Letters

Brown's Committees

Rumors of my departure from the Science and Technology Committee, and of my motivations for assuming the chairmanship of the subcommittee on department operations, research and foreign agriculture of the House Agriculture Committee (News and Comment, 20 Feb., p. 798) are in error. I cheerfully remain as the third-ranking Democrat on the Science and Technology Committee and, for better or worse, am determined to play an active role in all of the activities of this important committee.

While the scientific community is one of the least politically organized constituencies I work with, I have always been one of the rare few who could count on scientists for political (including financial) support. In fact, my direct mail efforts to like-minded scientists was my most successful fundraising device in the last election. My success convinces me that scientists are willing and able to be much more directly involved in the political process.

Finally, the Agriculture subcommittee I now chair has a major research role, as the authorizing committee for the original federal science support program, the Land Grant College System, and the Agriculture Extension Service, not to mention the Federal Insecticide, Fungicide and Rodenticide Act. In all of my work, I hope to expand, not reduce, my contacts with the scientific community.

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Neutron Research in Europe

The report of the Department of Energy (DOE) advisory panel on neutron scattering (the Brinkman report) is the subject of Arthur L. Robinson's excellent article "Will U.S. skip neutron scattering derby?" (News and Comment, 16 Jan., p. 259). It is true that in neutron research the French, German, and British governments spend about four times the total of what is spent in the United States, but neither Robinson's article nor the Brinkman report identifies all the advantages the large European expenditure brings.

The diverse applications of neutron research which are being promoted in Europe are, to a large extent, unavailable in the United States. At the esoteric end of the "relevance spectrum" is the work at the Institut Laue-Langevin (ILL) in Grenoble and at the University of Munich on the fundamental physics of ultracold neutrons (*1*). At the technological end is the application of neutron radiography at Harwell, United Kingdom, to Rolls Royce helicopter engines (*2*). Between these extremes one finds a variety of physical, chemical, and biological problems that have not been studied by neutron scattering in the United States. The necessary equipment, and the innovative ideas and techniques on which it is based, has been developed almost exclusively in Europe. In some cases the impact of a new technique on a particular field of science has been of fundamental importance. European success in the use of small-angle scattering for the investigation of problems in molecular biology, polymer science, and metallurgy has led several U.S. installations to build their own small-angle scattering facilities. Nevertheless, in techniques such as high-resolution spectroscopy and neutron spin echo, the European monopoly remains.

The European expenditure has also encouraged the widespread involvement of academic and industrial research scientists in neutron experiments. A large community of European scientists now understands the techniques and can apply them to a variety of different problems. This is in sharp contrast to the U.S. situation, where, apart from centers such as the new small-angle scattering facility funded by the National Science Foundation at Oak Ridge, neutron scattering is kept in the hands of "the professionals," thereby serving the interests of a small group. While the U.S. attitude toward a large community of "users" is a legacy from past decades, it is perpetuated both by an inefficient funding system, as Robinson indicates, and by misplaced prejudice. European experience clearly shows that the use of complex spectrometers need not be restricted to "expert users." The system at ILL provides an experienced "local contact" for all users, experienced or not, and thus makes neutron scattering a tool for any scientist. Access to ILL for scientists of the member countries is decided on the basis of the scientific merit of the proposed experiment. Concise (four-page) proposals are judged twice a year by panels of experts. A scientist whose proposal has been accepted is paid travel and accommodation expenses. Overall, the simplicity and openness of this system outweigh the inconveniences associated with the fixed scheduling of experiments. In 1980 it allowed 1400 scientists to visit ILL and benefit from 33 working instruments and in-house expertise.

Thus the impression that the larger European expenditure simply buys "more of the same" is incorrect.

G. H. LANDER
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References

1. R. Golub, W. Mampe, J. M. Pendlebury, P. Ageron, *Sci. Am.* **240**, 134 (June 1979).
2. C. Windsor and C. Wright, *New Sci.* **88**, 714 (1980).

History of Calculus

I read with much interest William J. Broad's article "Priority war: Discord in pursuit of glory" (News and Comment, 30 Jan., p. 465) concerning the dispute between Newton and Leibniz.

Actually, a Japanese mathematician had quite independently developed the calculus. His work probably predated slightly that of Leibniz and of Newton. The man's name is Seki Takakazu or Seki Kōwa (1642–1708); Seki is the family name. His development of the theory of determinants predates and was more general than that of Leibniz. It is extremely unlikely that Seki understood Latin, English, or German. Hence, neither Newton nor Leibniz would have any cause to accuse Seki of plagiarism. And, since neither Newton nor Leibniz understood Japanese, Seki had no cause to suspect them of borrowing his ideas. Seki's work remained unknown to them and to the West until relatively recently.

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