



Yasaman SHADROKH

Home Country

Iran

Degree

**PhD in Electronic
and Electrical
Engineering**

Expertise

**Electronics and
Electrical
Engineering**

Research Focus

**Computer-Based
Simulations
in Nanotechnology**

Host University

**Imperial College
London,
United Kingdom**

Fellowship Awarded

2008

Yasaman Shadrokh was born and grew up in Tehran, Iran. She says that throughout her studies she was a demanding and challenging student who never let obstacles get in the way of what she wanted.

Yasaman obtained her BSc degree in electronic and electrical engineering at Tehran Azad University in 1988 and her MSc degree from Glasgow University in the United Kingdom in 2006, graduating with distinction for her final project. She is pursuing her PhD in micro- and nano-technology at Imperial College London and expects to graduate by the end of 2010.

With rapidly improving technological capabilities and new physical transport processes, interest in nano-sized devices has increased dramatically over the last decade. The size of the control contact in these devices has been reduced to sub-100nm dimensions. This influences some of the device performance parameters and requires a search for new materials and geometries.

Yasaman's research uses different device simulators and analysers along with three-dimensional software to study the robustness of device structures to downscaling within the field of digital applications. Her research focus has already turned toward fabrication of the simulated device to evaluate the simulation results. She is also working on nanowires, especially the fabrication process and applications that can be used in making FET transistors.

Yasaman has published widely and presented the results of her work at several conferences. Highlights of her work published in the International Journal of High Speed Electronics received a best-paper award. She has also been teaching subjects such as mathematics and electronics and has given lectures on using the TCAD simulator to third-year undergraduate students.