



**PAKISTAN ACADEMY OF SCIENCES** 

Promoting Science. Technology and Innovation for Socio-economic Development

#### In This Issue

- + Honours and Awards earned by Fellows and Foreign Fellows
- + TRIPAS Initiates Monthly Seminar Series
- + Recipients of 2017 Breakthrough Prizes

#### **Contributions of AvH Alumni to Pakistan's Science & Technology**



Participants of the Workshop with H.E. Mrs. Ina Lepel, Ambassador of F.R. Germany

#### Editor Dr. Abdul Rashid

#### Fellows of PAS may submit news and views to:

Editor-in-Chief Pakistan Academy of Sciences 3-Constitution Avenue, G-5/2, Islamabad, Pakistan Email: editor@paspk.org Tel: (+92 51) 920-7140 Web: www.paspk.org

#### Composed by:

Engr. Adnan Bashir

Pakistan Academy of Sciences (PAS), Islamabad organized a joint AvH and PAS Meeting of the AvH Fellows of Pakistan to discuss the "Contributions of Pakistani AvH Alumni to Pakistan's S&T". The Meeting was coordinated by a team of AvH Alumni, **Prof. N. M. Butt, Prof. M. Aslam Baig** and **Prof. G. A. Miana** who are also the Fellows of the PAS. The event was graced by the Ambassador of F.R. Germany, **H.E. Mrs. Ina Lepel**, as Chief Guest. Many renowned scientists from Pakistan who are serving at key posts in S&T and are AvH and DAAD Fellows were present and shared their views and experiences with the young audience.

The AvH Fellows described that how every year the AvH Foundation grants more than 700 competitive research fellowships and awards worldwide, primarily going to academics from natural sciences and humanities. AvH Fellowships and awards are considered among the most prestigious and generous awards in Germany and the alumni network is the Foundation's greatest asset. In Pakistan there are more than 100 AvH alumni who are contributing significantly towards Science & Technology in the country.

Secretary General PAS, **Prof. Zabta Shinwari**, repeated the resolve to strive for conduct of responsible science in Pakistan. He reassured that PAS will always extend its resources to arrange such events to help in promote awareness amongst Pakistani young scientists to do more in the spirit of true cooperation.

Volume 12, No. 1

January 2017

#### Prof. Dr. M. D. Shami honored with Life Time Achievement Award

It's a matter of honor for the Pakistan Academy of Sciences that **Prof. Dr. M. D. Shami**, SI has been honored with Lifetime Achievement Award by the *Pakistan Institute of Chemical Engineers* (PIChE) for his contributions in the field of Chemical Engineering. Prof. Shami is an Ex-President of PIChE.

As Prof. Shami could not attend the ceremony due to ill health, the Award was received by Prof. Dr. Niaz Ahmed Akhter, President PIChE, and Vice Chancellor, University of Engineering and Technology, Taxila. The ceremony in the form of General Body meeting of the PIChE was held at the Punjab University, Institute of Chemical Engineering and Technology, New Campus, Lahore.

It may be mentioned that Prof. Shami has been the President, the Vice-President, the Secretary General and Editor-in-Chief of the Pakistan Academy of Sciences. Currently, he is the Treasurer of Academy.



## Prof. Dr. Muhammad Ajmal Khan appointed University of Karachi's Vice Chancellor

**Prof. Dr. Muhammad Ajmal Khan**, Fellow, Pakistan Academy of Sciences has been appointed the 17th Vice Chancellor (VC) of the University of Karachi (KU) for four years. Dr Khan is the founding director of the Institute of Sustainable Halophyte Utilisation (ISHU) of KU.

Prof. Ajmal Khan has succeeded **Prof. Dr. Muhammad Qaiser** as VC of KU. He has been awarded *Pride of Performance* and *Sitara-e-Imtiaz* in recognition of his scientific contributions.

He is Fellow of The World Academy of Sciences (TWAS) and Islamic World Academy of

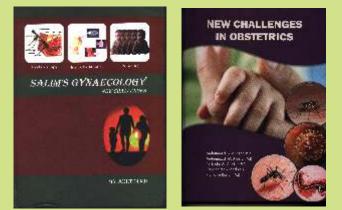
Sciences (IAS), and Higher Education Commission (HEC) Distinguished National Professor.



### **Books Published by Prof. Dr. M. Salim Akhter**

Recently two books entitled "Salim's Gynaecology" and "New Challenges in Obstetrics" were published by **Prof. Dr. M. Salim Akhter**, a Fellow of PAS and former Vice Chancellor, University of South Asia and former Dean, University of Lahore.

Prof. Salim is highly experienced in healthcare, with specialization in Gynecology and these books are a distillation of his life long experience in the field of Health Sciences.



### Prof. Dr. Zabta K. Shinwari elected as Fellow, Islamic World Academy of Sciences

**Prof. Dr. Zabta Khan Shinwari**, Professor, Department of Biotechnology, Quaid-i-Azam University and Secretary General, Pakistan Academy of Sciences, has been elected "Fellow of the Islamic World Academy of Sciences" (IAS).

The IAS is an international scientific organization founded by heads of state of the Organization of Islamic Cooperation (OIC) to assist the countries to realize socio-economic advancement. IAS is based in Amman (Jordan) and is fully supported by Government of Jordan. It is also an advisory body on scientific matters that has been designated as the voice of Science in the OIC.



## Prof. Chunli Bai inducted as Foreign Honorary Member of American Academy of Arts & Sciences

Prof. Chunli Bai, President, Chinese Academy of Sciences, and a Foreign Fellow of Pakistan Academy of Sciences, was inducted as Foreign Honorary Member of American Academy of Arts and Sciences in 2016.

The American Academy of Arts and Sciences was founded in 1780, and is among the America's oldest learned societies and independent policy research centers, convening leaders from the academic, business, and government sectors to respond to the challenges facing the nation and the world.



## 100th Anniversary of Journal of Association of Analytical Communities

The Journal of AOAC INTERNATIONAL publishes 6 issues per year of fully refereed contributed papers in the fields of chemical and microbiological analysis.

2017 marks the 100th year of publication of the Journal. We are proud to inform that the Chair of the Editorial Board, Dr. Sarwar Gilani, is a Foreign Fellow of the Pakistan Academy of Sciences. The Editorial Board comprises of eminent scientists from industry, regulatory agencies and academia.



# Theoretical Research Institute Pakistan Academy of Sciences (TRIPAS) Initiates Monthly Seminars

The Theoretical Research Institute Pakistan Academy of Sciences (TRIPAS) was established by the Pakistan Academy of Sciences (PAS) in December 2014. Researchers, faculty members of universities/ research institutes and graduate students visit TRIPAS for collaborative research since its inception. TRIPAS published more than 10 research papers in reputed international journals.

Recently, TRIPAS has started a monthly seminar series on thought provoking and interesting topics for the popularization of science. First Seminar of the series was on "Tasawwurat-e-Zaman-o-Makan" which was held on 5 January 2017; the speaker was Dr. Hamid Saleem [Fellow PAS and Director TRIPAS].

Second Seminar of the series was held on 2 February 2017 and topic was "Euclidis and Beyond". Speaker of this seminar was Dr. Khalid Saifullah, Prof. of Mathematics Department at Quaid-i-Azam University.

The contact person for this seminar series is: Dr. Hamid Saleem Email: saleemhpk@hotmail.com Cell: 0308 505 8991

#### **Recipients of 2017 Breakthrough Prizes Announced**

The Breakthrough Prize and founders Sergey Brin and Anne Wojcicki, Yuri and Julia Milner, and Mark Zuckerberg and Priscilla Chan, announced the recipients of the 2017 Breakthrough Prizes, marking the organization's fifth anniversary recognizing top achievements in Life Sciences, Fundamental Physics and Mathematics. A combined total of \$25 million was awarded at the gala ceremony in Silicon Valley, hosted by Morgan Freeman. **Each of the Breakthrough Prizes is worth \$3 million, the largest individual monetary prize in science.** 

Since its inception in 2012, the Breakthrough Prize has awarded close to \$200 million to honor paradigm-shifting research in the fields of fundamental physics, life sciences, and mathematics.

The 2017 Breakthrough Prize in **Mathematics** was Awarded to **Jean Bourgain**, IBM Von Neumann Professor in the Department of Mathematics at the Institute for Advanced Study, Princeton, for his many contributions to high-dimensional geometry, number theory, and many other theoretical contributions.

The 2017 Breakthrough Prize in Life Sciences was Awarded to Five Individual Recipients: Stephen J. Elledge, Gregor Mendel Professor of Genetics and Medicine in the Department of Genetics at Harvard Medical School, for his work investigating how damage detection proteins gives rise to mutated DNA replication, leading to increased cancer risk; Harry F. Noller, Director of the Center for Molecular Biology of RNA at the University of California, Santa Cruz, for connecting the dots between RNA's central role in the ribosome and the origin of life; Roeland Nusse, Professor of Developmental Biology at Stanford University and Investigator at Howard Hughes Medical Institute, for his work exploring the Wnt gene pathway and its implications in cancer; Yoshinori Ohsumi, Honorary Professor, Institute of Innovative Research at Tokyo Institute of Technology, for his investigation of the process of autophagy, a means by which cells recycle their own components to create nutrients; Huda Yahya Zoghbi, Professor in the Departments of Pediatrics, Molecular and Human Genetics, Neurology and Neuroscience at Baylor College of Medicine, for her work discovering the biological underpinnings of spinocerebellar ataxia and Rett syndrome.

The 2017 Breakthrough Prize in Fundamental Physics was Awarded to Joseph Polchinski, Professor in the Department of Physics and Member of the Kavli Institute for Theoretical Physics at the University of California, Santa Barbara; Andrew Strominger, Director of the Center for the Fundamental Laws of Nature at Harvard University; Cumrun Vafa, Donner Professor of Science in the Department of Physics at Harvard University.

More information on the Breakthrough Prizes is at : <u>www.breakthroughprize.org</u>



Recipients of 2017 Break Through Prizes