## Spring 2010 Wulff Lecture

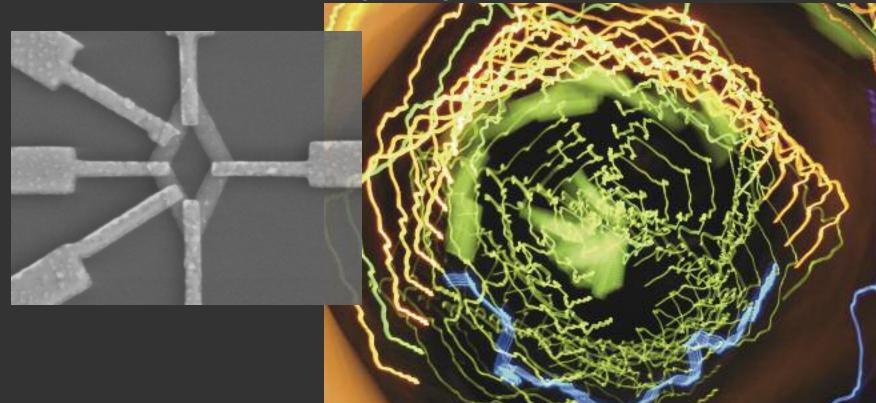
Tuesday, April 13, 2010 4:30–5:30 pm Room 1-190 Reception immediately following

## Magnetic Materials Science:

How magnets help us explore and record the world

## Professor Caroline A. Ross

Toyota Professor of Materials Science and Engineering Department of Materials Science and Engineering, MIT



Materials science is all about understanding the properties of materials, and how we can control them. This talk will show how magnetic materials have evolved, from natural magnets (lodestone and meteorites) to synthetic magnets with amazing properties, such as super-strong magnets, transparent magnets, nanosized magnets, or magnets that can be controlled with electric fields or mechanical deformation. The materials that have enabled modern life—the compass in your cell phone, hard disk drives, electric motors, power transformers, and medical diagnostics and treatments—all rely on magnetic materials.

The Wulff Lecture is an introductory, generalaudience, entertaining lecture which serves to educate, inspire, and encourage MIT undergraduates to take up study in the field of materials science and engineering and related fields. The entire MIT community, particularly freshmen, is invited to attend. The Wulff Lecture honors the late Professor John Wulff, a skilled, provocative, and entertaining teacher who inaugurated a new approach to teaching the popular freshman subject: 3.091 Introduction to Solid State Chemistry.



