

good suggestions were obtained; counsel was given on the development of local projects, and cooperation was sought in the attainment of STIP objectives.

The frequent suggestion that visits to a campus from a representative of a national scientific society can be of value in the stimulation of local activity has resulted in the project for regional consultants. In calls on colleges and universities the consultants might: (i) meet with staff members in education and science jointly to consider problems of science and mathematics teacher education; it would be desirable in these conferences if at least one representative of the state department of education could also be present, and possibly also secondary-school teachers; (ii) suggest ways in which colleges and universities might maintain closer working relationships with science and mathematics teachers in secondary schools; (iii) review possibilities for achieving greater awareness of the need for strong programs in science and mathematics, on the part of the general public, school boards, and school administrators; (iv) take part in the discussion of programs to interest more young people in the study of science and mathematics and the preparation for careers in science, engineering, and teaching; (v) seek information about promising programs which can be shared with other consultants and with the STIP office; (vi) discuss ways in which the AAAS, through STIP and other activities, may be of assistance in the improvement of science teaching.

The regional consultants for various areas are the following: *New England*, selection to be made by American Academy of Arts and Sciences; *New York*, Lowell D. Uhler (biology), Cornell University; *Pennsylvania, New Jersey*, Marsh White (physics), Pennsylvania State University; *Virginia, West Virginia*, E. J. McShane (mathematics), University of Virginia; *Maryland, Delaware, District of Columbia*, I. E. Wallen (zoology), assistant director, STIP (on leave from Oklahoma A&M College); *North Carolina, South Carolina*, Walter M. Nielsen (physics), Duke University; *Georgia, Alabama, Florida*, Russell H. Johnsen (chemistry), Florida State University; *Ohio, Michigan, Indiana*, A. B. Garrett (chemistry), Ohio State University; *Wisconsin, Minnesota*, Kenneth O. May (mathematics), Carleton College; *Illinois, Missouri, Iowa*, Jerry J. Kollros (zoology), State University of Iowa; *Kentucky, Tennessee*, F. Lynwood Wren (mathematics), George Peabody College for Teachers; *Mississippi, Arkansas, Louisiana*, Houston Karnes (mathematics) Louisiana State University; *Nebraska, Kansas*, G. Baley Price (mathematics), University of Kansas; *Montana, North Dakota, South Dakota*,

Adrien L. Hess (mathematics), Montana State College; *Oklahoma, Texas*, Joe P. Harris, Jr. (biology), Southern Methodist University; *Colorado, Wyoming*, Burton W. Jones (mathematics), University of Colorado; *New Mexico, Arizona*, M. G. Seeley (chemistry), University of Arizona; *Utah, Nevada*, Melvin C. Cannon (chemistry), Utah State Agricultural College; *Washington, Oregon, Idaho*, E. G. Ebbighausen (physics), University of Oregon; *California*, Norman A. Watson (physics), University of California (Los Angeles).

JOHN R. MAYOR  
*AAAS Science Teaching  
Improvement Program*

### Zürich and the Hungarian Crisis

The students of the Swiss Federal Institute of Technology, Zürich, canceled their traditional banquet and ball this year in order to carry out a collection to pay the expenses of Hungarian refugee students so that they might continue their studies in Switzerland. At almost the same time, the students and staff of the University of Zürich passed the following resolution:

"1) We the Professors, Lecturers and Students of the University of Zurich, assembled in the Great Hall, express our indignation and loathing at the inhuman action of the Communist rulers of Russia against the Hungarian efforts towards freedom.

"2) We unconditionally condemn the renewed subjugation of the Hungarian people, which is a flagrant violation of the right to self-determination, the maintenance of which was solemnly guaranteed by Soviet Russia.

"3) We express our admiration and are deeply moved by the heroic struggle of the Hungarian people and bow our heads mournfully, thinking of the dead who have given their lives, fighting for liberty. We mourn with their widows and orphans and vow our aid wherever an opening can be found for any help.

"4) We appeal to all Universities of the Western World to unite in the struggle against the moral, physical and spiritual subjugation of the peoples of Europe and to search for ways and means of liberating them from their shackles.

"5) We stand up for human dignity and the human rights which in the case of entire peoples have been shamefully trampled on by Soviet Russia, and we pledge our support in defence of the freedom of learning.

"6) We are not content with a mere protest and unite in a solemn vow neither to maintain nor accept any kind of scientific or cultural relations with Soviet Russia, as long as the Communist rulers of Russia continue to dishonour Hungary

or any other European nation by brutal repression of spiritual liberty and to rob it of its hereditary culture.

"7) We call on all concerned to exclude Soviet Russia entirely from any economic, athletic and ideological relations."

### Retinal Pigment in Deep-Sea Fish

It has been known that the visual pigments of fish are not all alike. Wald has made the generalization that the retinal pigments of fresh-water forms are purple (porphyropsins) and those of coastal marine forms rose-colored (rhodopsins). To these, E. J. Denton and F. J. Warren [*Nature* 178, 1059, (10 Nov. 1956)] have now added another group of visual pigments that are characteristic of deep-sea fish. These pigments, which are golden, have been designated as chrysopsins or visual golds.

Experiments were carried out on board R. V. *Sarsia* with the fresh retinae of four species of deep-sea fish from the Bay of Biscay (*Stomias boa*, *Flagellostomias* sp., *Argyrolepeucus olfersii*, *Mycotum punctatum*). The unbleached retinae were golden on simple visual inspection. The changes in spectral absorption on bleaching were those of retinal photosensitive pigments differing from visual purple in that their maxima were displaced about 20 m $\mu$  toward the blue end of the spectrum. A retinal pigment with a very similar absorption curve has recently been found in the conger eel, which is a deep-sea form when young and again, finally, when mature.

The golden retinal pigments found by Denton and Warren to occur in high density in all of their deep-sea fish are admirably suited for efficient utilization of that particular fraction of daylight which reaches deep oceanic waters. Additional experiments aboard R. R. S. *Discovery* showed that 15 species of deep-sea fish contained golden retinal photosensitive pigments and that only one oceanic fish, a surface form (*Saurus scombresox*), had visual purple.

—W. L. S., Jr.

### High-School Mathematics Club

A national high-school mathematics club, Mu Alpha Theta, has been formed. This is the first time that such an organization has been established at the national level, and it is expected that existing and future high-school mathematics clubs, if properly qualified, will wish to join the new organization.

The officers of the governing council are as follows: pres., Henry L. Alder, Department of Mathematics, University of California, Davis; v. pres., Edward

L. Walters, head, Mathematics Department, William Penn Senior High, York, Pa.; sec.-treas., Josephine P. Andree, Box 1127, University of Oklahoma, Norman, Okla. The council also includes four governors-general: Ida May Bernhard, consultant in secondary education, Texas Education Agency, Austin 11, Tex.; Nellie M. Kitchens, head, Department of Mathematics, Hickman High School, Columbia, Mo.; John R. Mayor, director, AAAS Science Teaching Improvement Program; and Virginia Lee Pratt, Mathematics Department, Central High School, Omaha, Neb. For further information, address the secretary-treasurer.

### Jobs for Hungarian Refugees

In cooperation with the President's Committee for Hungarian Refugee Relief, the National Academy of Sciences-National Research Council has established an office at Camp Kilmer, N.J., to help identify and place people having advanced scientific or other scholarly or professional training among those who have escaped from Hungary. So far the United States has agreed to accept 21,500 refugees, and groups are arriving each day at Camp Kilmer by plane and ship.

The Academy-Research Council would be glad to learn of openings that may be available for people with advanced training in any field of scholarship or in the professions, particularly openings that require the doctorate or an advanced engineering degree. Every effort will be made to bring such opportunities to the attention of those among the Hungarians who appear to be qualified and to provide a channel for direct communication between the candidate and the institutions where the openings exist.

Because of the limited facilities at Camp Kilmer, it is necessary to place the escapees rapidly. However, an effort will be made to bring known openings to the attention of all qualified applicants and to give to each person an opportunity to consider a variety of employment possibilities. The American Council for Emigrants in the Professions is cooperating with the Academy-Research Council in this effort, as are other national organizations.

Arrivals in this country from Hungary are in two categories, those with visas for immigration (some 6500) and those admitted on a "parolee" basis. In the first case the law requires a sponsor who will guarantee that for a period of 1 year the immigrant will not become a public charge. In the second case the legal requirement is less strict, but some degree of responsibility must be assumed. The necessary arrangements in both cases are usually made in the community where

the person is placed, often with the help of local welfare agencies.

Some language training courses for escapees who do not speak English have been arranged, and others are being considered. Many who do not speak English speak French or German.

When job openings are reported to the Academy-Research Council, the following information should be provided: (i) name and location of institution; (ii) description of position available, including field of work and nature of duties (for example, teaching, research, development, engineering, management); (iii) level of salary or other support; (iv) estimated starting date and duration of employment; (v) language requirements, and availability of local training in English if necessary; (vi) name, address, and telephone of the representative who would carry on further negotiations; (vii) housing available (some escapees are accompanied by wife and children); (viii) group or organization willing to act as sponsor, if known; (ix) names of other organizations or welfare agencies to which the job information may already have been given; (x) any other helpful information.

Information on employment opportunities should be submitted promptly and should be kept up to date as circumstances change. Written material should be sent in duplicate, the original to the National Academy of Sciences-National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C. (attention: Office of Scientific Personnel), and a carbon copy to the National Academy of Sciences-National Research Council Office, c/o President's Committee, Building 1305, Camp Kilmer, N.J. The telephone numbers for the respective offices are as follows: Washington, Executive 3-8100, extension 226 or 266; Camp Kilmer, New Brunswick, N.J., Charter 9-5883, extension 22 or 23.

### Environmental Hygiene

The Institute of Industrial Health of the University of Cincinnati is offering a 2-year course to candidates who wish to pursue graduate training in environmental hygiene (industrial hygiene, air pollution, industrial wastes, toxicology, and so forth). The institute combines the facilities of the Kettering Laboratory, the colleges of engineering, medicine, law, and business administration, as well as the staff and facilities of the technical laboratories of certain local industries and research organizations.

A candidate should be a graduate of an approved school of engineering or science. Orientation or additional training in chemistry or sanitary engineering is preferred but not essential. A master

of science degree can be awarded after 1 year of training in residence and the submission of an acceptable dissertation. The doctor of science degree may be given to those who, after the completion of the 2-year course, spend an additional year in supervised training and present a thesis.

The academic year begins in September. Applications for admission to the first year should be received *before 15 Apr.* Requests for information should be addressed to the Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Aves., Cincinnati 19, Ohio.

### British Nuclear Tests

Britain has notified Japan of a danger zone around Christmas Island, in the western Pacific, during a series of thermonuclear weapons tests to be held between 1 Mar. and 1 Aug. The announcement brought protests from Japanese fishing interests.

Isao Koide, director of the All-Japan Federation of Bonito and Tuna Fishing Cooperative Unions, says that his organization is asking the British Government to suspend tests this year because it is feared that radioactive fallouts would be likely to drift westward toward Fiji Island waters, where Japanese tuna fleets ordinarily assemble. Koide indicated that if London refuses, Japanese fleets will be forced to withdraw from valuable fishing grounds.

### AIBS Acquires Quarterly Review

On 1 Jan. the American Institute of Biological Sciences became the publisher of the *Quarterly Review of Biology*, having received all rights from the Williams and Wilkins Company of Baltimore, Md., in return for the sum of \$10. The Waverly Press retains the printing contract for a period of 5 years.

The *Quarterly Review* was founded in 1925 by the late Raymond Pearl and is the only review journal published in the United States which attempts to cover biology in the widest sense. It is noted not only for its general reviews but also in particular for its book review section, which is the most extensive in the field of biology and which maintains a reputation for critical and pungent reviews that was established by Raymond Pearl himself.

The present editors, B. H. Willier, editor-in-chief, Bentley Glass, associate editor, and C. P. Swanson, assistant editor, will continue in office; and the present advisory board will also be retained. The present subscription price of \$7.50 per annum will be reduced to \$6.50 for AIBS members.