

The Centennial Year

The PROCEEDINGS has planned a number of special features in recognition of the 1984 IEEE Centennial, and we are pleased to outline them here.

First, as is evident from this issue, the PROCEEDINGS has a new cover and format, and we have chosen to begin the year with a Special Issue on Supercomputers—Their Impact on Science and Technology. The last cover and format change took place in 1973, and the one prior to that in 1955. The new design was developed by Raymond Schoonover, who has been designing our covers for thirty years, and Irving Feinstein, an artist and illustrator.

The topic of supercomputers seems a most appropriate one with which to initiate the Centennial year in view of the intense interest in it and the rapid advances taking place in the development and applications of such machines. We believe you will find this an exciting issue, and it should be interesting to look back five to ten or more years from now to see where the world of supercomputers was in 1984!

Many of the key papers in the development of electrical engineering over the last century appeared in the publications of the IEEE's predecessor societies, the American Institute of Electrical Engineers (AIEE) and the Institute of Radio Engineers (IRE). Most engineers, although perhaps aware of these classics, have never had the opportunity to read them. With the expert advice of Dr. James E. Brittain, Associate Professor of the History of Science and Technology at the Georgia Institute of Technology, we have selected a number of such papers for reprinting in the PROCEEDINGS during the year. These will appear in groups of two to four in each regular issue, beginning next month with the 1888 papers by Nikola Tesla and Frank J. Sprague on ac motors and generators and on municipal rapid transit, respectively, and the 1892 paper by Charles P. Steinmetz on the law of hysteresis. Each paper will include an introduction by Professor Brittain to place the work and its author in historical perspective.

Dr. A. Michal McMahon, a historian of technology, has been commissioned by the IEEE to write a history of the electrical engineering profession and of the Institute which will be published in May as an IEEE PRESS book entitled *The Making of a Profession: A Century of Electrical Engineering in America*. Later this year, the PROCEEDINGS will feature a paper based on material from this book. We feel that this will be well received by all PROCEEDINGS readers in that it

will expose them to the rich history and heritage of their profession and their society.

Professor Judith M. S. Prewitt of Bell Laboratories and Dr. Robert D. Friedel of the IEEE Center for the History of Electrical Engineering plan to organize a symposium for the May 1984 meeting of the American Association for the Advancement of Science (AAAS) on the subject of a century of contributions of electronic instrumentation to the sciences. A special issue of the PROCEEDINGS, consisting of selected papers from the symposium, will be guest edited by Drs. Prewitt and Friedel and is scheduled to appear in January 1985. This issue highlighting the contributions of electrical engineering to the physical and life sciences should prove interesting and enlightening to engineers and scientists alike.

The capstone event of the IEEE Centennial Year will be the technical convocation at the Franklin Institute in October with the theme "The Second Century Begins." This event commemorates the 1884 Electrical Exposition in Philadelphia which was associated with the formation of the AIEE earlier that year. Speakers at the convocation will be eminent engineers and scientists, including winners of the Institute's Medal of Honor and of the Nobel Prize. A special supplementary issue of the PROCEEDINGS devoted to the convocation is being considered for early 1985.

As the IEEE embarks on its second century, the PROCEEDINGS begins its seventy-second year. The progress in our field has indeed been phenomenal during these decades of publication. Unlike this issue, which opens with a provocative paper on supercomputers by Nobel Laureate Kenneth G. Wilson, the first issue began with a paper on experiments with rudimentary antennas by Michael I. Pupin. The May 1962 issue, in observance of the fiftieth anniversary of the IRE, contained a series of papers on electronics in the year 2012. Most of the developments forecast in that issue either have been reached or surpassed already or are now irrelevant. Learning from this of the dangers of prophesying, we will limit ourselves to predicting that the year the PROCEEDINGS celebrates its centennial will see a technology vastly advanced from that of today—and vastly exciting as well!

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