

Get Involved: Jeffrey Fergus, TMS Accreditation Committee

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“Get Involved” is a recurring End Notes feature that spotlights the work of TMS volunteers and shows the wide range of activities available through TMS. This month features Jeffrey Fergus, professor, Materials Research and Education Center at Auburn University. As vice-chair of the TMS Accreditation Committee, Fergus is involved in training volunteers to evaluate materials science and engineering programs at colleges and universities for the Accreditation Board for Engineering and Technology (ABET).



Q. What is TMS’s role in accreditation activities?

A. Accreditation of college and university engineering programs is granted by ABET, but ABET relies on professional societies to provide individuals with the expertise necessary to evaluate programs in specific disciplines. ABET could not perform the evaluation required to accredit programs without support from professional societies, and professional societies could not provide that support without the time and effort of volunteers. TMS is responsible for providing individuals to evaluate materials programs, and the evaluation requires many hours of volunteer time. The financial and administrative support from TMS is critical for these volunteers to accomplish their reviews and ensure the quality of engineering education.

Q. What is involved in the work of an ABET evaluator?

A. ABET Program evaluators review academic programs that are seeking to be accredited or re-accredited. Although the focus of the evaluation is the visit, there is considerable work prior to the visit. The visits occur in the fall, but program evaluators receive a self-study report in late summer. The program evaluator reviews the report and communicates with the program with any questions or comments. Additional communication is required to plan the visit schedule. The visits typically occur from Sunday through Tuesday, so the program evaluators usually

will travel on Saturday and then return Tuesday evening. Although additional activity occurs after the visit and prior to the commission meeting the following summer, the program evaluator’s work is usually complete when he or she leaves the campus on Tuesday afternoon.

Q. As a TMS volunteer, do you make frequent visits to schools?

A. ABET evaluators visit at most one school per year, but not all evaluators go on a visit every year. I am currently serving as one of the two TMS representatives on the Engineering Accreditation Commission, so as a commissioner I do not serve as a program evaluator, but rather I serve as a team chair for typically two visits each year.

Q. How do you balance your volunteer work with your regular job responsibilities?

A. Planning ahead is critical—especially in the fall, which is when accreditation visits occur. To be available for the volunteer activities, tasks must often be completed well before their deadlines, which requires looking ahead and managing time effectively.

Q. Is your committee currently seeking volunteers to serve as ABET evaluators?

A. Absolutely! Training of evaluators is administered by ABET and is the same for evaluators in all disciplines. Details are available at the ABET website (www.abet.org/volunteer.shtml).

Materials evaluators are also required to attend a training session that includes information relative to the discipline-specific criterion. These training sessions are held at Materials Science and Technology (MS&T) meetings, the TMS Annual Meeting, and at Materials Research Society meetings. Although the sessions are intended for training evaluators, anyone is welcome to attend. For example, the information presented and discussed is helpful for academic program chairs in preparation for accreditation visits. The final step in the program evaluator training is to attend a visit as an observer, in which the prospective evaluator shadows an evaluator to see first hand what is involved in the visit. We are organizing a symposium on program improvement at MS&T 2011. I encourage interested individuals to attend this symposium or one of the evaluator training sessions.

Q. How has volunteering benefited you professionally?

A. I originally became involved in accreditation to learn about the process, so that I could help my own program to better prepare for our accreditation visits. My involvement has served that purpose, but much more. In addition to learning about the accreditation process, visiting other programs has provided a resource for ideas on how to improve our program.

Kelly Zappas is a contributing writer for TMS.