LETTERS

Students Have Trouble Accessing Physics Journals, APS Offers Range of Options

At the end of 1996, California State University, Dominguez Hills, a public university with 8000 undergraduates and some graduate programs, cut its institutional subscriptions to *Physical Review* and *Physical Review Letters* and to a host of other major scientific journals. This unfortunate situation resulted from a combination of many factors, including tight state budgets, rising journal prices, low undergraduate enrollment in physics, the subscription policies of the American Physical Society (APS), the unfulfilled promise of the Internet, and a CSUDH financial crisis.

Since physics majors comprised only about 0.15% of the total enrollment at CSUDH, our librarians and administrators argued that the physics department was entitled to only a proportionate amount of the annual institutional periodical budget—that is, a mere $450. By then, yearly institutional subscription rates had risen above $8000 for the five volumes of *Physical Review* (*A* through *E*) and above $2000 for *Physical Review Letters*. Since the cutbacks, there has clearly been an improving economy. However, there has been no sign of any institutional interest in restoring the canceled subscriptions, despite the continued pleas of a number of us in both the physics and chemistry departments that the canceled journals are basic reference works that contain information fundamental to all of the sciences and to academia in general.

Recently, I had the bright idea of giving our students at least nominal access to the canceled journals by donating my personal subscription copies of *Physical Review C* and *D* and *Physical Review Letters* (which cost me about $600 a year, or approximately one-ninth of the institutional cost) to the university library system. But then I read the fine print in the journals and was chagrined to learn that APS stipulates that individuals have to wait five years before they can donate their own copies to a library. So much for my bright idea.

As for using the Internet, that option has not yet been of much value to us. According to APS policy, a college or university cannot buy an on-line institutional subscription for less than the full hard-copy (institutional) price. At CSUDH, we can order individual articles using the CARL-Uncover on-line document delivery service. Typically and unfortunately, though, an article takes more than a week to appear (by fax), is likely to be illegible, and costs the university about $25.

My colleagues in the chemistry department managed to get CSUDH to restore subscriptions to several chemistry journals by virtue of the American Chemical Society's accreditation requirements for professional chemistry programs. To receive much-coveted ACS accreditation, a department must, among other things, give its students access to chemistry research journals. Unfortunately, a similar accreditation process does not exist for physics.

I have also come to realize that neither being being active in international research collaborations nor being published in the canceled APS journals is likely to budge the administration on the cancellation issue. I am a member of the University of California, Irvine, University of Michigan, and Brookhaven National Laboratory (IMB) nucleon decay collaboration, and a colleague and I are members of the Super Kamiokande collaboration. He and I have been coauthors on five *Physical Review Letters* papers over the past year. Although our papers are directly available electronically to the general CSUDH campus through the Los Alamos preprint server, that happens to be both a highly incomplete source and unfamiliar to most undergraduates.

Every week, one of my undergraduate students eagerly asks to be allowed to browse through my latest issues of *Physical Review D* and *Physical Review Letters*. It would be nice if I could simply say, "Go to the library." The number of young people in physics may be small, but they will likely have a disproportionate impact on science. Surely APS and the physics community can find a way to give all of our students easy access to these essential physics journals.

KENNETH S. GANEZER
(ganezer@csudh.edu)
California State University, Dominguez Hills
Carson, California

MCILRATH REPLIES: As treasurer and publisher of the American Physical Society, I must first say that it is regrettable that some institutions have to cancel subscriptions to APS journals. The society is dedicated to maximum efficiency in its publishing operations to keep costs low, and to investing in advanced technology to make its journals widely accessible. On a per-page basis, the journals are very low cost, and their quality is generally recognized as extremely high. Indeed, it is difficult to imagine a library without them at an institution with a high-quality physics program.

That said, Ken Ganezer's students need to know that they have a number of ways to access APS journals. To begin, like members of the general public, they can use the Web to access, free of charge, all abstracts from *Physical Review*, *Physical Review Letters*, and *Reviews of Modern Physics* (information is available at http://publish.aps.org/indexjrnls.html). In addition, they can take out a student membership in APS at $25 a year that includes either a free on-line personal subscription to any one of the APS journals or $25 off the print price of one such journal. And qualified students can even enroll in a one-year free trial membership in APS and receive a free on-line personal subscription (details and an application form are available at http://www.aps.org/memb/student.html). Regular APS members also may subscribe to the on-line version of any APS journal for $25 a year.

Students with neither a personal subscription nor access to an institutional one can use the Web to order print copies of articles from *Physical Review* and *Physical Review Letters* for nominal fees. This document delivery service is faster and less expensive than the one Ganezer describes, and

Letters submitted for publication should be sent to Letters, PHYSICS TODAY, American Center for Physics, One Physics Ellipse, College Park, MD 20740-3843 or to ptletter@aip.org (using your surname as "Subject"). Please include your affiliation, mailing address, and daytime phone number. We reserve the right to edit letters.

also provides copy of better quality.

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.

Thomas J. McIlrath
(mcilrath@aps.org)
American Physical Society
College Park, Maryland

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 communist 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.)

Ben R. Oppenheimer
(bro@astro.caltech.edu)
California Institute of Technology
Pasadena, California

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 postwar 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-