

Acceptance Speech by Professor  
**Paul B. Corkum**  
Co-Winner of the 2013 (1434H)  
King Faisal International Prize for Science

35<sup>th</sup> 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,

This is my first trip to Saudi Arabia and I am honored to be introduced to your country in this wonderful manner. The science of our time is a large-scale enterprise, and the field that Professor Krausz and I work in – ultrafast science – is no exception. Let me begin by thanking the King Faisal selection committee for choosing our field for this year's prize.

World-wide, the King Faisal Prize is recognized as one of the most important prizes in science. This perception results from your 30-year

history of rigorous selection. The King Faisal Award is respected for two reasons: its ability to identify the importance of emerging sub-fields, and its choice of recipients who represent these fields. I admire the King Faisal Foundation for this laser-sharp focus. I am very proud and honored to follow in the footsteps of such great scientists as Ahmed Zewail, Richard Zair, Steven Chu, and Canada's two previous winners, Richard Lemieux and Sajeev John.

I first met Professor Ferenc Krausz, my co-winner, colleague and friend, in 1994, when I spent a month in Vienna. We continue to meet at conferences, to exchange visits, and to collaborate on key experiments. I could not have imagined a more appropriate co-winner.

In my country, the King Faisal Prize will be seen as recognition that the long-term investment Canada made in ultrafast science has borne fruit. I wish to especially acknowledge Canada's National Research Council and the Natural Sciences and Engineering Research Council for their faith — in the field, and in my work. Canada's institutional

pride is represented here by President Alan Rock, the Rector and Vice Chancellor of the University of Ottawa.

Throughout my career I have worked with highly talented people whose accomplishments I also represent. How can I do justice to all of them in a short speech? I must, however, highlight the contributions of my colleague, David Villeneuve, and my former colleague, Misha Ivanov. Both contributed to the birth and growth of attosecond science. I have also worked with many talented students and postdoctoral fellows who deserve recognition. Most are now spread throughout the world, helping to make the field ever-more vibrant.

Near the end of his life, the famous mathematician G. H. Hardy wrote a monogram entitled *A Mathematician's Apology*. In this classic work, he discusses how we can recognize great science. Greatness can be recognized, he says, by how an advance builds on the foundation of the past and how it enables even greater advances in the future. This perspective has influenced how I choose research topics. It is

therefore important to me that the King Faisal Prize is awarded for “significant advances to benefit humanity and enrich human knowledge” — although the words differ, the thought is the same.

Thank you for awarding the 2013 King Faisal Prize in Science to Ultrafast Science, to my colleague, Ferenc Krausz, and to me.

Thank you