

Acceptance Speech by Professor
Ferenc Krausz
Co-Winner of the 2013 (1434H)
King Faisal International Prize for Science

35th Ceremony
Saturday 30/3/2013 – 18/5/1434H

Your Royal Highness Prince Salman Bin Abd Al-Aziz
Crown Prince Deputy Premier, Minister of Defense
Your Royal Highnesses,
Distinguished Guests,

Asalam Alykum

It is a great honour for me to be here today as a co-winner of this year's King Faisal International Prize for Science.

The King Faisal International Prize ranks among the most prestigious distinctions a scientist can earn on this globe. Only scholars breaking new grounds in science can meet the highest possible requirement of “an academic work... benefiting mankind and enriching human

progress” and over the past decades the King Faisal Foundation’s careful selection procedure has ensured that winners of the Prize indeed pioneered scientific advances that improved or are likely to improve human conditions. Being included in this company of pioneers of science is a great privilege.

I am delighted and honoured to share this award with my friend and distinguished colleague, Prof. Paul Corkum, who has influenced my own research like no one else. His concepts laid the foundations for making the electrons’ atomic-scale motion accessible to human observation.

The novel discipline of attosecond physics provides insight into and control over the microscopic motion of electrons, which is responsible, among others, for the production and detection of light (including our eyesight); for carrying and processing information in biological systems and man-made devices; creating, destroying, or modifying molecules and thereby affecting biological function. Consequently, electrons in motion play a pivotal role in physical, chemical, and

biological processes as well as in information, industrial, and medical technologies. Motivated by this broad impact, a great number of excellent coworkers and collaborators, as well as other scientists all over the world helped the new discipline to come into being. The Selection Committee's choice to recognize the importance of research into electronic motions also pays tribute to their work and provides them a great motivation to continue the way they have paved and to keep attracting young colleagues to this rapidly expanding field.

Science knows no borders between countries. Rather, its advancement requires global efforts in the spirit of the international scope of the King Faisal International Prize. Having been granted an excellent education in Hungary, outstanding conditions in Austria for developing my scientific profile, an unparalleled infrastructure and environment in Germany for expanding my activities, and the privilege of working together with numerous brilliant researchers from several other countries throughout my career, I benefited like few others from multi-national contributions. I therefore feel committed to strengthening links between scientists of different nations and

proliferating knowledge across borders. When receiving the King Faisal International Prize here in Riyadh today, it gives me a particular pleasure to announce that these efforts – undertaken in cooperation with Professor Abdallah Azzeer from King Saud University – will allow the first attosecond physics laboratory in the Gulf Region to be opened just a few miles away from here shortly, offering students from Saudi Arabia and abroad world-class research and training opportunities. This makes me at least as proud as any progress in research.

Thank you