

thus find an interesting assortment of units and scale designations. The text is remarkably free from typographical errors.

All in all, this is an interesting volume and should prove most useful to those who have a need for a general understanding of air-cooled condensing systems but who will not be directly involved in detailed system design.

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Annual Review of Nuclear Science

Editor Emilio Segre
Associate Editors J. Robb Grover
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Reviewer Joseph G. Gratton

As usual, the editors of the 1974 *Annual Review of Nuclear Science* have put together a group of very fine papers of importance to the nuclear physics community.

Each article meets the series' requirements that the work contain enough original material to justify its presentation. I would be remiss not to note that some articles are very marginal in this regard. The liberal use of references in the articles is excellent for those who wish to seek out a deeper understanding of the areas discussed.

The "Post-Fission Phenomena" review appeared to me to be an especially good summation of the work. In a lighter technical vein, but of no less interest, was Guinn's review of "Applications of Nuclear Science in Crime Investigation." The approach taken by the author was of special interest to this reviewer.

The articles presented in this 1974 Review were all well written and should be of considerable interest to its readers.

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Science Policy Making in the United States and the Batavia Accelerator

Author Anton G. Jachim
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Reviewer V. Lawrence Parsegian

The 1976 fiscal year budget of the U.S. Energy Research and Development Administration (ERDA), which assumed the development responsibilities of what had been the U.S. Atomic Energy Commission (AEC), includes \$17 900 000—for the support of high-energy physics. The interesting aspect is that of this total, \$10 200 000 is earmarked for the Fermi National Accelerator Laboratory (FERMILAB) located in Batavia, Illinois. The money will go toward increasing the accelerator capabilities beyond the 200-GeV (or BeV) particle energies for which it was designed to energies of 400 GeV or higher. How this midwestern region

became the site for a facility that was regarded as "the scientific prize of the century" is the theme of the volume by Anton G. Jachim. It is a case study that carries large implications for the scientific enterprise in the nation's other activities.

The story begins in the 1960's, following two decades of rapid growth of the scientific enterprise through government support. During that period physics and physicists rode the crest. The success of the atomic energy programs had given unusual credibility to the values that derive from basic research. High-energy physicists were especially favored, both through professional prestige and through financial support for one powerful accelerator facility after another, most of which were located on the east and west coasts. The next step was an accelerator facility estimated to cost \$350 million. By then the mood of the nation had changed to become somewhat critical of large annual increases in funds for basic research, and especially critical of grants that seemed always to go to the same established laboratories. (Of course, there was no thought of reducing the support given to the Vietnam war.)

Competition for research funds brought focus on the procedures by which government agency funds were allotted. Clearly the procedures were consonant with the "Matthew Effect," which Robert Merton had derived from the gospel according to Matthew ("For whosoever hath, to him shall be given . . ."). The practice of depending on specialists to review research proposals assured that only those who were recognized as specialists would be supported, thereby tending to limit others to the leavings.

The large state universities of the midwest had achieved considerable reputation for the quality of their graduates, but they were not regarded as research centers. The Midwest Universities Research Association was organized in 1953 to improve that reputation. Now, a decade later, the Association felt ready to make claim to this newest most powerful accelerator and national laboratory that was under consideration. But there was the question of how that claim could be given validity against the claims of powerful universities of California