

## Prof. Dr. M. Qasim Jan Addressed the General Assembly of International Academy of Sciences of the Silk Road (IASSR), at Xi'an, China (September 10, 2019)

President of Pakistan Academy of Sciences, Prof. Dr. M. Qasim Jan participated in the General Assembly of International Academy of Sciences of the Silk Road (IASSR) organized by 2019 Euro-Asia Economic Forum held at Xian, China on September 10, 2019. The forum aimed to promote the mutual understanding between Asian and European countries as well as to discover the cooperation and development opportunities under the Belt and Road Initiative (BRI).

Prof. Dr. M. Qasim Jan addressed the audience on topic BRI: A Unique Opportunity for Global Prosperity and Peace Through Trade and Science, Technology and Innovation

On behalf of the Pakistan Academy of Sciences (PAS), Prof. Dr. M. Qasim Jan also delivered a talk titled "Trillion Dollar Belt and Road Nexus for STI, Socio-economic Development, Global Collaboration and Peace".



## A Joint Workshop of the U.S. National Academies of Sciences, Engineering, Medicine (NASEM) and the Pakistan Academy of Sciences (PAS), Georgetown Campus Doha, Qatar (October 22-24, 2019)

Prof. Dr. Zabta Khan Shinwari (Fellow, PAS) as a PAS representative co-organized A Joint Pakistan-U.S. Workshop on Implementation of Good Clinical Laboratory Practices from October 22-24, 2019 at Georgetown University, Qatar Campus. He participated in the panel discussion as panelist on Fighting Infectious Diseases: Biosecurity in the National and Global Arena.

This event aimed the assembly of leading figures in biosecurity and biosafety to discuss the shared responsibility of meeting the challenges to public health and national security. It also drew attention on the role of social sciences and humanities in facilitating research and critical skills for the next generation of leaders in the field.



## **Prof. Dr. M. Qasim Jan (President, PAS) Participated in International Conference at Nukus, Uzbekistan (October 24-25, 2019)**

Prof. Dr. M. Qasim Jan, President PAS participated as member of Economic Cooperation Organization(ECO) in the International Conference on Aral Sea Region- Zone of Environmental Innovations and Technologies organized by the Government of Uzbekistan under the sponsorship of the United Nations held from October 24-25, 2019 at Nukus, Uzbekistan.

This conference was attended by about 250 participants from almost 28 countries including representatives

from international organizations, academia, civil and private sectors.

It focused on developing measures to create conditions for attracting foreign investment in the development and implementation of environmentally friendly technologies like green economy, energy and water-saving technologies, and ensuring food security, desertification prevention, environmental migration and development of ecotourism.



## **Prof. Dr. Khan Bahadar Marwat (FPAS) received Lifetime Achievement Award from Asian Pacific Weed Science Society (September 4, 2019)**

Prof. Dr. Khan Bahadar Marwat Fellow PAS has received the Lifetime Achievement Award by the Asian Pacific Weed Science Society (APWSS) at Kuching, Malaysia on September 4, 2019 in its 27<sup>th</sup> Asian Pacific Weed Science Society Conference.

Dr. Khan Bahadur received this award in recognition of his outstanding services to Weed Science in Asia Pacific Region and APWSS. The Fellows of Pakistan Academy of Sciences also congratulate and wish him continued success in his research endeavors in the field of Weed Science. The Conference was themed as “Weeds Science for Sustainable Agriculture and Environment” with the opportunity to gain insights relating to weed management in cropped and non cropped areas.



## Inauguration of the Academician Prof. Atta-ur-Rahman One Belt and One Road TCM Research Center, China (October 24, 2019)

The grand inaugural ceremony of the Academician Professor Atta-ur-Rahman One Belt and One Road TCM Research Center recently constructed in Hunan University of Chinese Medicine, Changsha was held on Wednesday, October 24, 2019 with the 5<sup>th</sup> Annual Bio-TCM International Conference.

The Federal Minister for Science and Technology Fawad Hussain Chaudhry, along with Chinese Government officials, Mayor of Huanhua, and Prof. Dr. Muhammad Iqbal Choudhary, Director of ICCBS - University of Karachi also joined this ceremonial.



## Prof. Dr. Zabta Khan Shinwari (FPAS & Treasurer AASSA) Participated in the AASSA Regional Workshop & its Executive Board Meeting 2019 Seoul, Korea (September 23-25, 2019)

Prof. Dr. Zabta Khan Shinwari, Fellow PAS speaks at the Association of Academies and Societies of Sciences in Asia (AASSA), Korean Academy of Science & Technology (KAST) Regional Workshop on the topic "Functional genomics applied to understanding drought and salt tolerance and osmo-regulation in plants".

The AASSA Executive Board Meeting 2019 was held in conjunction with this regional workshop at Seoul, Korea. Dr. Zabta Khan Shinwari attended the meeting as treasurer of the AASSA.



## International Symposium on Functional Nanomaterials at Air University Islamabad (October 8, 2019)

A one-day symposium on functional nanomaterial was organized jointly by the Department of Physics, Air University, Islamabad and the German Academic Exchange Service (DAAD) on October 8, 2019 at the Auditorium Air University, Islamabad. This symposium aimed the provision of a platform of networking & communication to disseminate latest knowledge based on functional nanomaterial among junior researchers, participants, academicians, and senior experts.

University chaired and welcomed the event participants.

Prof. Dr. Asghari Maqsood Fellow Pakistan Academy of Sciences and Dean, Faculty of Basic & Applied Sciences, Air



## Prof. Dr. Fazal A. Khalid (FPAS) Organized Training on Outcome Based Education at Pakistan Engineering Council (October 16-17, 2019)

Prof. Dr. Fazal A. Khalid (Fellow, PAS & Chairman, PHEC) organized a two-day training in collaboration with Pakistan Engineering Council (PEC) on Outcome Based Education focusing on Complex Engineering Problems & Activities for the faculty selected as Program Evaluators from October 16-17, 2019, at Pakistan Engineering Council.

This training was attended by more than fifty program evaluators from various institutions of Pakistan. The significant objective of the training encompassed capacity building for newly inducted Program Evaluators (PEVs), & the implementation of Outcome Based Education and Assessment System (OBE/OBA) in the country.

Honorable Minister for Higher Education Commission, Govt. of Punjab Raja Yassir Humayun Sarfraz graced the

closing ceremony and addressed the participants and highlighted the government's mission to advance the socio-economic progress which is fundamentally based on quality education, training and professionalism.



## AASSA Secretariat Special Committee Members (2019)

The Associations of Academies & Societies of Sciences in Asia (AASSA) held its Executive Committee Meeting 2019 at Seoul, Korea, in which nominations of the following four PAS Fellows were approved for various AASSA Special Committee:

1. Prof. Dr. Kauser A. Malik (Sustainability Committee)
2. Prof. Dr. Iqrar A. Khan (Science Education Committee)

3. Prof. Dr. Zabta Khan Shinwari (SHARE Committee)
  4. Prof. Dr. Azra Khanum (WISE Committee)
- Prof. Dr. Muhammad Perwaiz Iqbal nominated for Inter Academy Partnership (IAP) Global Project on Climate Change and Health strategy.

Pakistan Academy of Sciences congratulates the committee members and wish them best of luck.



Prof. Dr. Kauser A. Malik

Prof. Dr. Iqrar A. Khan

Prof. Dr. Zabta K. Shinwari

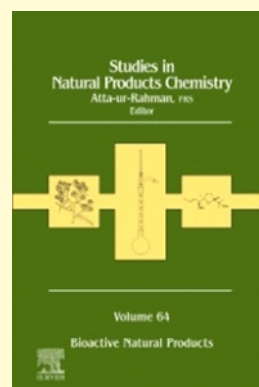
Prof. Dr. Azra Khanum

Prof. Dr. M. Perwaiz Iqbal

## Elsevier Published Two Volumes of Prof. Dr. Atta-ur-Rahman, *FRS*

Elsevier Science Publishers published Volume 64 and 65 of Studies on Natural Product Chemistry. The series was initiated under the editorship of Prof. Dr. Atta-ur-Rahman, *FRS* 30 years ago and now has become the most comprehensive encyclopedic series.

These volume Focuses on the chemistry, synthesis, testing and pharmacology of bioactive natural products from the medicinal plants and new and exciting opportunities in the field of new drug development to the pharmaceutical industry.



# The 2019 Nobel Laureates

## Nobel Prize in Physics

The 2019 Nobel Prize in Physics was awarded "for contributions in understanding of the evolution of the universe and Earth's place in the cosmos", with one half to **James Peebles** "for theoretical discoveries in physical cosmology" and the other half jointly to **Michel Mayor** and **Didier Queloz** "for the discovery of an exoplanet orbiting a solar-type star."



James Peebles

Michel Mayor

Didier Queloz

## Nobel Prize in Chemistry

The 2019 Nobel Prize in Chemistry was awarded to **John Goodenough**, **M. Stanley Whittingham** and **Akira Yoshino** "for the development of lithium-ion batteries". Through their work, they have created the right conditions for a wireless and fossil fuel-free society, and so brought the greatest benefit to humankind.



Jhon Goodenough

M.Stanely Whittingham

Akira Yoshino

## Nobel Prize in Physiology/Medicine

The 2019 Nobel Prize in Physiology or Medicine is awarded jointly to **William G. Kaelin Jr**, **Sir Peter J. Ratcliffe** and **Gregg L. Semenza** "for their discoveries of how cells sense and adapt to oxygen availability." They identified molecular machinery that regulates the activity of genes in response to varying levels of oxygen.



William G.  
Kaelin Jr

Sir Peter J.  
Ratcliffe

Gregg L.  
Semenza

## Noble Prize in Economic Sciences

The Royal Swedish Academy of Sciences has decided to award the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2019 to **Abhijit Banerjee**, **Esther Duflo** and **Michael Kremer** "for their experimental approach to alleviating global poverty." The laureates have played a decisive role in reshaping research in development economics. Their research has already helped in alleviating global poverty and has great potential to further improve the lives of the most impoverished people on the planet.



Abhijit Banerjee

Esther Duflo

Michael Kremer