

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 μ 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