

Centennial Campaign

by Troy M. Miller

In the last issue of Interface, an article appeared highlighting ECS's Centennial Campaign that began in October of 2002. The following is the first in a series of articles that provides specific information about the goals of the campaign as displayed in the ECS Case for Support. If you wish to see the Case for Support in its entirety, or want more information about the Centennial Campaign, you can visit the ECS website at www.electrochem.org.

Supporting the growth of the educational and training opportunities that The Electrochemical Society provides to its members, and to the solid-state and electrochemical community as a whole, is a goal of the ECS Centennial Campaign. Assuring the availability of adequate training and education of fundamental and applied scientists and engineers in electrochemistry, solid-state science, and allied subjects has long been a defining objective of the Society. It is then entirely appropriate that the Centennial Campaign should make education one of its priorities.

The Electrochemical Society's Case for Support includes three quantifiable objectives to better allow ECS to assure the availability of training and education. These three objectives include upgrading the ECS short course program, adding to the number of ECS summer fellowships, and providing Internet-based training resources to our constituents.

Short Courses

ECS short courses have long been a staple of the Society biannual meetings. Short courses allow meeting attendees the opportunity to either update their training on cutting edge technologies in their field, or learn how information in different fields relates to their work. Taught by professionals, short courses provide valuable information to diverse groups within the Society. University teachers or researchers gain valuable insight into topics they are studying. Students supplement their academic studies. Corporations train employees quickly and with little expense. Employees increase their marketability and knowledge by acquiring additional training in their field or related fields. To all these diverse groups, short courses provide world-class information in easy to digest, bite-size chunks at a competitive price. The Centennial Campaign raises money to provide additional marketing for short courses and also increases the fees the Society can pay to instructors.

Traditionally, short courses have been marketed in meeting materials and on the ECS website. In addition, short course instructors have marketed their courses individually, adding to the tremendous amount of work they already do in organizing the course material. Unfortunately, this limited marketing misses a large percentage of the target market that has interest in these short courses. In addition, short courses are typically chosen based not on what the most compelling

courses might be, but rather on what instructors are available to teach. By providing an additional \$10,000 annually to both better market the courses and determine what courses are most in demand by our current constituency, ECS can greatly enhance the short course program.

Mark Orazem, a short course instructor, said "The short course program provides a great complement to the ECS meetings; however, the quality and relevance of the program is not fully appreciated within the electrochemical community, and, while many of the courses have relevance to fields outside traditional electrochemical engineering, the short courses do not have visibility outside The Electrochemical Society. Additional resources for marketing and instructor fees would greatly enhance the overall program. The additional marketing would provide a greater audience, perhaps reaching those who do not normally attend ECS meetings. The increased instructor fees would allow current instructors to improve their courses and would provide an incentive to attract additional world-class instructors."

Short course instructors are currently paid a minimal fee to teach their courses. Instructors, by no means, make a fortune by teaching. Instead, much like the Society itself, they provide instruction to encourage research and dissemination of knowledge in their field. By providing an additional \$4,000 annually to short course instructors, ECS can better remunerate its current instructors, making it easier for them to teach and prepare for their courses, and also attract additional talented instructors to the short course program.

The Centennial Campaign will raise an additional \$14,000 annually for short courses. Improving short course marketing, and investing more in short course instructors has the additional prospect of making the short courses self-sustaining. Improved marketing will improve short course enrollment and make them more viable and profitable. Making it easier for instructors to teach, and attracting new teachers to the short course program will improve the quality of the short courses and will draw even more students to ECS short courses and meetings in general.

Summer Fellowships

Over one hundred and fifty individuals have received summer fellowships from The Electrochemical Society, including such respected figures as Vittorio de Nora (of the Vittorio de Nora Award), Larry Faulkner (past president), and Paul Kohl (editor of the Society's journals). For over seventy years, summer Fellowships have given students in electrochemistry or solid-state science the opportunity to continue their research through the summer months with less financial hardship.

As Jon Parrish from the University of California Santa Barbara said about his fellowship, "The F. M. Becket Fellowship was very helpful in my pursuit of my graduate education. The

ability to concentrate on research during the summer months allowed me to make significant progress toward my research goals without the interruption of teaching or other employment requirements.” Charles Noble, the 2001 recipient of the Joseph W. Richards Fellowship said, “I believe that the summer fellowship played an integral role in my education and subsequently my placement after graduation.”

Currently, four summer fellowships of \$4,000 each are annually awarded to graduates pursuing work between the degrees of BS and PhD in a college or university, and who will continue their studies after the summer period. The fellowships are awarded through the Consolidated Fellowship Fund, funded with generous individual gifts and income provided by The Electrochemical Society itself.

Unfortunately, the demand for the fellowships greatly outdistances the Society's capacity for support and every year extremely well qualified candidates must be turned away because of lack of funding. In addition, the fellowship amount is no longer competitive and students look elsewhere for support rather than be awarded the fellowship and not be able to sustain their work. (It is intended that the recipient should feel he or she is uniquely an ECS Summer Fellow during the period of his or her fellowship; to this end, he or she is required to not hold other named fellowships.)

The Centennial Campaign will raise an additional \$200,000 to be included in the Summer Fellowship Consolidated Fund in order to increase the number of fellowships to five and raise the fellowship award amount to \$5,000 each. These changes will allow for more qualified students to be honored, and for those awardees to face less financial hardship as they continue their studies and research.

Web-Based Training

As previously noted, providing adequate training in the solid-state and electrochemical fields is one of the main objectives of The Electrochemical Society. ECS short courses are a valuable training tool; however, an average of only five to seven courses are provided each year, and are provided only at biannual meetings. Obviously, because of diversity of the technical fields within the Society, additional training would be worthwhile. Because not all of ECS's constituents are able to attend biannual meetings, individuals who desire additional training through the Society may not be able to access this valuable resource.

The Electrochemical Society has been approached recently by various educational groups and has been asked to provide content review and hosting for additional solid-state and electrochemical web-based training materials. ECS would assure content meets the high technical standards of the Society, and would provide an arena where the solid-state and electrochemical community can access this valuable peer-reviewed training material. In return, the educational groups providing the content receive the valuable stamp of approval of the premier society for solid-state and electrochemical science and technology in the world, and have a ready-made platform for providing access to the training material.

Researchers, students, and corporate employees who want to acquire additional training will have the opportunity to do so without the expense or time outlay associated with attending the technical meeting, and ECS will meet its objective of providing adequate training resources to its constituents.

Daniel Schwartz, of the University of Washington (Seattle), and U.S. lead for the U.S./U.K. Program in Electrochemical Materials and Interfaces, had this to say, “Online education allows working professionals and other students to upgrade their skills conveniently, but where do you find relevant electrochemical and solid-state courses and how can you be assured of their quality? The University of Washington has begun working with ECS to establish a website where externally peer-reviewed educational courseware can be centralized, assuring both quality and ease of access. ECS has an outstanding reputation for peer review of journal content, but to

develop an appropriate review process for courseware will require new resources.”

The Centennial Campaign will raise \$215,500 in order to offer web-based training programs to its members and associates. An investment of \$50,000 is necessary to provide ECS with the software programs needed to provide multiple reviewers access to the technical training content. ECS would also provide \$50,000 of editorial support to five technical reviewers. ECS will need

\$20,000 to purchase equipment, configure hardware, software and network resources including set-up, maintenance and staffing. Finally, marketing this new training resource will cost \$23,000. (Other than the \$10,000 necessary to purchase the server, and the \$70,000 necessary for the software program, the additional costs are based on a five-year model.)

Conclusion

When ECS surveyed members and friends last year, one of the questions asked was, “What do you think is worth funding in the organization, or rather, where would you like to see additional dollars go?” Education was, by far, the most prevalent answer given in response. Other than the ECS Endowment, education is allotted more support than any of the additional target areas in the Case for Support (meetings, publications, membership, education, and professional development).

With your support, ECS plans on raising \$429,500 through the Centennial Campaign for educational purposes. Improving the ECS short course program, upgrading the summer fellowships, and organizing web-based training materials are important steps in improving the Society's capacity for meeting its objective of assuring the availability of adequate training and education of fundamental and applied scientists and engineers in these fields. ■

Troy Miller is the ECS Director of Development.