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I trust that the above information helps and encourages physics students everywhere to take advantage of the various forms of access to its journals that APS provides.

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Reasons Behind 1950s Oppenheimer Security Decision Are Debated

Upon reading your special issue on the physics community and the wider world (March), and especially Kurt Gottfried's article, "Physicists in Politics" (page 42), I was struck by a peculiar interpretation of one piece of history—namely, the reason that the Atomic Energy Commission revoked J. Robert Oppenheimer's security clearance in 1953 and voted the following year against restoring it.

I think it is almost ludicrous to suggest that Oppenheimer's clear opposition to the H-bomb was the only or even principal reason for the AEC's actions. But that is just what Gottfried does in his article, as does Harry Lustig in his accompanying article entitled "APS and the Wider World" (page 27). Both writers fail to take into account or discuss the political climate of the early cold war era, when Senator Joseph McCarthy, the House Un-American Activities Committee, and the executive branch of the US government hounded many people suspected of having attachments to the Communist Party or even of associating with others who possibly did.

It has been widely documented that Oppenheimer was one of those who was aggressively investigated. His admission that he had had ties to left-wing organizations and individuals was regarded as a serious security threat (even though it could be argued that his leadership on the Manhattan Project had been paramount in safeguarding the country's interests during World War II). He was placed under 24-hour surveillance by the FBI, and not because he was opposed to the H-bomb. In a dramatic display of a darker side of his character, he gave the names of friends involved in Communist Party activities, possibly to head off far worse repercussions than losing his security clearance—although that is not completely clear. What is clear and well-known is that a common tactic used by investigators was to cut a suspected com-

munist a deal by having him inform on others; individuals who did not give names were thrown in jail or branded as seditious and could not find work at all.

As Lustig states, Hans Bethe, then president of the American Physical Society, spoke up on Oppenheimer's behalf. However, as Lustig and Gottfried fail to mention, Bethe, APS, and Oppenheimer were up against a vast and widely supported social force that had absolutely no tolerance for communism in any form and that persisted until the end of the cold war.

It is unfortunate that the social conscience that arose in APS in the years after the Oppenheimer case (as duly recorded by Lustig) was not present in the 1950s to help out one of our best researchers. It is also unfortunate that so many members of the physics community in the late 1990s seem oddly reluctant to admit what actually happened to Oppenheimer back then.

(For the record, I don't think I'm related to J. Robert Oppenheimer. When he was director of the Institute for Advanced Study and my father was an undergraduate at Princeton University, the two of them discussed possible family ties but couldn't find any relatives in common.)

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GOTTFRIED REPLIES: My assignment was to describe 54 years of "physicists in politics" in 4000 words, not to write a biography of J. Robert Oppenheimer (JRO). Indeed, I devoted far more space to the early post-war period than others thought reasonable, and as a result there were larger holes than the one that Ben R. Oppenheimer (BRO) wants filled.

BRO seems to be arguing that the dominant factor in JRO's removal was his association with communists; I think that it provided JRO's enemies with their sharpest weapon, but was not the real reason for their desire to discredit him. However, neither my article nor this letters department is an appropriate venue for such a debate. Suffice it to say that the final verdict in the 1954 Oppenheimer hearing was literally as I stated it, and that the references in my article provide some (though far from all) of the documentation BRO alludes to. Indeed, I witnessed the climate of which he speaks, for during McCarthy's heyday, I was a graduate student at MIT, surrounded by faculty who had worked on the Manhattan Project and deeply distressed by the vi-

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cious attacks not only on JRO, but also on David Bohm, Wendell Furry, Philip Morrison, and many others.

The implicit charge that I am one of those "oddly reluctant to admit what actually happened" strikes me as very odd. I could more plausibly be charged with being naive in assuming that physicists today are aware of the most basic facts about the McCarthy era.

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LUSTIG REPLIES: The readers of **PHYSICS TODAY** owe Ben Oppenheimer a debt of gratitude for recalling the atmosphere of extreme, and often irrational, anticommunism and the baneful effects of McCarthyism that afflicted the country in the years surrounding the removal of J. Robert Oppenheimer's security clearance. (I could not take the space to deal with that subject in my very differently focused article.) There is little doubt that the exhumation in 1953 of Robert Oppenheimer's previous communist associations and evasive actions was licensed, if not inspired, by McCarthyism, or that they played a role in the proceedings against him.

In recommending against restoring Oppenheimer's clearance (in spite of finding him unquestionably loyal), the majority of the review board set up by the Atomic Energy Commission cited four considerations: (1) "... his continuing conduct and associations [which] have reflected a serious disregard for the requirements of the security system," (2) "... a susceptibility to influence which could have serious implications for ... security," (3) "... his conduct in the hydrogen-bomb program," and (4) his lack of candor. In the board's report, the third reason got as much space as the three others combined. Contrary to Ben Oppenheimer's assertion, I never stated that "Oppenheimer's clear opposition to the H-bomb was the only or even principal reason for the AEC's actions," but the record clearly demonstrates that it was one of the reasons.

In speaking up for J. Robert Oppenheimer and in expressing confidence in his loyalty, the American Physical Society did not explicitly point to McCarthyism and the prevalent anticommunism as a cause of his problems. Rather, by giving prominence to the H-bomb accusation, it chose to focus on the evil effects of persecuting scientists and others for their unpopular opinions and advice. I believe that this was an important statement for APS to have made on

behalf of its members, science, and the country, and for that reason I included it in my history of the society. APS did not at the time (or ever, as far as I know) issue a broad, general attack on McCarthyism or a defense of anti-communism. (And after all, there were communist spies at Los Alamos.) It is not clear from Ben Oppenheimer's letter whether he finds that to be naive, astute (because it wouldn't have done any good), or cowardly.

However, he does APS an injustice in stating that the society was not willing to help "our best researchers" (or even its ordinary members) until after the 1950s. To cite one early case to the contrary, consider what happened in 1948, when Edward U. Condon—who was then the director of the National Bureau of Standards—was pronounced by the House Un-American Activities Committee to be "one of the weakest links in our atomic security." The APS council issued a strong statement in his defense. On 5 March, in prominently overing the APS action, the *New York Times* reported that APS, in a move "unprecedented for an organization devoted exclusively to the affairs of pure science, entered the field of politics yesterday with a letter vigorously assailing the actions of the House Un-American Activities Committee in reference to Dr. Edward U. Condon. . . . The distinction between this message and those from other organizations lies in the fact that the American Physical Society prides itself on its aloofness from all matters except the intricacies of pure physics." The last sentence was slightly hyperbolic, but the newspaper's realization that APS was not in the habit of issuing political broadsides undoubtedly helped in the multifaceted and successful efforts of gaining clearance for Condon.

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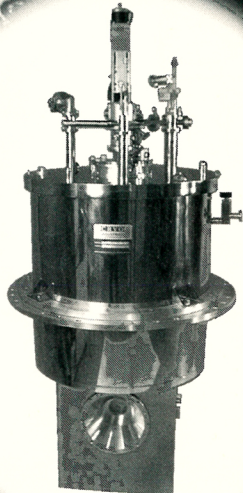
Radiation Discoverer Rutherford Was Alpha Male in Deed and Word

Harry Lustig's article "APS and the Wider World" in your March issue (page 27) is readable, enjoyable, and packed with useful information. It does, however, contain a minor but significant error. Lustig states (on page 30) that "In December 1901, Ernest Rutherford, then at McGill University, gave two papers on radioactiv-

continued on page 83

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