

# Preparing Future Scientists at Multiple Levels

Materials science integrated into the high school physical science curriculum;

Enhancing diversity at the graduate level through a M.S.-to-Ph.D. Bridge Program

## Bridge Program for Physics Graduate Students

OSU, CEM and the OSU Department of Physics have established and funded a M.S.-to-Ph.D. Bridge Program at OSU; OSU is one of the first sites funded by the American Physical Society Bridge Program. The program seeks to enhance the diversity of qualified applicants to physics Ph.D. programs at OSU and at other universities. The first cohort of students for this 2-year transitional M.S. program will begin in June 2013.

## Materials Science in High School Classrooms

Researchers from The Ohio State University's Center for Emergent Materials were awarded a Math Science Partnership grant from the Ohio Department of Education to expose students to physical science concepts in high school classrooms through a materials science course. The program included a 40-hour ASM Materials Camp for Teachers held in summer 2012, and professional development events held throughout academic year 2012-2013.

Significant improvement was seen in scores on materials science content tests administered before and after the workshops. This project brought together collaborators from the CEM, the OSU College of Engineering, the Ohio Resource Center, Springfield City Schools and Columbus City Schools.



Master teacher Nydam working with teachers on the lemon battery experiment at the materials camp during summer 2012.