

Wayne D. Kaplan is the Executive Vice President for Research at the Technion, and is a full professor in the Department of Materials Science and Engineering at the Technion where he holds the Karl Stoll Chair in Advanced Materials. He completed his B.Sc. in Mechanical Engineering, and his M.Sc. and D.Sc. in Materials at the Technion after immigrating to Israel from the U.S. He then spent a year as a Humboldt Fellow at the renowned Max-Planck Institute in Stuttgart Germany before joining the Technion faculty in 1995.

During the past 20 years, Prof. Kaplan's research activities at the Technion have focused on the structure, chemistry and energy of interfaces between metals and ceramics. Applications from these basic studies include the development of metal-ceramic composites for use in high temperature applications (such as jet engines and automobile brake-pads), flash memory devices, and defense (transparent ballistic armor). In addition to his basic research in materials engineering, Prof. Kaplan works on the development of electron microscopy techniques for characterization at the nano-scale level. Prof. Kaplan, whose research aims at understanding how the arrangement of atoms at metal-ceramic interfaces influences the material's properties, makes intensive use of the Technion's special high resolution transmission electron microscope (the Titan) at the Electron Microscopy Center.

Prof. Kaplan is the author of more than 130 scientific articles, including 3 publications in Science, as well as two textbooks: *Joining Processes and Microstructural Characterization of Materials*, both published by Wiley. In 2006 he received the Henry Taub Prize for Academic Excellence. He is a member of the Materials Research Society and the American Ceramic Society, the Israel Microscopy Society, and was an editor of the *Journal of Materials Science* (Springer).

Prof. Kaplan was born in Miami, Florida, but spent most of his childhood years just north of Milwaukee, Wisconsin. He met his wife (Marielle Kaplan, who immigrated to Israel from Lyon, France) as an undergraduate at the Technion. Marielle Kaplan, who also completed her undergraduate degree and Ph.D. at the Technion, is the Director of the Clinical Laboratory Division of Rambam Hospital. They have two boys (Ben and Shai) who were both born in Haifa.