those river basins where the governors concerned agreed to seek the state legislation required to establish strong river-basin organizations. The basin organizations would have to be given authority to raise capital by sale of bonds, to levy charges for sewage collection and treatment, and to take other necessary actions. These would have to include some means of obtaining compliance with water-quality standards.

The Delaware River Basin Commission, established about 4 years ago, seems to have most, if not all, of the attributes that would be required under the Johnson program. A spokesman said that the commission had not met since the President made his proposal but that the staff had discussed it. "There's been a good deal of informal thinking that we fit into it ideally," he said.

Federal officials observe wryly that the government has, at one time or another, brought abatement actions against polluters in four river-basin-commission jurisdictions. These actions involved pollution of the Potomac, the Hudson, several New England rivers (the Connecticut, Merrimack, Androscoggin, Blackstone, and Ten Mile), and Raritan Bay south of Staten Island.

In addition, actions were brought against polluters of the Monongahela and the Mahoning rivers, both within the jurisdiction of the Ohio River Valley Water Sanitation Commission (ORSANCO). The commission and federal water pollution officials were at cross purposes at a pollution-abatement conference about a year ago. The federal conferee declared that discharges from municipal and industrial sources in Ohio had polluted the Mahoning, endangering the health and welfare of persons in Pennsylvania.

A PHS report said that, from Warren, Ohio, to the point in Pennsylvania where the Mahoning enters the Beaver River, the stream was covered with an oily film. "Oily sludge lined the banks and masses of [greasy] materials hung from bushes and tree limbs," the report said. "In and below the Youngstown area, gobs of dark, greasy material bobbed up and down in the water as they moved along with the current." Not only had the scenic and recreational values of the Mahoning been destroyed, the report stated, but the pollution posed a menace to health.

The ORSANCO conferee, whose views were similar to those of the conferees for Ohio and Pennsylvania,



James M. Quigley

seemed to be talking about a different river from that described in the PHS report. "Impressive accomplishments in curbing pollution of the Mahoning River have resulted from the efforts of ORSANCO in furthering [the] program," he said. He conceded that the task had not been completed, but said that further progress was assured. "We regard the conclusion of the federal conferee—that all sewage discharged into the Mahoning River should be provided with secondary (85 percent) treatment—as a premature and arbitrary determination," he said.

The ORSANCO compact was established in 1948 by the states of Illinois, Indiana, Kentucky, New York, Pennsylvania, Virginia, West Virginia, and Ohio and approved by Congress. Unlike the Delaware compact, ORSANCO does not include the federal government as a signatory party, although three federal representatives sit on the commission. The terms of the compact plainly indicate that the eight states were jealous of their sovereignties.

The commission may promulgate regulations for the control of pollution, but it has no authority or funds to construct treatment works, and its authority to bring a polluter into court depends, in effect, upon the consent of the state in which the offensive discharge occurs. Court actions have been few and initiated always at state request. It would seem that if organizations such as ORSANCO are to play a major role in the President's proposed river-basin program, the compact states must be willing to delegate greater authority to them.

Because of its complexity and con-

troversial enforcement provisions, the Johnson program is assured of an agonizing examination by the Congress. Last year's water pollution legislation was the product of a lengthy and painful process of compromise; yet some of the features eliminated were milder than certain provisions now proposed, such as the right of the government to bring immediate court action in "imminent" danger cases. Much of what Johnson has requested may not be passed this year or even next year—perhaps never.

However, FWPCA officials point out that there is opportunity for federal abatement actions under existing law. In some 80 interstate situations around the country pollution is believed bad enough to warrant federal intervention. The federal enforcement program has been at a virtual standstill for several months. A principal reason appears to have been that the new agency, FWPCA, lacked a commissioner.

Two weeks ago, the President, after an unaccountably long delay, named James M. Quigley to the commissionership. Quigley, who has been an Assistant Secretary of HEW, with jurisdiction over pollution problems, is regarded as an exponent of a vigorous abatement program. Once FWPCA finds its departmental home, there should be no reason why the hard task of reducing the backlog of potential abatement cases should not begin. Such action could sharpen public interest in water pollution control and perhaps influence the outcome of President Johnson's ambitious proposals.

-Luther J. Carter

## **Announcements**

On 17 February a dinner was held in Cleveland to announce the creation of what is to be known as the Stouffer Prize. It was attended by representatives of all major medical and scientific organizations concerned with heart and vascular disease, such as Surgeon General William Stewart, James Shannon (National Institutes of Health), Charles Hudson (American Medical Association), C. Walton Lillehei (American College of Cardiology), Keith Cannan (National Academy of Sciences), Howard Patterson (American College of Surgeons), Carlton Ernstene (American College of Physicians), Kenneth G. Kohlstaedt (Council for High Blood

Pressure Research), Robert Wissler (Council on Arteriosclerosis), Robert Ebert and Luther Terry (medical schools), Alton Blakeslee (science writers), along with the Governor of Ohio, the Mayor of Cleveland, and leading citizens.

The prize, consisting of a medal, citation, and \$50,000, is to be awarded annually from funds of the Vernon Stouffer Foundation to the person or persons chosen by an international prize selection committee for achievement in prevention, understanding of, and treatment of arteriosclerosis and hypertension, the two diseases primarily responsible for heart attacks and strokes. The prize has been declared tax-free by the Internal Revenue Service. Its purpose is to stimulate original investigation and to promote public welfare by making the causes and prevention a matter of public knowledge. The prize will be given at a public ceremony at the time of the annual meeting of the Council for High Blood Pressure Research in Cleveland.

This large and unusual prize comes at a time when the public has only just begun to realize that heart disease and stroke are by far civilized man's greatest killers. The two diseases chiefly responsible are hypertension and arteriosclerosis. To accelerate discovery of the causes of these diseases the Stouffer Foundation has established this scientific award.—IRVINE H. PAGE, Cleveland Clinic, Cleveland 6, Ohio

## Courses

Scientific and engineering uses of high-speed photographic measurement techniques will be the topic of a seminar 25–29 July at MIT's Stroboscopic Light Laboratory. Mornings will be devoted to theory and demonstrations and afternoons to laboratory practice. (Office of the Summer Session, MIT, Room E19-356, Cambridge, Massachusetts)

A course in high resolution nuclear magnetic resonance is scheduled for 11–15 April at Georgetown University, Washington. Topics to be covered include spectral analysis, heteronuclear magnetic resonance, biochemical applications, double resonance, theory of coupling constants and chemical shifts, and pulse spectrometry. Laboratory sessions will also be held. (Allan J. Rosen, Department of Chemistry, Georgetown University, Washington, D.C. 20007)

An institute on **vibration testing** and measurement is scheduled for 13–14 May in New York. It is designed to supplement the college training of engineers and to provide basic knowledge for nonengineering test personnel. Sessions will be included on the various aspects of sinusoidal and random vibrations, vibration energy and spectra, test equipment, and instruments for shock testing. (Leonard J. Smith, Training Services, Inc., 130 Orient Way, Rutherford, New Jersey 07070)

A course on membrane biophysics will be held at the University of the Saarland, Homburg-Saar, Germany, 12 September to 1 October. The work is intended as an introduction to the physiochemical foundations and laboratory techniques of permeability research. Surveys of transport process in various biological systems also will be covered. Classes will be conducted in English. Applicants should be less than 35 years old and have an M.D. degree or an M.S. degree in biology, biophysics, chemistry, or physics. Participation is limited to 60. The fees for tuition, room, and board are DM 300 (\$75 U.S.) The course is sponsored by the International Cell Research Organization of UNESCO. (H. Passow, Physiological Institute, University of the Saarland, 665 Homburg-Saar, Germany)

Massachusetts Institute of Technology will present a course in experimental solid state physics, 20 June to 22 July, for college faculty members and representatives from government and industry. The program will provide opportunities to participate in experimental projects on several aspects of the field. It will include laboratory work, lectures, and tours of several solid state facilities at MIT. Funds may be available to support faculty participants from accredited colleges and universities. Application deadline: 15 April. (Solid State Physics Program, Room 24-417, Center for Advanced Engineering Study, MIT, Cambridge 02139)

## Grants, Fellowships, and Awards

The National Institutes of Health is offering postdoctoral research associateships in disciplines related to the major aspects of **pharmacology**. Appointments will be for 2 years, beginning 1 July 1967. Stipends will be based on the candidate's training, experience, and

accomplishments. Deadline: 9 May. (Program Administrator, Pharmacology-Toxicology Programs, National Institute of General Medical Sciences, NIH, Bethesda, Maryland 20014)

The American Museum of Natural History offers fellowships through its Theodore Roosevelt memorial fund to "help provide the necessary means of encouraging studies on the North American fauna to which Theodore Roosevelt . . . devoted so much of his time and energy." Grants in small amounts will be made to individuals conducting research in any phase of wildlife conservation, animal ecology, or related fields of North American natural history included in the museum's activities and located within the U.S. Preference will be given vounger scientists, especially graduate students. Deadline for applications: 15 April. (Director, American Museum of Natural History, Central Park West and 79th Street, New York 10024)

The American Microchemical Society is soliciting nominations for its recently established A. A. Benedetti-Pichler memorial award for "outstanding contributions to the practice or teaching" of microchemical techniques. Benedetti-Pichler, who died in December 1964, was a retired professor of chemistry at Queens College, New York. Nominations for the award should consist of letters, up to 300 words, citing the nominee's work and including his name and address. The recipient will deliver a lecture at a meeting of analytical chemists. Deadline: 1 April. (D. B. Sabine, U.S. Vitamin and Pharmaceutical Corporation, Yonkers, New York)

Summer internships for graduate students in the physical sciences, mathematics, statistics, economics, and research engineering are available at the **Center for Naval Analyses**, Arlington, Virginia. Interns will be assigned to work on the current projects of one of CNA's five operating groups: operations evaluation, naval warfare analysis, Marine Corps operations analysis, systems evaluation, or the naval studies institute. Stipends will vary with the recipients' training and experience. Application deadline: 30 March.

CNA is a private research organization managed by the Franklin Institute, Philadelphia. (F. E. Averill, Center for Naval Analyses, 1401 Wilson Boulevard, Arlington, Virginia)