

Editorial

Fifty years later

This month marks the 50th year of the achievement of a nuclear chain reaction. There are many lessons to be drawn from the history of the Manhattan Project, the promise realized and aborted of nuclear energy, and so on; but one generally overlooked point in this connection has been raised again by Manhattan Project veteran Dr. Edward Teller.

He has resurrected his campaign against the imposition of secrecy restrictions on basic science. We wholeheartedly support Dr. Teller on this. A strong nation guarantees its preeminence by fostering scientific research in order to lead the field with new discoveries, not by hoarding its secrets.

In the "Forum" section of the National Academy of Sciences magazine *Issues in Science and Technology* dated Fall 1992, Dr. Teller wrote on this point:

"Our keeping of secrets has often misled and confused our own people but has been ineffective in denying information to our enemies or competitors. I make a proposal hoping that it may help to start a fruitful discussion. Let us pass a law requiring all secret documents to be published one year after their issuance. This would of course eliminate long-term secrecy and might also deter unnecessary classification of documents, because the original invocation of secrecy might be subject to criticism and even ridicule when the documents are published. There might be very special cases where secrecy of longer duration is needed. I suggest that an extension, in turn, might be given on a year-to-year basis in order to make sure that long-term secrecy not be applied except for truly important reasons."

On Nov. 17, as a featured speaker at a meeting of the American Nuclear Society held to commemorate the 50th anniversary of the first nuclear chain reaction (on Dec. 2, 1942), Dr. Teller raised the same theme before an audience of several hundred scientists and engineers.

The crux of the matter is that the people who suffer most from the U.S. secrecy rule are America's scientific community, since classification creates stultification. Not only does it cause a preordained breakdown in the kind of fruitful collaboration which drives science

forward, but because of this, many top-rank scientists refuse to work in military-related research. The futility of secrecy was seen time and again in the Cold War, when important breakthroughs had a way of becoming known to Soviet scientists, usually within six months of their discovery.

Recently, according to a report in the *New York Times* of last Sept. 28, the U.S. government finally decided to lift some of the secrecy restrictions preventing American laser fusion scientists from sharing their work with their non-security-cleared counterparts at home, and most foreign scientists as well. Such a move is long overdue.

The *New York Times* article noted that the reason for the U.S. declassification of laser fusion was "foreign competition." According to author William Broad, "Scientists in Japan, Germany, Spain, and Italy, striving to harness the power of tiny, repeated hydrogen bomb-like blasts for the generation of electrical energy, have openly published the 'secrets' for years. Continued secrecy for similar research in the United States was seen as stifling the exchange of ideas, inhibiting progress, and limiting international cooperation. At times American scientists have been ordered not to attend meetings with foreign scientists."

Even where classification is not at issue, the American scientific establishment, in tandem with the U.S. Department of Energy, has moved to suppress advances in nuclear science. The most recent example is the shameful treatment of cold fusion. The U.S. government has yet to grant Martin Fleischmann and Stanley Pons a patent for the discovery of this remarkable phenomenon, and the hostile climate generated against them in the United States was so severe that they left the country and are pursuing their researches in France.

The reported Department of Energy move to raise the curtain slightly on secrecy, by allowing laser fusion scientists to request the right to publish their results, is a step in the right direction, but it is still little more than a gesture. What is needed is a complete policy overhaul.