Significant Performance in last 5 years

With advances in VLSI Design Automation (DA) the Microelectronics industry is undergoing a major revolution. The future of Microelectronics is totally linked to innovation and research in VLSI DA. Considerable research work was conducted at KFUPM in this field in the last few years. An example of this is the project undertaken to explore solutions to problems of speed/power performance in VLSI circuits.

On a related track, at KFUPM, I completed the integration of a state-of-the-art VLSI Design Automation System which is being used to design VLSI chips in Saudi Arabia.

High-level synthesis of digital systems is another major research area (related to VLSI DA) that has also found support at the university. Two high-level synthesis systems have been designed and implemented. Few MS theses, journal publications, and several conference papers have resulted from this work.

The experience gained on these projects and research work culminated in the writing of graduate level research-oriented text books, one entitled '**VLSI Design Automation: Theory and Practice**', which was published by Mc-Graw Hill Book Co., Europe, and co-published by IEEE Press, 1995.

Our other recent book published is entitled: **Iterative Computer Algorithms with Applications in Engineering: Solving Combinatorial Optimization Problems**. December 1999, Sadiq M. Sait and Habib Youssef, IEEE Computer Society Press, California.

I have extensively published in the last four years in the fields of Design Automation and Iterative Algorithms.

In summary, my work in the last five years comprises (1) authoring 15 journal papers, (2) authoring 32 conference papers, (3) authoring a book and a book chapter, (4) development of the VLSI Design Automation Laboratory of COE, (5) work on 4 funded projects (two research projects funded by KFUPM Research Committee, one book project funded by KFUPM Research Committee, and one funded by KACST), (6) advising (Chairman/Co-Chairman) 13 MS theses, (7) working as a member of two editorial boards of reputable journals (Arabian Journal of Science and Engineering), (8) chairing a conference session, and (9) delivering a few seminars.

Currently I am serving as the Chairman of the Computer Engineering Department at King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia.