

**ANNOUNCEMENT FROM THE GENERAL SECRETARIAT OF  
THE KING FAISAL INTERNATIONAL PRIZE  
ON THE RESULTS OF THE SELECTION COMMITTEES  
IN THEIR MEETINGS HELD  
BETWEEN 14/4/1434H-16/4/1434H  
CORRESPONDING TO 26/1/2013G-28/1/2013G**

**Riyadh, 28 January 2013 - 16 Rabi' I 1434H**, HRH Prince Khalid Al-Faisal, Director of King Faisal Foundation, tonight announced the winners of the King Faisal International Prize.

The King Faisal International Prize for Science (Physics) for this year 2013 (1434H) has been awarded jointly to:

**Professor Paul B. Corkum** (Canada)

Research Chair in Attosecond Photonics, University of Ottawa,  
and Director, Attosecond Science,  
Steacie Institute for Molecular Science, NRC, Canada  
and

**Professor Ferenc Krausz** (Hungary)

Ludwig Maximilians University, Munich,  
and Director, Laboratory for Attosecond Physics,  
Max-Planck-Institute of Quantum Optics, Garching, Germany

The prize winners are recognized for their independent pioneering work which has made it possible to capture the incredibly fast motion of electrons in atoms and molecules in a "movie" with a time resolution down to attoseconds. An attosecond is a vanishingly short time. One attosecond compared to one second is like one second compared to the age of the Universe.

When intense ultra-short laser pulses are focused into a gas, a laser-like beam of attosecond pulses of ultraviolet light is produced.

Professor Corkum was the first to explain this phenomenon with a conceptually simple model. He has harnessed this process for pioneering studies in collision physics, plasma physics, and molecular science. He has even been able to produce tomographic images of the movement of electrons in molecules.

Professor Krausz has developed powerful techniques for generating intense, tailored, waveforms of laser light, and he has applied these tools for observing and controlling the motion of electrons on a time scale of attoseconds to femtoseconds. His group was the first to generate single

ultraviolet pulses with duration as short as 80 attoseconds.

The King Faisal International Prize for Medicine (The Genetics of Obesity) for this year 2013 (1434H) has been awarded jointly to:

**Professor Jeffrey Michael Friedman (USA)**

Simpson Professor, Rockefeller University, New York,  
Investigator, Howard Hughes Medical Institute, New York,  
Director, Star Center for Human Genetics, New York

and

**Professor Douglas Leonard Coleman (USA)**

Senior Staff Scientist Emeritus, The Jackson Laboratory, Bar Harbor, Maine

The research findings of Professor Friedman and professor Coleman led to the identification and characterization of the leptin pathway. This seminal discovery has had a major impact on our understanding of the biology of obesity, describing some of the key afferent pathways in body weight regulation active in man. Their fundamental discoveries have also helped in the recognition of more illuminating views of the endocrine system. Because of their major contribution to the field of the genetics of obesity they have been awarded King Faisal International Prize in Medicine for the year 1434H. (2013).

The King Faisal International Prize for Arabic Language and Literature (Individual and Institutional Efforts in Writing Arabic Dictionaries) for this year 2013 (1434H) has been awarded jointly to:

**The Arabic Language Academy in Cairo**

(Egypt)

for its distinguished contributions to Arabic Language, particularly its issuance, over the past 80 years, of a large collection of general and specialized Arabic Language dictionaries which the Academy has produced in collaboration with different experts. These illustrious dictionaries are characterized by their diversity and fulfillment of the needs of different Arabic language users, by linking contemporary Arabic Language with its past and by utilizing modern techniques and methodologies of dictionary production.

The 2013G (1434H) King Faisal International Prize for Islamic Studies (Topic: *Studies on Islamic Criminal Law*) has been withheld due to the lack of sufficiently meritorious nominations.

The King Faisal International Prize for Service to Islam for this year 2013 (1434H) has been awarded to:

**Shaikh Rai'd Salah Mahagna (Occupied Palestine)**

Chairman of the Supreme Council for Islamic Call,  
Chairman of the Islamic Movement in Palestine and  
Chairman of AI-Aqsa Foundation for the Rehabilitation of Revered Islamic Places

In recognition of his following services to Islam:

- 1- A preeminent founding member of the Islamic Movement in occupied Palestinian territories in 1948.
- 2- Pursuing distinctive reforms and social services during his chairmanship of the Islamic Movement between 1996-2001 G.
- 3- Serving as Chairman of AI-Aqsa Foundation for the Refurbishment of Revered Islamic Places and Chairman of the Humanitarian Relief Organization in Occupied Palestine.
- 4- Being one the pioneers who have led many projects in AI-Aqsa Mosque, in collaboration with the Islamic Endowment Organization in AI-Quds and the Committee for the conservation of the revered AI-Aqsa Mosque and the Dome of the Rock.
- 5- Being the first to discover the tunnel dug under AI-Aqsa Mosque by the occupiers.
- 6- Serving his countrymen by working and succeeding, together with AI-Rawha Peoples Committee, in preventing the confiscation of AI Rawha land in 1998G.
- 7 - Organizing regular events titled "AI-Aqsa is in Danger" which attract thousands of Palestinians in the occupied territories and help boost their moral.

**Notes to Editors:**

- The topics for the 2014 King Faisal International Prize are: **Science- Mathematics, Medicine- Non Invasive Diagnosis of fetal Diseases, Arabic Language and Literature- Studies on Modern Arabic Novel, Islamic Studies- Cultural Heritage of Makkah Al-Mukarrama.** The deadline for all nominations is **1 May 2013.**