

# Industrial Strength Mathematics



## *Focus on Mathematics Seminar*

**Presented by:**

**Art Heinricher and Suzanne Weekes, WPI**

**Derek Kane, DEKA Research & Development**

**Brady Townsend, Wachusett Regional High School**

**Thursday, May 13**

**3:00 – 6:00 PM**

**Charles River Museum of Industry**

**154 Moody Street, Waltham**

Mathematics is everywhere, but it usually doesn't look like the mathematics you, or your students, find in textbooks. The purpose of this seminar is to present some of the mathematical problems that we have found while working with our industrial partners at the Center for Industrial Mathematics and Statistics at WPI, but also to help you work on the problems and to find ways that you can use these problems in your own classes. We will describe some real problems and you will get to work on them.

Derek Kane from DEKA Research & Development will start the seminar with a demonstration of one of DEKA's recent inventions: the INDEPENDENCE™ IBOT™ Mobility System. This is a new "wheelchair" that can do things, and go places, that no ordinary wheel chair can.

Participants will work in teams on one of three projects:

- Geometry in the design of the iBot.
- Matrices and networks in decision making for public transportation.
- Basic statistics for decision making... in gas stations.

These projects have been developed and tested by teachers at the Mathematics in Industry Institutes at WPI.

**Deadline for registration is May 10. Please see your district leader for registration information and easy directions to the Museum in Waltham. Refreshments will be served from 3:00 to 3:20, and the seminar will begin promptly at 3:30.**