Omar M. Yaghi James and Neeltje Tretter Chair Professor of Chemistry University of California, Berkeley

Omar M. Yaghi received his Ph.D. in Chemistry from University of Illinois at Urbana-Champaign, and was an NSF Postdoctoral Fellow at Harvard University. He is the James and Neeltje Tretter Chair Professor of Chemistry at University of California, Berkeley. He is the Founding Director of the Berkeley Global Science Institute whose mission is to build centers of research in developing countries and provide opportunities for young scholars to discover and learn, and the Co-Director of the Kavli Energy NanoSciences Institute focusing on the basic science of energy transformation on the molecular level, as well as the California Research Alliance by BASF supporting joint academia-industry innovations.

His 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 pioneering several extensive classes of new materials: Metal-Organic Frameworks (MOFs), Covalent Organic Frameworks (COFs), and Zeolitic Imidazolate Frameworks (ZIFs). These materials have the highest surface areas known to date, making them useful for hydrogen and methane storage, carbon capture and conversion, water harvesting from desert air, and catalysis, to mention a few. The building block approach he developed has led to an exponential 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'.

Yaghi is an elected member of the National Academy of Sciences, and has been honored with many awards for his scientific accomplishments, including the Materials Research Society Medal (2007), the American Chemical Society Award in the Chemistry of Materials (2009), the King Faisal International Prize in Science (2015), the Royal Society of Chemistry Spiers Memorial Award (2017), the Albert Einstein World Award of Science (2017), the BBVA Foundation Frontiers of Knowledge Award in Basic Sciences (2017), the Wolf Prize in Chemistry (2018), the ENI Award for Excellence in Energy (2018), the Gregori Aminoff Prize by the Royal Swedish Academy of Sciences (2017), and the August-Wilhelm-von-Hofmann-Denkmünze of the German Chemical Society (2020). He has published over 300 articles and is listed among the most highly cited chemists worldwide.