IEEE and the Section. The proclamation was presented to the Section officers during the 21 October Section Centennial Technical Symposium held at the Creekside Community Recreation Centre at the Olympic Athlete Village. The symposium addressed topics such as communications, power engineering, information technologies, and energy by seven distinguished speakers looking at the past, present, and future of electrical and electronics engineering.

Bombay Section Active in 2011

Life Members (LMs) in the Bombay Section in India gave two presentations on the role and contributions of IEEE to students of engineering colleges in Mumbai. LMs talked about the advantages of IEEE membership to the student members to promote student activities.

The Section's LMs also discussed training programs or provided assistance to the Bombay Section Executive Committee (ExCom) for technical events. This included discussions on technical events and involved LMs sharing their experience on their past technical work with the present ExCom members.

As in the previous year, LMs arranged two Sunday lunch meetings including spouses and ExCom members. Talks were given by Rajeev Sharma of Indian Railways in March and Prof. Ispita Banerjee of Fordham University, New York, in December at the Hotel Taj in Mumbai. These meetings were both useful and successful, and the LMs are interested in arranging similar meetings in the future.

California's New Life Member Groups Draw Big Crowds

Two new Life Member groups on the west coast have been doing extremely well. The Silicon Valley group, chaired by Les Besser, and the Oakland/East Bay group, chaired by Charles Herget, have been attracting large audiences to their regular meetings. In June 2011, 115 people came to hear Prof. Mark Jacobson of Stanford speak about renewable energies. In October 2011, the groups held a joint meeting where Dr. Edwin Moses of Lawrence Livermore Laboratories presented his views on safe nuclear energy to an audience of 130 attendees. The latest talk in April 2012, titled, "The Drive for Electric Vehicles," was presented by the two cofounders of Tesla Motors, Marc Tarpenning and Martin Eberhard, to a standing-room only crowd in the 140-seat meeting room.

A crowd of 115 people gathered to hear Prof. Mark Jacobson talk about renewable energies.

Prof. Jacobson and Silicon Valley LM Group Chair Les Besser admire Jacobson's electric Tesla Roadster.

IEEE Computer Society History Activities

Most of the IEEE Computer Society's publications and activities focus on state-of-the-art computing technology and the computing profession with occasional retrospective articles in the Society's journals and magazines. However, a component of the Society's activities is more directly focused on computing history. Many readers of the *IEEE Life Members Newsletter* may be interested in such sources of information on computing history.

IEEE Annals of the History of Computing. The Computer Society's longest running explicit history

activity is the *IEEE Annals of the History of Computing* (computer.org/portal/web/annals). It has traditionally been a print journal and is now available in an electronic publication format. Founded by computing pioneers in 1979 (and operated by the Society since 1992), the *Annals* has long published first-person accounts from participants in the history of computing. More recently, the *Annals* has become a preeminent journal of scholarly writing by professional historians on computing history. The *Annals* encourages submissions from both computing practitioners and computing historians.

In late 2011, the Computer Society Press published a history book from the *Annals: The IBM Century: Creating the IT Revolution*, edited by Jeffrey R. Yost. This book reprinted a careful selection of articles on IBM from the *Annals*. The articles are augmented by an insightful introduction and overview, timeline, and annotated bibliography of IBM history, all by editor Yost. The 282-page book is available from Amazon.com and other retail bookstores (I have reviewed the book at Amazon).

Computing Then. In recent years the "Computing Then" department (www.computer.org/portal/web/computingthen) of the Society's "Computing Now" Web site (www.computer.org/portal/web/computingnow) has highlighted and posted online historical content from the *Annals* and elsewhere.

Computer Society History Committee. Since 1990, the Society has also maintained a Society History Committee. Members of the History Committee work on various projects relating to Society history and to computing history more generally. A recent example of the latter is a project commemorating the 50th anniversary of the Massachusetts Institute of Technology's (MIT's) Compatible Time-Sharing System (CTSS), important for reasons explained below. The full document is freely available as item five at www.computer.org/portal/web/volunteercenter/history.

CTSS. Time-sharing was in the air around MIT and Cambridge in the years circa 1961. MIT faculty, staff, and students who had worked directly with the Whirlwind or TX-0 computers sitting at their consoles wanted more of that interactive access—the then-traditional computer system batch processing approach was very slow for program debugging and was made worse by machine overloading as digital computing was becoming more popular.

In the spring of 1961 Prof. Fernando Corbató, then associate director of MIT's Computation Center, began to design a system he called the "Compatible Time-Sharing System" for MIT's IBM 709 computer. Corbató initially worked with two of his Computation Center staff members, Robert Daley and Marjorie Merwin. They arranged for IBM to provide an interrupt capability for the machine that allowed them to take control of it. They created a special version of the operating system that set aside 5 kilowords of memory (of 32 kilowords total) for the time-sharing supervisor (and for buffering typewriter terminal input and output). Tape drives were used to store the programs and files of the users of the four terminals. It was crude, but that original configuration allowed a November 1961 demonstration of interactive computer use. (The traditional batch processing system still operated in parallel with the time-sharing system—that was the "compatible" part of CTSS.) Thus, 2011 was the 50th anniversary of the conception and initial demonstration of CTSS.

By 1963, CTSS was a stable, large-scale system, operating with a large disk drive for file storage, more memory for a refined time-sharing supervisor, and a controller that handled a significant number of local and remote terminals. That summer, CTSS supported experimentation with time-shared computing by a stream of notable visiting computing pioneers. CTSS was proof positive of the feasibility of time sharing.

The Corbató-led substantive, solid, early implementation of time sharing in CTSS at MIT was an important stimuli for the era in computing that continues to this day—the era where users themselves have direct contact with a computer, telling the computer what they want it to do from moment to moment.

David Walden
2011–2012 Chair
Computer Society History Committee

Call for Grant Applications

The IEEE Life Members Committee (LMC) is responsible for the administration of the Life Members Fund (LMF), in coordination with the IEEE Foundation. The LMF supports the awarding of grants to projects of interest to Life Members (LMs), potential engineers, and engineering students.

Along with the IEEE Foundation, the LMC accepts grant applications for new and innovative projects two times per year. The next 2012 grant application deadline is 24 July 2012 at 11:59 p.m. EST.

To be considered for grant funding by the LMC, a project should have a clearly defined objective and provide support in the following areas:

- applying technology for humanitarian efforts
- engineering education and workforce development
- the history of technology.

If you feel that your unit (Section or Chapter) has a project that fulfills the criteria identified above, you are welcome to apply through the IEEE Foundation Web page (www.ieee.org/organizations/foundation/grants.html). Before submitting an application, please review the IEEE Foundation's grant guidelines. Information regarding grant applications can be found at www.ieeefoundation.org.