



TEXAS A&M
UNIVERSITY *at* QATAR

Qatar Foundation Research Division is pleased to announce the 9th Lecture of Qatar Foundation Distinguished Lecture Series

Professor Jean-Marie Lehn
Nobel Laureate in Chemistry 1987

“From Matter to Life: Chemistry ? Chemistry!”

Date: 6th February 2011

Time: 9:30 am – 12:15 pm

Venue: Lecture Hall 238 – Texas A & M, Education City, Doha- Qatar

Qatar Foundation Research Division is pleased to present to the public the ninth lecture of Qatar Foundation Distinguished Lecture Series by a Nobel Laureate who will speak about the conceptual considerations on science in general and on chemistry in particular.

The lecture is followed by a discussion session with the speaker.

Admission is free and reservation is on first come first served basis. To register and /or learn more about the Qatar Foundation Distinguished Lecture Series please visit www.qf-research-division.org/distinguished/

For additional information contact us by emailing DLS.info@qf.org.qa or calling +974 - 44540541.

BIOGRAPHICAL SKETCH OF PROFESSOR JEAN-MARIE LEHN



Jean-Marie Lehn (born September 30, 1939) is a French chemist. He received the Nobel Prize together with Donald Cram and Charles Pedersen in 1987 for his work in Chemistry, particularly his synthesis of the cryptands. Professor Lehn was an early innovator in the field of supramolecular chemistry, i.e., producing large, useful compounds from smaller pieces in a rational way, and continues to innovate in this field. He has published in excess of 800 peer-reviewed articles in chemistry literature.

After earning his bachelor's, he joined Ourisson's lab, working his way to the Ph.D. There, he was in charge of the lab's first NMR spectrometer, and published his first scientific paper, which pointed out an additivity rule for substituent induced shifts of proton NMR signals in steroid derivatives. He obtained his Ph.D., and went to work for a year at Robert Burns Woodward's laboratory at Harvard University, working among other things on the synthesis of vitamin B12.

In 1966, he was appointed a position as maître de conférences (assistant professor) at the Chemistry Department of the University of Strasbourg. His research focused on the physical properties of molecules.

In 1968, he achieved the synthesis of cage-like molecules, comprising a cavity inside which another molecule could be lodged. Organic chemistry enabled him to engineer cages with the desired shape, thus only allowing a certain type of molecule to lodge itself in the cage. This was the premise for an entire new field in chemistry, sensors. Such mechanisms also play a great role in molecular biology.

These cryptands, as Lehn dubbed them, became his main center of interest, and led to his definition of a new type of chemistry, "supramolecular chemistry", which instead of studying the bonds inside one molecule, looks at intermolecular bonds, and what would be later called "fragile objects", such as micelles, polymers, or clays.

In 1980, he was elected to become a teacher at the prestigious Collège de France, and in 1987 was awarded the Nobel Prize, alongside D.J.Cram and C.J. Pedersen for his works on cryptands.

RESEARCH, SCIENCE AND TECHNOLOGY AT QATAR FOUNDATION

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 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 organized 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 SIDRA 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 Division implements a number of programs 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 programs with hosting institutions for junior scientists to receive training in niche areas of research which are not available locally.

The Scientific Advancement and Coordination program 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 program helps to initiate targeted areas of research that give strengths to Qatar Foundation, Qatari Centers 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.

ABOUT QATAR FOUNDATION

Founded in 1995 by His Highness Sheikh Hamad Bin Khalifa Al Thani, Emir of Qatar, and chaired by Her Highness Sheikha Mozah Bint Nasser Al Missned, Qatar Foundation is a private, non-profit organization committed to the principle that a nation's greatest natural resource is its people.

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

For more information please visit: <http://www.qf.org.qa/>