

An online lecture



The Thrilling World of Discovery

Prof. Dr. Atta-ur-Rahman, *FRS, NI, HI, SI, TI*

Distinguished National Professor and President Pakistan Academy of Sciences



Introduction of the Speaker: Prof. Atta-ur-Rahman, Ph.D. in organic chemistry from Cambridge University (1968), has 976 international publications in several fields of organic chemistry including 720 research publications, 37 international patents, 151 books and 68 chapters in books published largely by major U.S. and European presses. He is the Editor-in-Chief of ten European Chemistry journals and Editor of "Studies in Natural Product Chemistry", (44 volumes published under his Editorship by Elsevier Science Publishers). His books are used in courses in USA and Europe and have been translated into Japanese and Chinese languages. Prof. Rahman was elected Fellow of Royal Society (London) (2006) and won the UNESCO Science Prize (1999). He has been conferred honorary doctorate degrees by many European universities including the degree of Doctor of Science (Sc.D.) by the Cambridge University (UK) (1987). He was elected Honorary Life Fellow of Kings College, Cambridge University, UK in 2007. The Austrian government conferred its highest civil award ("Grosse Goldene Ehrenzeischen am Bande") in recognition of his eminent contributions. He has recently been conferred the highest Chinese Award "Friendship Award of China" for his outstanding contributions to the country's economic and social progress. He is the most decorated scientist of Pakistan having received 4 Civil Awards, including Tamgha-i-Imtiaz, Sitara-i-Imtiaz, Hilal-i-Imtiaz and the highest national Civil Award, Nishan-i-Imtiaz. A number of institutions have been named after Prof. Rahman including the "Atta-ur-Rahman Institute of Natural Product Discovery" (RIND) at Malaysia's largest university, Universiti Teknologi Mara and the Atta-ur-Rahman School of Applied Biosciences at National University of Science & Technology in Islamabad.

Prof. Atta-ur-Rahman was the Federal Minister for Science and Technology, Federal Minister of Education and Federal Minister/Chairman of the Higher Education Commission during 2000-2008. He is President of the Pakistan Academy of Sciences, President of Network Academies of Sciences of Islamic Countries and Foreign Fellow of Korean Academy of Sciences.

Abstract: We live in a world where truth has become far stranger than fiction. Each day brings thousands of new discoveries, many of which are transforming our lives in a multitude of ways. The blind can amazingly, today see using their tongue <http://www.wicab.com/media/Wicab%20Press%20Release%203-19-2013.pdf>. You can hang an elephant on a strand of "graphene" that is 150 times thinner than a human hair and the strand will not break since it is 200 times stronger than steel. The Harry Potter's disappearing cloak is now a reality by the discovery of metamaterials. Anything covered with metamaterials just disappears since they have the ability to bend light. Genes have been transferred from deep sea jelly fishes to orchids --- the result are luminescent flowers that glow in the dark. Bullet proof paper has been developed through application of nanotechnology. Super-fast gene sequencing under development should allow the entire human genome to be sequenced in minutes! Objects can be moved by thought control and driverless cars are under development. Anti-ageing compounds have been discovered and when given to old mice, it made them younger! Stem cells promise to cure damaged organs and may change the manner in which medicine will be practiced tomorrow. Science today presents myriad opportunities for research and exciting careers in many diverse fields. Some of these fascinating developments will be presented along with some of the dreams of the author that have been transformed into reality.

Date and Time: 10th November, 2014 at 10:00 a.m.

Venue: Prof. Salimuzzaman Siddiqui Auditorium, HEJ Research Institute of Chemistry, ICCBS, UoK

Organized by: International Center for Chemical and Biological Sciences (ICCBS) and National Academy of Young Scientists (NAYS), Pakistan