Biographical Sketch: Menachem Elimelech

Menachem Elimelech is the Sterling Professor of Chemical and Environmental Engineering at Yale University. He received his B.S. and M.S. degrees from the Hebrew University of Jerusalem and his Ph.D. in Environmental Engineering from Johns Hopkins University. In his first appointment, Elimelech served as professor and vice chair of the Department of Civil and Environmental Engineering at UCLA. Upon coming to Yale in 1998, he founded Yale’s Environmental Engineering Program, which has become one of the leading programs in the United States.

Professor Elimelech’s research is in the general area of the water-energy nexus. Specifically, the research in his group involves: (i) membrane-based processes for energy-efficient desalination and wastewater reuse, (ii) advanced materials for next-generation water decontamination technologies, and (iii) environmental applications of nanomaterials.

Professor Elimelech has received numerous major awards in recognition of his research. Notable among these are the Eni Award for Protection of the Environment in 2015; election to the United States National Academy of Engineering in 2006, the Chinese Academy of Engineering in 2017, the Australian Academy of Technology and Engineering in 2021, and the Canadian Academy of Engineering in 2022; and the Clarke Prize for excellence in water research in 2005.

Professor Elimelech has authored more than 530 refereed journal publications, including invited review articles in Science and Nature, and is a co-author of the book Particle Deposition and Aggregation (1995). He is a Clarivate (Web of Science) Highly Cited Researcher.

Professor Elimelech has advised 49 Ph.D. students and 46 postdoctoral researchers, many of whom hold leading positions in academia and industry. In recognition of his excellence and dedication in teaching and mentoring, he received the W.M. Keck Foundation Engineering Teaching Excellence Award in 1994, the Yale University Graduate Mentoring Award in 2004, and the Yale University Postdoctoral Mentoring Prize in 2012.