Dean Aslam shows his innovations in education/research at Harvard, Princeton, MIT

Dean Aslam presented his Lego-, robot- and microcontroller-based learning modules at Harvard, Princeton and MIT recently. His research on micro and nanotechnologies in the past 10 years has resulted in such unique modules which focus on three layers of learning for Microsystems: fundamental science, enabling technologies and complete systems. For example, Legos are used to explain the fabrication process and operation of (a) nano-structures and transistors, (b) sensors and actuators, (c) wireless devices and (d) cochlear implant probes.

The researchers at Harvard, Princeton and MIT were very impressed with the modules that Dean Aslam now uses in the K-12, undergraduate and graduate teaching. Referring to nanotechnology modules, Dr. Philip Sadler, Head of Science Education at Harvard, says: “It was intriguing to see how you approached conveying the concepts and processes of this burgeoning field using simple activities and models. I found your use of Legos to be especially riveting. Taking such a familiar, everyday item and putting it to a new use is particularly impressive. I learned a tremendous amount from your visit and see great potential in your methods and ideas.” Dr. Dan Steinberg, Director of Education and Outreach at Princeton University, says “I am very impressed with the LEGO modules on nano fabrication. I haven't seen anything like that anywhere else”.

Nanobrick LLC, a new company, was launched on September 21, 2006 to commercialize Dean Aslam’s inventions. The Nanobrick plans to offer short courses and to market low-cost learning toys and learning modules in the first phase of its business plan.