

The Raymond and Beverly Sackler Distinguished Lecturers in Chemistry

1980-81	Prof. Rudolf A. Marcus
1982-83	Prof. Andrew Streitwieser, Jr.
1983-84	Prof. John B. Fenn
1984-85	Prof. Bruce Berne
1985-86	Prof. Robert G. Shulman
1985-86	Prof. George Feher
1986-87	Prof. Adam Heller
1987-88	Prof. Harold L. Friedman
1988-89	Prof. Walter D. Knight
1989-90	Prof. Robert Silbey
1990-91	Prof. Vitali I. Goldanskii
1991-92	Prof. Richard E. Smalley
1992-93	Prof. Ahmed H. Zewail
1993-94	Prof. Anatol M. Zhabotinsky
1993-94	Prof. Graham Fleming
1994-95	Prof. Friedrich Hensel
1995-96	Prof. Alex Pines

Joshua Jortner Distinguished Lectures in Chemistry of The Raymond and Beverly Sackler Foundation

1996-97	Prof. John M. Deutch
1998-99	Prof. Steve Berry
1999-00	Prof. Gary H. Posner
2000-01	Prof. Jan Peter Toennies
2001-02	Prof. Adrian Parsegian
2003-04	Prof. Claude Cohen-Tannoudji
2004-05	Prof. George Whitesides
2005-06	Prof. Tobin J. Marks
2006-07	Prof. K. C. Nicolaou
2007-08	Prof. Mark A. Ratner
2009-10	Prof. Barry Trost
2009-10	Prof. Louis Brus
2010-11	Prof. Richard Van Duyn
2011-12	Prof. Krzysztof Matyjaszewski
2013-14	Prof. Martin Moskovits
2014-15	Prof. Ben L. Feringa
2014-15	Prof. Wilson Ho
2015-16	Prof. Marsha I. Lester



Joshua Jortner ההרצאות המיוחדות בכימיה
Distinguished Lectures in Chemistry על שם יהושע יורטנר
Endowed by Raymond and Beverly Sackler נתרמו ע"י ריימונד ובברלי סאקלר

Professor Omar M. Yaghi פרופסור עומר יגהי
James and Neeltje Tretter Chair הקתדרה ע"ש נילטיג' טרטנר
Department of Chemistry המחלקה לכימיה
University of California אוניברסיטת קליפורניה
Berkeley, California ברקלי, קליפורניה

Lecture הרצאה

RETICULAR CHEMISTRY: THE ATOM, THE MOLECULE, THE FRAMEWORK

The lecture will take place on Tuesday,
13 December 2016, at 14:00,
Melamed Hall (6), Shenkar Physics building,
Tel-Aviv University, Ramat-Aviv

ההרצאה תתקיים ביום שלישי,
13 בדצמבר 2016, בשעה 14:00,
אולם מלמד (6), בניין שנקר לפיסיקה,
אוניברסיטת תל-אביב, רמת-אביב

Lecture הרצאה

SEQUENCE DEPENDENT MATERIALS: A CARBON NEUTRAL CYCLE AND HARVESTING WATER FROM AIR

The lecture will take place on Thursday,
15 December 2016, at 16:00, Room 315,
Multidisciplinary Research Building,
Tel-Aviv University, Ramat-Aviv

ההרצאה תתקיים ביום חמישי,
15 בדצמבר 2016, בשעה 16:00, חדר 315,
בבניין הרב תחומי למחקר בהנדסה ומדעים,
אוניברסיטת תל-אביב, רמת-אביב

*Light refreshments will be served
before the lectures* כיבוד קל יוגש לפני ההרצאות

<http://www.tau.ac.il/institutes/advanced/>



Professor Joshua Jortner was born in Poland in 1933 and immigrated to Israel in 1940. He received his Ph.D. from the Hebrew University of Jerusalem in 1960. In 1964 he was appointed to a professorship in the Department of Chemistry at Tel Aviv University and served as its first chairman. From 1966-72 he served as Deputy Rector, Acting Rector and Vice President of Tel Aviv University. From 1973-2003 he held the position of the Heinemann Professor of Chemistry at the School of Chemistry, The Raymond and Beverly Sackler Faculty of Exact Sciences of Tel Aviv University. He has held visiting Professorships at the University of Chicago, the University of Copenhagen, and the University of California, Berkeley. In 1995 he was the Christensen Visiting Fellow, St. Catherine's College, Oxford, and in 1998 he served in the International Research Chair "Blaise Pascal" of the Fondation de l'École Normale Supérieure, France. Jortner holds honorary doctorates from the Ben Gurion University

of the Negev, Israel (1985); the Pierre and Marie Curie University of Paris, France (1986); the Technical University of Munich, Germany (1996); the Technion, Israel Institute of Technology, Haifa, Israel (2005); the Weizmann Institute of Science, Rehovot, Israel (2005); the Free University of Berlin, Germany (2005); and the Humboldt University of Berlin, Germany, (2003). Among his awards are the International Academy of Quantum Science Award (1972), the Weizmann Prize (1973), the Rothschild Prize (1976), the Kolthof Prize (1976), the Israel Prize in Exact Sciences (1982), the Wolf Prize in Chemistry (1988), the Honorary J. Heyrovsky Medal (1993), the August Wilhelm von Hofmann Medal (1995), the Joshua Jortner Distinguished Lectures in Chemistry Endowed by Raymond and Beverly Sackler (1997), the Robert S. Mulliken Medal (1999), the Joseph O. Hirschfelder Prize (1999), the Maria Sklodowsky-Curie Medal of the Polish Chemical Society (2003), the Medal of the Israeli Chemical Society (2004), the Joshua Jortner Chair in Chemistry endowed by Raymond and Beverly Sackler (2007), the Lise Meitner Research Award of the Alexander von Humboldt Foundation (2007), and the EMET Prize in Exact Sciences: Chemistry (2008). A member of the Israeli Academy of Sciences and Humanities, Jortner is a foreign honorary member of the Academies of Sciences of Denmark, Poland, Romania, Russia, India, the Netherlands, the Czech Republic, the Leopoldina National Academy of German, and the Italian Accademia Nazionale dei Lincei. He is a member of the International Academy of Quantum Molecular Sciences and the Academia Scientiarum et Artium Europaea. He is a Foreign Honorary Member of the American Philosophical Society, the American Academy of Arts and Sciences and the National Academy of Sciences of the United States of America. He held many honorary lectureships in Europe, Asia, the United States and Israel.

Jortner served as President of the Israel Academy of Sciences and Humanities (1986-1995), served as the Founding President of the Israel Science Foundation, and acted as Science Advisor to the Prime Ministers of Israel, Shamir, Rabin and Peres. He served as the President of the International Union of Pure and Applied Chemistry (1998-2000).

His research centers on the exploration of the phenomena of energy acquisition, storage and disposal in isolated molecules, clusters, nanostructures, condensed phases and biophysical systems. Jortner is the author of over 735 scientific publications, and the author and editor of 28 books.



Professor Omar M. Yaghi is currently the James and Neeltje Tretter Chair Professor of Chemistry at UC Berkeley, and a Senior Faculty Scientist at Lawrence Berkeley National Laboratory. He is the Founding Director of the Berkeley Global Science Institute. He is also the Co-Director of the Kavli Energy NanoScience Institute, and the California Research Alliance by BASF.

Prof. Yaghi's work encompasses the synthesis, structure and properties of inorganic and organic compounds and the design and construction of new crystalline materials. He is widely known for discovering several extensive classes of new materials termed metal-organic frameworks, covalent organic frameworks, and zeolitic imidazolate frameworks, and for successfully developing them from basic science to applications. These materials have the highest surface areas known to date, making them

useful in clean energy storage and generation. Specifically, applications of his materials are found in the storage and separation of hydrogen, methane, and carbon dioxide, and in clean water production and delivery, supercapacitor devices, proton and electron conductive systems. The building block approach he developed has led to an explosive growth in the creation of new materials having a diversity and multiplicity previously unknown in chemistry. He termed this field 'Reticular Chemistry' and defines it as 'stitching molecular building blocks into extended structures by strong bonds'.

Prof. Yaghi's early accomplishments in the design and synthesis of new materials have been honored by the Solid-State Chemistry Award of the American Chemical Society and Exxon Co. (1998) and the Sacconi Medal of the Italian Chemical Society (2004). His work on hydrogen storage was recognized by Popular Science Magazine which listed him among the 'Brilliant 10' scientists and engineers in USA (2006), and the US Department of Energy Hydrogen Program Award for outstanding contributions to hydrogen storage (2007). He was the sole recipient of the Materials Research Society Medal for pioneering work in the theory, design, synthesis and applications of metal-organic frameworks and the AAAS Newcomb Cleveland Prize for the best paper published in Science (2007). He is also the recipient of the American Chemical Society Chemistry of Materials Award (2009), Izatt-Christensen International Award (2009), United Kingdom's Royal Society of Chemistry Centenary Prize (2010), China Nano Award (2013), King Faisal International Prize in Science (2015), and Mustafa Prize in Nanoscience and Nanotechnology (2015). He published over 200 articles, which have received an average of over 300 citations per paper. He is among the top five most highly cited chemists worldwide.