

SCIENCE

18 August 1967

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AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



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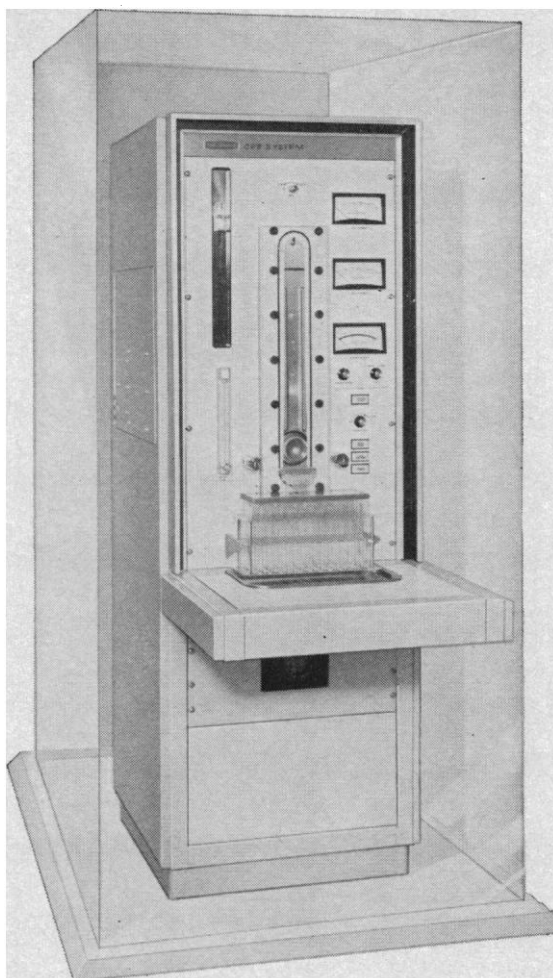
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The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

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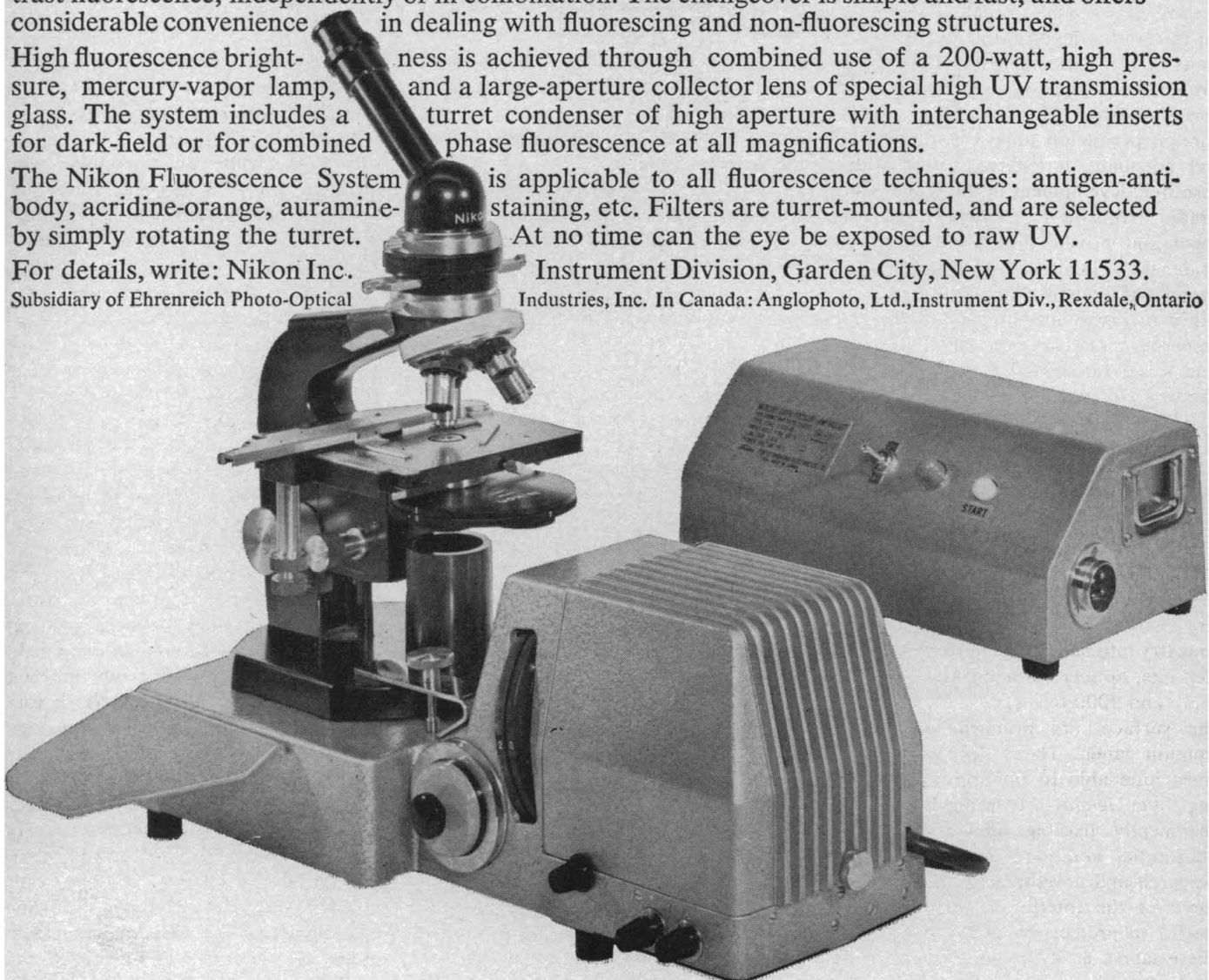
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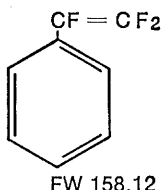
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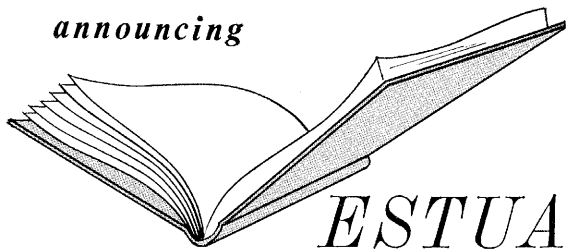
to help in the decision on the value of bombing North Vietnam; operations research is a subject in which many can participate. We should be able to help in the decision as to the kind of area to be held if we are to hold an area. If we had briefings on the situation, we might be able to make wider suggestions as to techniques in the warfare in the Mekong Delta.

I would like a response from those who would be willing to give a percentage of their time to aid our effort. Please give your name, address, phone number, degree, broad area of competence, and whether willing to help organize or just participate. Please mark the envelope "V.N. Emergency." It is not right that I, at my relatively advanced age, should be the person to organize this but I am happy to be one that might help start it. . . . I will collect the names and I will also report results to *Science* in 4 weeks and I will also inform President Johnson. Since I have very little help to work on this, please keep your answers compact.

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Salmon Semantics

The salmon industry as well as the gourmets may be pleased if the salmonella bugs are renamed "sanella" ("News in Brief," 14 July, p. 172); but not so the people of West Germany who eat "*Sanella, die gute*" (oleomargarine) on their daily bread.

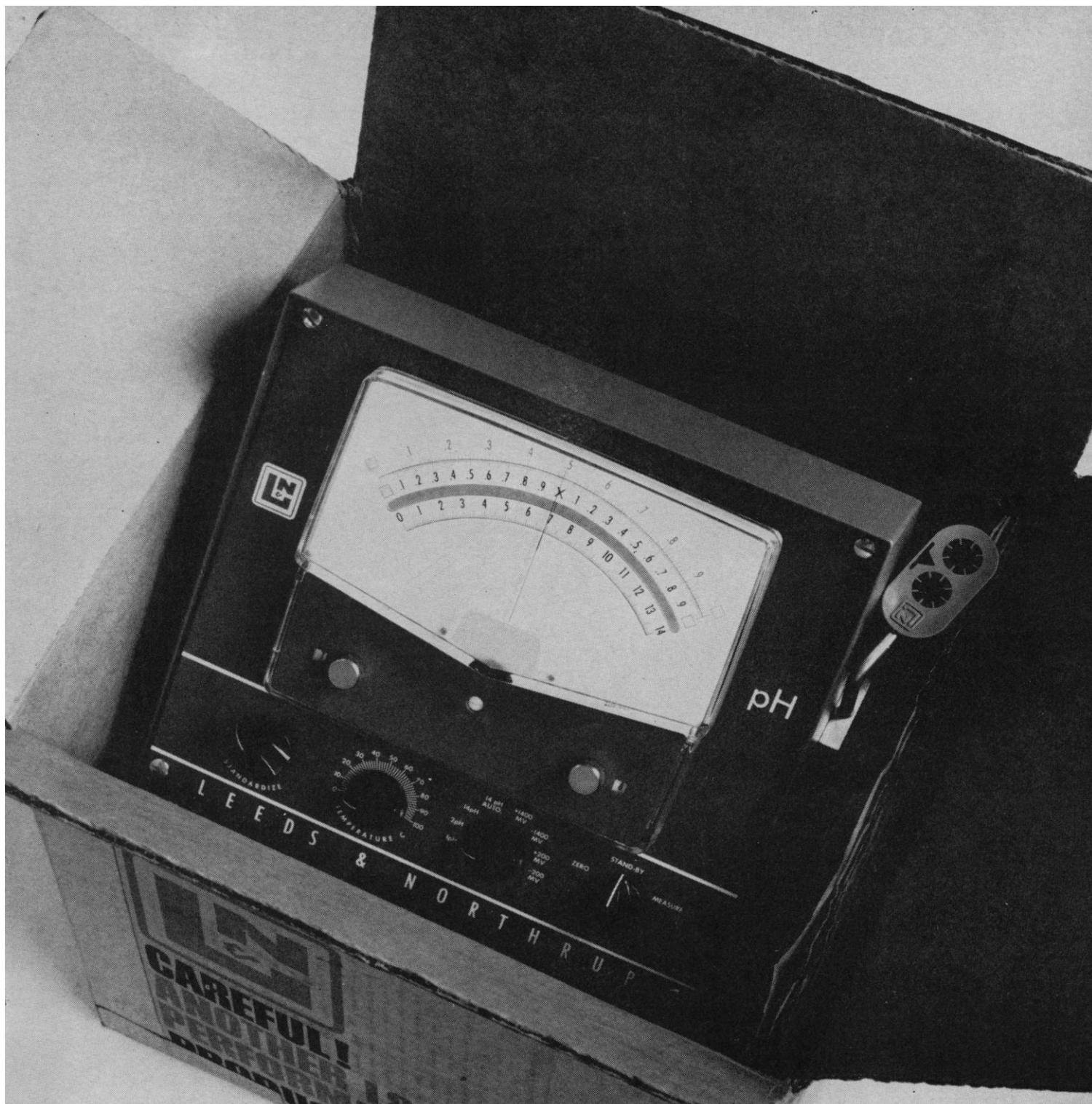
L. MILLER

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. . . The good citizens of Washington State may be starting a trend with their desire to protect the salmon industry by simply adjusting nomenclature. What if a lobby of the persons named Bruce were to ask for a revision of the term brucellosis? What if the fruit industry were to initiate the removal of beriberi (the name only, not the disease)? I see no end to such a trend when I come across words like mongolism, cypridopathy or water moccasin. . . .

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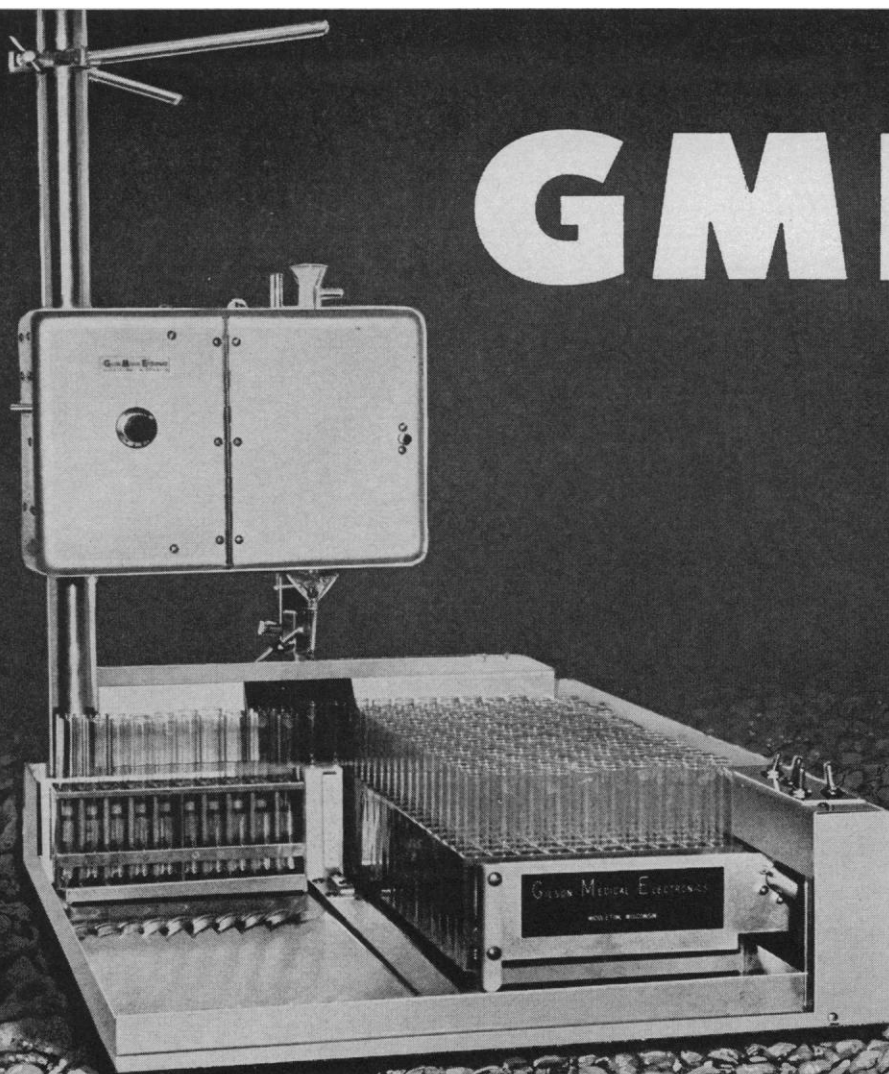
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Justifying Academic Research

As a nation we often behave as if we are not sure that we will survive the next 6 months. Urgent short-term or emotion-laden issues commanding the headlines compete successfully for federal funds, while programs essential to the long-term life of the nation are neglected. In such circumstances, academic scientists must not fail to remind the public of the many enduring benefits to be derived from support of research.

The public is aware that practical applications have arisen from past research and are likely to arise from future research, but scientists would do well to continue to furnish examples of the relation of research and beneficial applications. Another need is to help the public explore the cultural aspects of scientific knowledge. Most humans hunger to understand the universe about them, and many are willing to make considerable efforts to satisfy their curiosity. Thus the museums of the Smithsonian Institution in Washington draw large crowds. The observatory at Mount Palomar is besieged with visitors, and the Christmas science lectures sponsored by the American Association for the Advancement of Science are well attended.

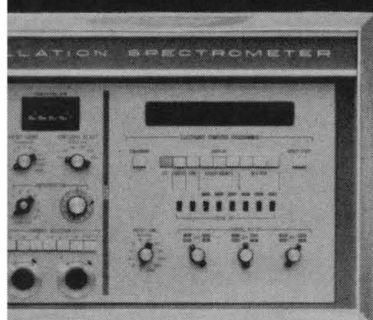
Leadership in the creation of knowledge brings great national prestige. When a conspicuous contribution is recognized with a Nobel prize, a nation's stature increases. The United States has been receiving about half of the Nobel prizes, and most of the winners do their research at universities.

A serious failure of academic scientists has been in educating the public with regard to the role of scholarly inquiry in the universities. The necessity to do so became acute a few years ago. At that time a number of articles in major publications asserted that research efforts by professors were destructive to the teaching functions of universities. Critics neglected to mention that often the most incompetent professors in science departments are those who do no research. The administrations of many colleges and universities quietly responded to the criticisms by making clear to their faculties the importance attached to the teaching function. However, the public is largely unaware of these steps, and an impression remains that good teaching and research are incompatible. This is an incorrect view.

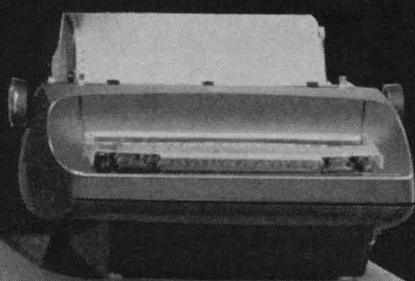
With science evolving rapidly, a major task for professors is to keep up with developments in their field. The full-time instructor who presents material that is out of date defrauds his students in at least three ways: He fails to render proper guidance with respect to subject material, he fails to set high standards of scholarship, and he fails to inspire enthusiasm for learning. To be a good teacher of science, a professor must be intellectually virile. He must be part of the creative enterprise. The most practical means of keeping current with new developments is to participate personally in research activity. The sharply disciplining nature of cold-eyed peer evaluation induces research scientists to work hard at creative endeavor. As part of that effort they try to achieve awareness and understanding of new discoveries in their branch of science. Their students are beneficiaries.

A final role of academic research is in the graduate training of scientists for industry, government, and academia. If good basic research is not conducted in the universities, how will the nation obtain the elite scientists so essential to modern civilization?—P. H. ABELSON

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