



#### AAAS EDITORIAL BOARD

Duane Roller  
*Editor*

Ruth C. Christman  
*Acting Executive Editor*

|                     |                    |
|---------------------|--------------------|
| Mark H. Adams       | Bentley Glass      |
| William R. Amberson | Karl Lark-Horovitz |
| Wallace R. Brode    | Edwin M. Lerner    |
| Walter J. Nickerson |                    |

*Advertising Representative:* F. A. Moulton

## Nuclear Power—Its Future

ONE of the more encouraging aspects in what is, to many, a disappointingly slow approach to the utilization of nuclear energy for peaceful purposes, is the fact that the pattern is beginning to show a very real parallelism with other major technologic developments of the past. Recognition of ultimate possibilities, isolation of immediate critical problems, and an understanding of the physical phenomena basic to a solution of these critical problems are steps through which developments from the steam engine to television have all progressed. It is now beginning to be clear that the peacetime use of nuclear power will be no exception.

Papers such as those appearing in the present issue of *SCIENCE* show again the essential elements of this pattern. Research reactors, especially those in university installations, are destined to pay big dividends, for they contribute to each of the several stages of a major development. Such reactors of course provide facilities for the solution of research problems. But they also serve for the training of students, for gain-

ing experience in reactor operation, and for developing self-confidence in the operating staffs. Moreover, the fact that they are usually accessible to public view and that the results obtained with them are published widely go a long way toward removing the atmosphere of mystery and awe that surrounds things atomic in the lay mind—one of the major handicaps to normal and rational technologic progress in this field.

Recent successes with reactors, including those abroad, now practically assure that at sometime in the not too distant future, nuclear power will be utilized in successful competition with power from fossil fuels. The question is no longer whether, but *when*, such utilization will begin. All this suggests the timeliness of a group of technical articles for the nonspecialist, describing the tools, the problems, and the progress of research in this fascinating but controversial field.

L. R. HAFSTAD

*Director of Reactor Development*

*Atomic Energy Commission, Washington, D. C.*

## More Important Than War

ONE day during the First World War the celebrated British physicist Rutherford wrote an apology for not attending a meeting that had been called to discuss a war research problem. He stated that he was too busy with experiments in which he seemed to have split the atom. "If this is true," he wrote, "it is far more important than your War."

In talking . . . about the future development of atomic energy I would like to borrow some of Rutherford's perspective. In the midst of a great war this eminent scientist glimpsed the real proportions of that force for human peace and welfare that lies in the energy from the atom—"Far more important than

your War." In that thought I find a strong note of hope, and hope is the virtue in which our national stockpiles are today so low. I trust that our world will put this evaluation "Far more important than War" on the future use of atomic energy.

Such an evaluation will, I believe, come as a part of a growing awareness that atomic war because of its overdestructiveness will no longer be a useful means for solving international disputes.

*Thomas E. Murray, Atomic Energy Commission, on the Electric Companies Public Information Program, Chicago, October 22, 1953.*

*SCIENCE*, founded in 1880, is published each Friday by the American Association for the Advancement of Science at Business Press, Lancaster, Pa. Entered at the Lancaster, Pa., Post Office as second class matter under the Act of March 3, 1879.

All correspondence should be addressed to *SCIENCE*, 1515 Massachusetts Ave., NW, Washington 5, D. C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors.

Change of address: The notification should reach us four

weeks in advance. If possible, please furnish an address stencil label from a recent issue. Be sure to give both old and new addresses, including postal zone numbers, if any.

Annual subscriptions: \$7.50; foreign postage, outside the Pan-American Union, \$1.00; Canadian postage, 50¢. Single copies, 25¢. Special rates to members of the AAAS.

*SCIENCE* is indexed in the *Reader's Guide to Periodical Literature*.

The AAAS also publishes *THE SCIENTIFIC MONTHLY*. Subscription and advertising rates will be furnished on request.