

**Attention all Students and Interested Faculty**  
*Join the Kent State- Stark Campus Math Club public lecture on*

**Electrospun Nanofibers and their Applications**

By

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Thursday, March 12, 2009

4.00-5:00pm

Kent State University - Stark Campus  
**Main Hall 203**

**Abstract:**

In year 2000, The University of Akron pioneered an electrospinning technology to produce nanofibers that are infinitely long and 30 to 100 nanometers in width. Since then a number of new ideas and applications evolved. In this talk, I will introduce the electrospinning process and discuss three applications that I am involved in. The first one will deal with coated nanofibers and wound healing techniques, the second one will involve calculations of field emission from nanofibers, and the last one will involve materials characterization of nanofibers, namely obtaining Young's modulus. These applications include mathematical modeling, simulations, and comparisons to experiments when possible. I will also discuss other aspects of nanotechnology including applications using widely known carbon nanotubes.

**About the Speaker:**

Dr. Subramaniya Hariharan is a Professor of Electrical & Computer Engineering and a Professor of Mathematics at University of Akron. He is the Associate Dean for Research and Graduate Studies in the College of Engineering. He served as the Program Director in Applied Mathematics at NSF (95-97). He is also the Associate Editor of the SIAM Journal of Applied Mathematics. With many grants to his credit he was twice the recipient of the Outstanding Researcher Award at University of Akron (93 & 99). His current research interests are in applied mathematics and scientific computation, modeling in materials science, and nanoscale modeling.

*Food and beverages will be available! If you have any questions, or need directions, please send an email to [akasturi@kent.edu](mailto:akasturi@kent.edu) or call 330 244 5172.*