Academic and industrial conferences are professional events where researchers meet and network with colleagues, industry affiliates, national lab scientists, instrument manufacturers, students, and industry advocates. Typically the principal purpose is to share one’s own work, learn from others, and develop new ideas. This guide is designed to provide an overview of such conferences so that you can make the most out of your trip.

To get an idea about the scope of these meetings: the major professional conferences in Materials Science tend to draw about 5,000 attendees over the course of one week. For example, MS&T is an annual meeting that brings together five distinct materials-related societies every fall, including the American Ceramic Society, TMS, AIST, and ASM. This is also the parent organization for Materials Advantage.

Similarly, the Materials Research Society has annual meetings in the Spring (Phoenix) and the Fall (Boston). There are many smaller or more-focused conferences within Materials Science as well, with MSE researchers often attending annual or specialty meetings for APS, ACS, AVS, IEEE, and others.

Professional Attire

- Conference attendees will be wearing everything from suits to business casual.
- Always prepare for rain or snow, depending on the season.
- From poster presentations to meet-and-greets in the evening, prepare to be on your feet a lot.

Scientific Talks
- This is the main reason for the conference. There will be many interesting talks for the duration of the conference, so be sure you spend some time attending. Sometimes you can access a guide of particularly noteworthy talks or events, occasionally even put together by student groups (e.g. the ACerS PCSA).
- Invited talks, typically given by very well-known experts in their field, may be more thorough.
- The first few minutes of a talk are often the most important; plan accordingly.
- Try to ask at least one good question at a talk while you are at the conference.

Poster Sessions
- Poster sessions are designed to encourage extensive interaction with the presenter. Ask many questions for the posters that you find interesting, and keep in mind there is always something to be learned from others’ work.
- If you are presenting a poster, be open to questions and criticism.

Award Sessions
- Conferences often feature scientific and industrial awards in which you may hear some of the best and most widely understandable talks of the meeting.

Organizational Meetings
- Advanced graduate students or professionals may be interested in volunteering to help organize the meetings or assist in the societies (such as MS&T or MRS).
Industry Events

- There are professional development workshops as well as some talks that really target industry, and are often very focused on specific equipment or methods.
- There are always some tours scheduled. Note that these can take longer and may cost money.

Student Events

- Most conferences, such as MRS, are tailored for graduate students and professionals. MS&T is unique by providing a wide array of activities for undergraduates as well.
- Engage with students of other universities and learn about the various graduate or post-doctoral programs. Network with industry professionals and researchers.
- Balance time between events and talks for a well-rounded takeaway.

The Exhibit

- Major conferences typically have an area with a variety of companies, research journals, or scientists demonstrating what they do.
- The exhibit is for meeting, learning and selling things. It is not a career fair.
- See what kind of equipment is available for various lab tasks at the booths. You may want to ask if they hire students for internships if your work aligns with the company’s. If so, it is polite to ask them for a business card and send them a thank-you note the following week, along with your resume.

Breaks

- Several times a day there are mandated breaks in the talks. Conversation with the speakers and other attendees is encouraged during these breaks. Introduce yourself, tell them where you are from, and ask them questions. If you found their presentation intriguing, tell them that; maybe ask about joining their group someday, or what it’s like to work for their company.
- There are usually refreshments available throughout the conference. You may also buy food.
- Conferences often include a welcome event or other chances to mingle. These are great opportunities to network, but seldom provide a full meal.

Meals

- Meals may be an opportunity to meet and network with peers, faculty, or professionals.
- You can eat in the exhibit hall, or find a restaurant nearby.
- While on professional business, it is good practice to keep all receipts for meals, transportation, and other conference-related expenses.

Tourism and Safety

- You will often be in a big city or a large campus, and should travel with group members you are familiar with. Exchange numbers with classmates and several professors, and let someone know if you are going anywhere off-site alone.
- Be a tourist on your own time. Your purpose for going to the conference (and for paying for it, and/ or being sponsored to go) is to actually attend the conference.

Nightlife

- Any time you are outside of the conference hall, safety is the priority. Don’t leave the hotel or conference site alone for the night, and travel with people you are familiar with.
- Since the trip is sponsored by the university or society, you should reasonably limit your outings. Your attendance is expected at the conferences throughout the duration of your stay.