Omar M. Yaghi

Professor, Department of Chemistry & Biochemistry, UCLA
PhD, University of Illinois-Urbana; NSF Postdoctoral Fellow, Harvard University

Tel: (310) 206-0398
Fax: (310) 206-5891
Email: yaghi@chem.ucla.edu
http://yaghi.chem.ucla.edu/

Omar M. Yaghi received his Ph.D. from the University of Illinois-Urbana (1990) with Professor Walter G. Klemperer. He was an NSF Postdoctoral Fellow at Harvard University (1990-92) with Professor Richard H. Holm. He has been on the faculties of Arizona State University (1992-98) and University of Michigan (1999-2006). His current position is the Jean Stone Professor of Chemistry at UCLA. His 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 (1999). 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 the recipient of the American Chemical Society Chemistry of Materials Award (2009). His work encompasses the synthesis, structure and properties of inorganic compounds and the design and construction of new crystalline materials. He is widely known for inventing several extensive classes of new materials termed metal-organic frameworks, zeolitic imidazolate frameworks, and covalent organic frameworks. These materials have the highest surface areas and the lowest densities known to date, making them useful in clean energy technologies such as hydrogen storage, methane storage, and carbon dioxide capture. The building block approach he developed has led to an explosive growth in the creation of new materials of a diversity and multiplicity previously unknown in chemistry. He termed this emerging field 'Reticular Chemistry' and defines it as 'stitching molecular building blocks into extended structures by strong bonds'. He published over 130 papers which have received over 180 citations per paper. He is listed among the top ten most highly cited chemists worldwide (1998-2008).