

**Announcing the First QF Distinguished Lecture Series for Year 2008**  
**Professor Richard Schrock, Nobel Laureate in Chemistry**  
**Massachusetts Institute of Technology (MIT), USA**

## **"The Olefin Metathesis Reaction. New Catalysts and Application"**



### **BIOGRAPHICAL SKETCH OF RICHARD SCHROCK**

Richard R. Schrock was born in Indiana, but spent his high school years in San Diego, California, and obtained his B. A. degree in 1967 from the University of California at Riverside. He attended graduate school at Harvard University, from which he received his Ph. D. degree in inorganic chemistry in 1971 (awarded 1972) as a student of J. A. Osborn. He moved to M.I.T. in 1975 where he became full professor in 1980 and in 1989 the Frederick G. Keyes Professor of Chemistry.

Schrock is perhaps best known as the discoverer of  $\alpha$  hydrogen abstraction reactions in high oxidation state metal alkyl complexes that yield high oxidation state "carbene" (alkylidene) and "carbyne" (alkylidyne) complexes. High oxidation state alkylidene complexes ("Schrock carbenes") are the active catalysts for the olefin metathesis reactions, and much effort has been expended in learning how to design, synthesize, and control the activity of olefin metathesis catalysts.

He has published more than 460 research papers and has supervised over 140 Ph.D students and postdocs. He received the ACS Award in Organometallic Chemistry (1985), the Harrison Howe Award of the Rochester ACS section (1990), the ACS Award in Inorganic Chemistry (1996), the Bailar Medal from the University of Illinois (1998), an ACS Cope Scholar Award (2001), the F. Albert Cotton Award in Synthetic Inorganic Chemistry (2006), the Theodore Richards Medal from the Northeast ACS section (2006), and the Basolo Medal from the Chicago ACS section (2007).

He is a member of the American Academy of Arts and Sciences and the National Academy of Sciences.

## **ABOUT QATAR FOUNDATION**

The Qatar Foundation for Education, Science and Community Development is a private, chartered, non-profit organization in the state of Qatar, founded in 1995 by His Highness Sheikh Hamad bin Khalifa Al-Thani, Emir of Qatar.

Guided by the principle that a nation's greatest resource is the potential of its people, the Qatar Foundation aims to develop that potential through a network of centers devoted to progressive education, research and community welfare. The chairperson of Qatar Foundation is the Emir's wife, Her Highness Sheikha Mozah Bint Nasser Al-Missned.

Qatar Foundation's flagship project is Education City which has branch campuses of six major American universities. Others are expected to join in the coming years from various parts of the world. The branch campus concept - world-class universities bringing their best-regarded programs to Qatar as full-fledged partners with Qatar Foundation - is unique in the history of education.

Education City is, in essence, a university of universities, a community of educational and research institutions that serve the whole citizen, from early childhood education to post-graduate study. A string of knowledge-based organisations is being created at Education City, including the Qatar Science & Technology Park which will house technology-based companies and entrepreneurs, and link the universities with industry.

By the end of the current decade there will be an academic medical center which aims to reach the highest standards in patient care, medical training and research. Its initial specialization will be in women's and children's medicine.

Qatar Foundation's mission is to prepare the people of Qatar and the region to meet the challenges of an ever-changing world, and to make Qatar a leader in innovative education and research.

## **RESEARCH, SCIENCE AND TECHNOLOGY**

Research is an essential component in Qatar Foundation's strategy to make Education City a world-class center for innovative education. Qatar Foundation's Research, Science and Technology Division, with Education City's branch campuses and Research Centers, is aiming at pursuing cutting-edge research and development that helps build Qatar's innovation and technology capacity, supports the growth of Qatari society and uncovers solutions to national challenges in health, climate change, the environment, clean energy and other fields.

Qatar Foundation's research strengths will be organised around core platforms of medicine, biotechnology, information and communication technologies, environmental sciences, molecular sciences and nanotechnology. Each of the university branch campuses boasts a research element, and Education City's Medical and Research Centre will be as much cutting-edge research facility as clinical care provider. And Qatar Science and Technology Park will be an incubator where private companies can partner with government agencies and academic institutions and developing research into commercial applications. Qatar National Research Funds plays a vital role in providing financial support to researchers at all levels, from students to professionals, in the private, public and academic sectors.

As part of Qatar Foundation supporting national aspirations for research and development, the Research Science and Technology Division implements a number of programmes that relate to achieving the development in niche areas of science that give the country competitive advantage while raising the research profile at the global stage. The QF distinguished lecture series provides an avenue to invite renowned scientists to share their experiences through lectures and to provide opportunities for local scientists to approach them for potential research collaborations. The Scientific Research Exchanges serves to establish collaborative programmes with hosting institutions for junior scientists to receive training in niche areas of research which are not available locally.

The Scientific Advancement and Coordination programme highlights Ethical, Environmental, Economic, Legal and Social Issues of science and technology that must be addressed in a country in order to progress. The International Science Cooperation programme helps to initiate targeted areas of research that give strengths to Qatar Foundation, Qatari Centres and Institutions by directing concentrated efforts in a particular area of work that is of strategic importance to Qatar Foundation and Qatar.

Qatar Foundation envisions research as a catalyst for expanding and diversifying a country's economy; enhancing the education and well-being of its citizens and the training and development of its workforce.