

Invites you to a presentation by

**JOHN W. BANDLER**

**Wed. Sept. 19, 2012 at 6:45 PM, McMaster University Main Campus, Room ITB-A113**  
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John W. Bandler holds the B.Sc.(Eng.), Ph.D., and D.Sc.(Eng.) degrees from the University of London, England. He is a Professor Emeritus at McMaster University, Hamilton. He was President of Optimization Systems Associates Inc., which he founded in 1983, until 1997, when his company was acquired by Hewlett-Packard. He is President of Bandler Corporation. He is a Life Fellow of the IEEE, and a Fellow of several other societies, including the Canadian Academy of Engineering and the Royal Society of Canada. In 2004 he received the IEEE MTT-S Microwave Application Award. In 2012 he received the IEEE Canada A.G.L. McNaughton Gold Medal. He has published more than 470 technical papers. He has written a novel, a screenplay, and several stage plays, three of which have been performed, and one of which he directed himself in 2012.

## **Have You Ever Wondered About The Engineer's Mysterious "Feel" For A Problem?**

*Based on the IEEE Canada 2012 McNaughton Lecture*

I first encountered the engineer's so-called "feel" for a technical problem when I started out as a graduate student. But, against all professorial advice, I instantly committed myself to a life-long study of computer-aided design and optimization technology, then widely considered (by engineers) contrary to both respectable mathematical theory and sound engineering practice. Now, almost half a century after my bachelor's degree, I find that I can explain the engineer's mysterious "feel" as well as the motivations of those who discouraged me. Luckily I persevered, with the encouragement of professionals and friends as well as co-workers more brilliant than I deserved. I have always been guided by two principles. The first is by H.J. Eysenck, ca. 1960s: "If we make up an ad hoc hypothesis for every new case . . . then we shall never go beyond the present position where we can explain everything and predict nothing." The second is my own: "Proceeding in a direction not sanctioned by my peers has always proved tough, but the results achieved have almost always been worth the effort." Thus, I caution against "experts" who claim to see no future in your proposed work; I recommend you not take that well-trodden path to be instantly understood and accepted. Instead, I encourage you to follow your pioneering instinct even if you find yourself initially ridiculed or rejected.