

**The Materials Science and Engineering Society**  
by Derek Miller, President

The Materials Science and Engineering Society (MSES) at Michigan State University is a student-managed, member chapter of Material Advantage, a student program for materials science and engineering of ASM International. The primary mission of the MSES chapter is “to promote educational and informative activities that generate interest in the materials science field.” MSES members are encouraged to join Material Advantage in order to enhance its viability and enjoy the support and benefits offered such as free technical-professional journals, scholarship funding, travel grants to attend conferences, and networking and career development assistance. MSES is also affiliated with the ASM Detroit Chapter. MSES organizationally consists of the these officers: president, vice-president, secretary, treasurer, webmaster, symposium day representative, graduate representative, and faculty advisor. The general membership is open to all levels of undergraduate and graduate students in materials and engineering and physical sciences. Areas of interest vary widely and include biomaterials, metallurgy, composites, electronic materials, and alternative energy materials.

The attendance of regular MSES monthly meetings is generally between 20 and 30 students. Considering the size of our program (~60-70 MSE majors) at Michigan State, participation in our chapter functions is well represented. Meetings generally consist of an invited faculty member or industry professional giving a lecture or question and answer session of about an hour. Last semester, new faculty members were invited to introduce their work and research interests. This proved to be most valuable as several MSES students benefited by getting interviews and then jobs as research assistants under the guidance of these professors. The chapter invited a recent MSU alumnus currently employed by a solar panel manufacturer located in Toledo, OH to speak about the technology behind photovoltaic cells as well as the transition experience from a graduate of MSU into the workplace. Several times a year the MSES also holds fundraising activities. These have included t-shirt and sweatshirt sales, stadium cleanup, and profit sharing from advertising for local businesses.

Six members of the MSES who were also Material Advantage members had the privilege of attending MS&T '09 in Pittsburgh assisted by a travel grant from ASM. The generous grant helped defray the travel cost to students. The students attended several technical sessions on Monday and Tuesday, and were able to see how their classroom knowledge was applied in the

real world. The students also took advantage of their time to explore the rooftop of the convention center overlooking the city lights of Pittsburgh, and got a chance go downtown and try one of the famous Primanti's sandwiches. They even got to see some of their professors out on the dance floor of the Sunday night student mixer.

Every year, the MSES and the Chemical Engineering Society host an event called Symposium Day. This day-long, student-organized symposium is held in the Kellogg Conference Center on MSU's campus and is attended by students, faculty and staff. Two parallel series of lectures are given in the morning, followed by a keynote speaker in the afternoon. One series focuses on graduate school and an academic career. The other series focuses on careers in industry. The most recent keynote speaker was Matthew Melis, from NASA's Glenn Research Center in Cleveland, who spoke about the Columbia Space Shuttle disaster, what went wrong, and what steps were taken to ensure it does not happen again.

The Materials Science and Engineering Society is constantly trying to expand both the chapter and interest in the materials science field. Our members at all levels are diligent in their efforts to enhance the viability and visibility of MSES. MSES members speak in freshman and sophomore classes to advertise meetings, speak on student panels to visiting high school students, and assist professors with outreach programs to even younger students. Most of the current MSES members were unaware of the materials science field until they started exploring colleges. By introducing materials science to students in middle school or early high school, we will grow interest greatly. The Materials Science and Engineering Society is proud to assist the Materials Advantage program and all of its contributors in their efforts to promote materials science and engineering among pre-professionals. We are very thankful for the opportunity to be this month's feature chapter.



**MSES members teaming up on diffusion homework.**