



**PROF. BRIAN BERKOWITZ**  
**Department of Environmental Sciences and Energy Research**  
**Weizmann Institute of Science**

Prof. Brian Berkowitz's research centers around the analysis and modeling of fluid and chemical transport in geological formations, with particular emphasis on groundwater systems. He and his colleagues are developing new models that realistically describe pollutant migration patterns. These models demonstrate conditions under which groundwater contamination can occur, a phenomenon which often happens at a much faster rate than was previously thought.

In parallel, Prof. Berkowitz and his colleagues have developed a series of unique series of laboratory experiments to examine a diverse range of flow and reactive chemical transport processes in geological media. The laboratory is also focusing efforts on developing new catalytic methods and synthesizing new materials, to remediate water polluted by toxic organic contaminants (industrial solvents, agrochemicals, petrochemicals, pharmaceuticals) and heavy metals. It is expected that this research will ultimately result in higher quality supplies of fresh water, safer waste disposal and sustainable development with a cleaner environment.

Born in 1959 in Edmonton, Alberta, Canada, Prof. Berkowitz received his B.Sc. and M.Sc. degrees in applied mathematics in 1980 and 1982, respectively, from the University of Alberta. He completed his D.Sc. at the Technion. From 1986 to 1991, he worked as a research hydrologist for Israel's Ministry of Agriculture. He served as a visiting professor in the Department of Geological Sciences, University of British Columbia before joining the staff of the Weizmann Institute in 1993 as a senior scientist. In 1999, he was promoted to associate professor and appointed full professor in 2005. In 2005, he was elected a fellow of the American Geophysical Union; he was also appointed editor of *Water Resources Research*, the flagship journal in hydrology. In 2007, Prof. Berkowitz was elected a fellow of the Geological Society of America, and in 2008 he was named "Inventor of the Year" by Yeda Research and Development Co. Ltd., the technology transfer arm of the Weizmann Institute of Science. Other prizes and honors include the Goldschmidt Award of the Israel Association for Hydrology (1986); the Faculty of Science Teaching Excellence Award from the Science Undergraduate Society, University of British Columbia, Canada (1992); and the 1997 Michael Landau Achievement Prize (*Mifal HaPayis*) in Israel. Prof. Berkowitz is the incumbent of the Sam Zuckerberg Professorial Chair and has served as Head of the Department of Chemical Research Support since 2004.

**The Canadian Society for the Weizmann Institute of Science**  
4700 Bathurst Street, 2<sup>nd</sup> Floor Toronto, ON M2R 1W8  
Tel: 416-733-9220, [www.weizmann.ca](http://www.weizmann.ca), [weizmann@ca.inter.net](mailto:weizmann@ca.inter.net)