FINAL PERFORMANCE TECHNICAL REPORT

The *Thirteenth International Conference on the Application of Accelerators in Research and Industry* was held on the campus of the University of North Texas (UNT) November 7-10, 1994. The major sponsors of the conference were: The United States Department of Energy, The National Science Foundation, and the University of North Texas. An industrial Exhibit Show composed of 42 companies that distribute components of interest to accelerator users was held in parallel during the first two days of the conference. The conference was attended by 888 accelerator scientists from 43 countries. There were 598 invited papers given in 76 sessions and 290 poster papers. Of the invited papers 97 were invited poster papers. Most of the invited paper sessions had six to nine invited speakers. As in the case of most of the previous conferences in this series, Accelerator Based Atomic Physics had the most sessions. There were 16 sessions that dealt directly with Atomic Physics. There were also two sessions on synchrotron experiments which were mostly atomic physics. In addition, there were 20 poster papers which fell under the general heading of Atomic Physics. There were four sessions which were called Accelerator Technology. These sessions covered topics such as new accelerators, beam handling systems, ion sources, detectors, spectrometers, magnets, etc. Radioactive Beams and Nuclear Physics were topics for eight sessions which were very well attended. Two sessions were arranged on Positrons. There were nine sessions directly related to Materials Analysis with Ion beams. These sessions covered such topics as Rutherford Backscattering, Forward Scattering, Nuclear Reaction Analysis, and Particle Induced X-Ray Emission. Worldwide, there are over 30 accelerator laboratories doing Accelerator Mass Spectrometry (AMS). There were three sessions in which 18 speakers summarized the present state-of-the-art in regard to AMS. There were also one or two sessions each on the following topics: Radiation Processing,

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Tomography, Single Event Upsets, Ion Implantation, Activation Analysis, Safety, Clusters, Radiation Therapy, Medical Radioisotope Production, and Targets for Accelerator Experiments. There were three sessions with 17 captivating speakers on Nuclear Techniques and Explosive Detection. These were one of the most popular sessions. Finally, there were two sessions on BNCT in which 14 speakers summarized the state-of-the-art on this important topic.

The conference Banquet was held Wednesday evening, November 9, in the UNT Coliseum. It was attended by approximately 500 participants.

All of the papers that were published for this conference appear in Nuclear Instruments and Methods in Physics Research Vol. B 99 (1995).