## COMMENTS ON THE 1977 PARTICLE ACCELERATOR CONFERENCE

The seventh national Particle Accelerator Conference was held in the Pick-Congress Hotel in Chicago on March 16, 17, and 18, 1977. The air of the Conference was optimistic and forward-looking. The Conference Chairman, Dr. L. C. Teng, suggested in his opening speech the Russian word "poyekhali" ("Let's begin," used by Yuri Gagarian at the launching of his pioneer space flight) as a theme for the entire Conference. He summarized the large number of new developments and projects since the 1975 Conference in Washington. The SPS and KEK synchrotrons in Europe and Japan, the UNILAC heavy-ion linac in West Germany and the Indiana Cyclotron have all come into operation. Electron cooling has been experimentally demonstrated at Novosibirsk. Several new accelerators are being built, including the e<sup>+</sup>e<sup>-</sup> storage rings PETRA at DESY in West Germany and PEP at SLAC, and the Energy Doubler/Saver at Fermilab. There are also many new accelerators being proposed, developed, or discussed, including ISABELLE at Brookhaven, CESR at Cornell, PIGMI at Los Alamos, UNK and VEP 4 in the Soviet Union, TRISTAN in Japan, antiproton cooling at CERN and Fermilab, superconducting linear accelerators at Argonne and other laboratories, and the VBA (Very Big Accelerator) on an international scale. Applications of accelerators to fusion and to fission-fuel breeding are also being discussed. All these developments were described and discussed at the Conference, as well as many other new technical topics.

There were 640 registrants at the Conference, an increase of 10% over the 1975 Conference. As at past Conferences, there was a strong representation of our accelerator colleagues from other countries, approximately 20% of the registration. Altogether, 27 invited papers, 46 oral contributed papers, and 131 poster papers were presented. An additional 115 papers were accepted for publication in this Proceedings. Of the total of 292 contributed papers, 12 were withdrawn from the Proceedings. Of the invited papers, four (Auslander, "Electron Beam Cooling," Eastman, "Synchrotron Radiation Applications," Brown, "Current Challenges in Materials Modification by Ion Implantation," and Dimmler, "Computer Networks in Future Accelerator Control Systems,") chose not to publish their papers in the Proceedings.

A panel on the use of accelerators for fusion was held on the first evening of the Conference. A summary of the panel is in the Proceedings.

The Conference Banquet was held on the second day of the Conference. We heard an instructive talk by Prof. Sidney Drell of SLAC. Prof. Drell's talk was an adaptation of a paper to be published shortly in Daedalus.

The poster sessions introduced at the 1975 Conference were expanded greatly and were active and crowded at all times. It is clear that the poster technique has become a popular and valuable feature of our Conferences.

Arrangements were managed by a group headed by Ms Judy Ward of Fermilab. The staff included Mses. Miriam Holden and Karen Volk of Argonne and Mses. Denise Augustine, Gloria Beck, Erene Garcia, Marge Harvey, Helen Peterson, and Carolyn Vanecek of Fermilab. In addition, Mses. Rene Donaldson and Barbara Perington of Fermilab managed the Proceedings Office and Mr. James Henning of Argonne managed the extensive audio-visual equipment. The smoothness with which the Conference ran is due to the skill, hard work, and good will of all these dedicated people.

The next Particle Accelerator Conference will be held at the Sheraton-Palace Hotel in San Francisco in March, 1979.

R. L. Martin Chairman of the Program Committee