

Western Washington University Advanced Materials Science and Engineering Center (AMSEC) Advisory Board (AB)

Background

The Advanced Materials Science and Engineering Center (AMSEC) was established at Western Washington University in 2007. Its mission is to educate students in materials science, support interdisciplinary research, and enhance regional industry competitiveness and innovation. AMSEC brings together faculty, students and industry partners to facilitate interdisciplinary collaborations and synergistic solutions to complex, multifaceted problems.

AMSEC educates students in our materials science minor degree program through academic coursework as well as through deep involvement in independent, cutting-edge research experiences, either in an academic setting with one of AMSEC's nationally recognized faculty, or through our industrial internship program. AMSEC's materials science minor degree prepares highly trained professionals for graduate study or positions in industries ranging from aerospace to microelectronics, alternative energy, and biotechnology.

Part of the Center's mission is to promote private sector innovation by helping northwest companies address specific challenges in materials analysis, research and development. AMSEC works with companies to improve competitiveness through access to faculty experts and student interns as well as the state-of-the-art x-ray diffraction, thin film preparation, and thermal analysis equipment housed in their Materials Characterization Laboratory. In recent years, AMSEC has worked with regional industries spanning the range from aerospace to pet products to renewable energy.

In 2016/2017, AMSEC developed an ambitious strategic plan with a focus on continued innovation, program expansion, and community engagement. Through this process, the leadership team has identified an acute need for external guidance and leadership in order to ensure that our curriculum, educational programs, and industrial partnerships continue to grow and serve AMSEC's wide-ranging mission. WWU has therefore committed to creating an advisory board comprised of highly visible, knowledgeable and influential leaders with an interest in interdisciplinary materials science to help guide program development and secure resources.

BOARD CHARTER

The mission of the AMSEC Advisory Board (AB) is **to help guide the development and growth** of its educational, research, and outreach programs in interdisciplinary materials science. **AMSEC AB members will work with AMSEC to achieve the following program development objectives:**

1. Evaluate and update the curriculum for the materials science minor and explore the possibility of implementing a new masters degree in materials science at WWU.
2. Achieve broader regional connectivity with the industrial, academic, and non-profit materials science community, with the goals of expanding our industrial internship offerings and R&D and academic partnerships.

3. Expand AMSEC's ability to provide support for student research and faculty and staff technical expertise development.
4. Identify areas of technical expertise and related equipment holdings to focus on in order to enhance the relevance of the program to regional needs and to ensure the preparedness of our graduates.
5. Conduct wide-spread, vigorous, effective legislative outreach and public education that will communicate the value of the program as it relates to education, materials innovation, economic expansion and workforce development for the region.
6. Make contact with investors / donors who are willing and able to financially support the program.
7. Identify and facilitate opportunities for large-scale collaborative or multi-institutional grants.
8. Maintain an advisory board of 10 to 20 members who are highly visible, knowledgeable and influential leaders from within the professional materials science community in the region.

Board members will enjoy a satisfying and stimulating volunteer experience as they work in collaboration with Western Washington University to fulfill the need for innovation and a highly trained workforce in materials science in the Pacific Northwest.

ADVISORY BOARD MEMBER RESPONSIBILITIES

- Attend approximately two board meetings per year with the AMSEC leadership, affiliated faculty and university leadership.
- It is anticipated that some advisors will have more time/flexibility/inclination to meet individually or small groups to discuss specific aspects of program outreach and development. This type of participation is encouraged but there are no specific expectations.
- Provide programmatic feedback.
- Assist with legislative and public communication through personal contact with opinion leaders, policy makers, and people of influence.
- Provide meaningful financial support to the program through contributions from corporate, foundation, personal or other resources available to them as appropriate.
- Facilitate professional development opportunities for students by providing access to internships, employment, mentorship and research opportunities as appropriate.
- Assist with program outreach through personal contact with potential donors, advocates and board members.