school Southern conservative. He and Thomas have worked together harmoni-

In August Senator John L. McClellan of Arkansas, chairman of the Government Operations Committee, appointed a special subcommittee on government research, to be headed by Fred Harris, a freshman senator from Oklahoma elected in 1964 to finish out the term of the late Robert Kerr. Other senators on the subcommittee are McClellan, Abraham Ribicoff of Connecticut, Joseph M. Montoya of New Mexico—all Democrats—and Karl E. Mundt of South Dakota and Milward L. Simpson of Wyoming, Republicans.

Harris, a lawyer, served 8 years in the Oklahoma State Senate before coming to Washington. He seems to have impressed his new colleagues as a serious, workmanlike legislator. Harris is given an excellent chance of reelection this fall, and he can be expected to use his subcommittee chairmanship as a means of making his chances better still

His staff, headed by a young Oklahoman who has a Ph.D. in rhetoric and mass communications from the University of Illinois, is canvassing the work of other Senate and House committees on research, in an effort to define a fruitful area for exploration. Senator Harris has said he will seek a "total overview" of the government's involvement in research. The subcommittee does not propose any "sensational exposé," but it will look for ways to eliminate duplications and overlapping in research projects handled by federal agencies, according to Harris.

Harris has complained of a lack of "overall national policy" on research and on the proper use of research manpower resources. He has joined in the clamor for wider distribution of research contracts, and has complained of the difficulty in getting a comprehensive view of contracting activities.

"There is no centralized oversight or review of research contracts let by the various departments and agencies," he has said. "Research results are not readily accessible to government agencies or the general public, because there is no centralized filing, indexing, or reporting of them." Harris is only the newest entrant in a field in which other investigators, such as Senator Nelson and Representative Reuss, will be busy as the congressional session gets under way.—LUTHER J. CARTER

Announcements

Duke University has been selected as the site of a regional nuclear structure laboratory, which it will operate in conjunction with the Consolidated University of North Carolina. The AEC will provide \$2.5 million toward the cost of the facility, and Duke, with support from other agencies, will provide the building. Construction is to begin next year and is expected to take about 2 years. Plans call for the laboratory to adjoin the Duke physics building. The regional facility will absorb Duke's own nuclear structure laboratory, which the school has operated since 1951 with AEC support.

The laboratory will house a tandem Van de Graaf accelerator with a 15-Mev cyclotron injector. Henry W. Newson, physics professor at Duke, will be director of the laboratory.

Purdue University next fall will combine the efforts of its biological sciences and chemistry departments to offer a doctoral program in biochemistry. Plans are being implemented by a 13-member interdepartmental committee headed by chemistry professor Joseph F. Foster. Besides providing courses to remedy any deficiencies in undergraduate preparation, the program will offer research opportunities in either of the participating departments. Applicants should have a bachelors degree in biology, chemistry, or biochemistry. Fellowships and assistantships are available, with stipends for academic-year appointments starting at \$2400, and \$400 for summer appointments. Additional information is available from J. F. Foster, Department of Chemistry, Purdue University, Lafayette, Indiana 47907.

Fred H. Harrington, president of the University of Wisconsin, has been elected chairman of the board of trustees for Argonne Universities Association. The association was incorporated recently by 26 midwestern universities to participate in a three-way agreement for the management of Argonne National Laboratory; the other participants are the University of Chicago and the AEC. The new management plan calls for AUA to formulate, approve, and review the laboratory's policies and programs. The University of Chicago will continue to operate the lab, and AEC will continue to furnish financial support.

Meeting Notes

More than 30 midwestern sections of the American Chemical Society will sponsor their first Great Lakes regional meeting in Chicago 16–17 June. Papers are invited on analytical, organic, inorganic, and physical **chemistry** and biochemistry; but not on applied spectroscopy and gas chromatography. At least one author of each paper must be a member of ACS. Deadline for receipt of titles and abstracts: 15 March. (Great Lakes Regional Meeting, ACS, 86 East Randolph Street, Chicago, Illinois 60601)

A research program in fertilization mechanisms and gamete physiology will be offered by the Marine Biological Laboratory, Woods Hole, Massachusetts, 13 June to 25 August. Emphasis will be on current research problems in marine plants and animals. Applications will be accepted from pre- and postdoctoral students in the biological, biochemical, biomedical, and agricultural sciences. Stipends will be provided, and prorated at standard NIH fellowship rates. Deadline: 15 February. (Charles B. Metz, Institute of Molecular Evolution, University of Miami, Coral Gables, Florida 33134)

An international symposium on mathematical and computational methods in the social sciences is scheduled for 4-8 July, under the auspices of the Center, Computation International Rome, and the Centre de Calcul, Paris. Papers are being accepted on the application of computation methods in sociology, psychology, anthropology, and archeology. Summaries: up to two pages, French or English; deadline: 1 March. (Bernard Jaulin, Centre de Calcul de la Maison des Sciences de l'Homme, 14 rue Monsieur le Prince, Paris 5, France)

A conference on **exobiology** is scheduled for 4–6 April at NASA's Ames Research Center, Moffett Field, California. The University of California Extension, Berkeley, is sponsor. The program is designed to provide the chemical, physical, and biological background for study of the origin of life and to cover such topics as the scientific basis for belief in the existence of extraterrestrial life, major problems in the search for it, and the instrumentation for life-detection missions. The

registration fee is \$60 for students, \$100 for others. (Letters and Science Extension, University of California, Berkeley 94720)

The fifth symposium on cineradiology will be held in Rochester, New York, 4–5 March. Papers are invited on any aspect of the technical or applied aspects of motion picture radiology, including pertinent television technology. The program will be oriented toward basic and clinical research programs and teaching demonstrations. Registration will be limited to 200. (R. Gramiak, Division of Diagnostic Radiology, University of Rochester Medical Center, Rochester, New York 14620)

The Institute of Electrical and Electronics Engineers will hold its communications conference 15–17 June in Philadelphia. Papers are invited on research, design, analytical and theoretical studies, engineering, manufacture, and operation of communications equipment. Deadline: 25 February. (A. E. Joel, Jr., Room 2G-330, Bell Telephone Laboratories, Holmdel, New Jersey)

Grants, Fellowships, and Awards

A research seminar on interrelationships between organisms and sediments will be held 25 July to 3 September at the Bermuda Biological Station, St. Georges. The cosponsor is Lehigh University's Marine Science Center. Applicants may be students in any discipline related to marine science who have completed a year of graduate work but are not actively working on a Ph.D. thesis. Lectures, laboratory sessions, and field work will be included, as well as opportunities for independent research. Stipends will vary according to the distance the recipient must travel. Application deadline: 15 March. (K. E. Chave, Lehigh University, Bethlehem, Pennsylvania 18015)

The National Science Foundation will sponsor a postdoctoral program in **psychology** at the University of Michigan 13 June to 22 August. Applicants must be full-time college psychology teachers in U.S. institutions. Participants will receive travel allowance and stipends of \$100 a week, plus \$15 a week for dependents. They will devote full time as members of research teams investigating one of the following: human short-term memory, perception in

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humans, probabilistic information processing, effects of subcortical lesions on learning and retention in the rat and cat, neural correlates of visual and auditory perception and of problem solving in primates, verbal control during concomitant verbal and nonverbal responses, motivational influences on alternative activities in animals. Deadline for receipt of applications: *I March*. (D. J. Weintraub, Department of Psychology, University of Michigan, Ann Arbor 48104)

Postdoctoral fellowships in experimental marine biology are available from the Institute of Marine Science of the University of Miami. The fellowships are intended to acquaint biologists with opportunities for research on marine organisms. Stipends are \$5000, plus dependent's allowances of \$500. Application deadline: 15 March. (C. E. Lane, Institute of Marine Science, University of Miami, Rickenbacker Causeway, Miami, Florida 33149)

The American Museum of Natural History is offering two Ogden Mills research fellowships in anthropology for persons who "might benefit by a year at the museum." Recipients will have full access to the museum's facilities, collections, and archives. Although no rigid requirements are made as to age, sex, or academic background and degrees, candidates in their early postdoctoral years will be given preference. The fellowships carry \$5000 stipends, plus allowances for dependents. Applications should include curriculum vitae, description of research aims, and the proposed program for the fellowship year. Deadline: 15 February. (H. L. Shapiro, Department of Anthropology, American Museum of Natural History, New York 10024)

Courses

The University of Minnesota will prsent two courses in **infrared spectroscopy**: techniques, 12–16 July; and chemical interpretation, 18–22 July. The courses are related but separate, and participants may register for one or both. Enrollment is limited; applicants need at least basic training in chemistry and physics, but experience in spectroscopy is not required. The sessions on techniques will include lectures and laboratory work in basic optics and instrument theory, instru-

ment design, sample preparation, and laboratory techniques. The course on interpretations will cover the group frequencies useful in chemical diagnosis and structure determination, and practical use of infrared spectroscopy in day-to-day chemical work. (Bryce Crawford, Jr., Department of Chemistry, University of Minnesota, Minneapolis 55455)

A course in the fundamentals of optics will be presented at the University of Rochester, New York, 11-22 July. The program is designed for physicists and engineers in industry and government and for college physics and electrical engineering teachers. The topics to be covered include modern lens design, image structure and transfer, multilayer filters, holography, radiometry, lasers, polarized light, microscopy, and interferometry. Tuition: \$375; deadline: 10 June. Fellowships covering tuition, stipends, and travel allowances are available for a maximum of 20 college teachers: deadline: 15 February. (Fundamentals of Optics, Institute of Optics, University of Rochester, Rochester, New York 14627)

Scientists in the News

Grayson Kirk, president of Columbia University, has been elected president of the Association of American Universities, succeeding Harlan H. Hatcher, president of the University of Michigan. The association meets semiannually to discuss matters of general interest to universities. Membership is limited to the presidents of U.S. and Canadian universities that specialize in graduate and professional training and in research. The other officers are David Henry, University of Illinois, vice president; and Nathan M. Pusey, Harvard, secretary-treasurer.

Ralph W. Chaney, emeritus professor of paleontology at the University of California, has been named visiting scholar by the China Foundation for the Promotion of Education and Culture. He will be visiting professor of geology at the National Taiwan University until April.

Raymond E. Hopponen, assistant dean at the University of Kansas, will become dean of the college of pharmacy at South Dakota State University, as of 1 February.

Peter B. Medawar, director of England's National Institute of Medical Research and winner of the 1960 Nobel prize in physiology and medicine, has been named a nonresident professor at Cornell University. He will serve a 6-year term as Andrew D. White Professor-at-large during which he will spend periods in residence at the school.

Geoffrey C. Hanna, head of nuclear physics research at the Chalk River Establishment, Atomic Energy of Canada, has become chairman of the European-American Nuclear Data Committee for a 2-year term. He succeeds Egon Bretscher, of the United Kingdom Atomic Energy Authority.

Fernando Sisto, Jr., professor of mechanical engineering at Stevens Institute of Technology, has been appointed head of the department, succeeding Kurt H. Weil, who has announced plans to retire in September.

Kenneth A. Fry, head of the fellowship office of Oak Ridge Institute of Nuclear Studies, has been appointed professor and head of the department of biological sciences at Texas Women's University. He is succeeded at ORINS by Granvil C. Kyker, a senior staff member of the institute's medical division.

Neil Bartlett, professor of chemistry at the University of British Columbia, will receive the Research Corporation award for 1965, for his discovery of compounds of the noble gases. The \$10,000 award is presented annually "for outstanding achievements in science not previously accorded major recognition."

Hersey E. Riley, formerly chief statistician at the International Labor Office, has been named head of the Office of Economic and Manpower Studies at the National Science Foundation. He succeeds Jacob Perlman, who has retired.

R. Hobart Ellis, Jr., executive editor of *Physics Today*, has been appointed editor of the journal, succeeding **Robert R.** Davis.

Chester C. Kisiel, formerly associate professor of civil engineering at the University of Pittsburgh, has become professor of hydrology at the University of Arizona.

Alan B. Rothballer, former associate professor of neurological surgery at Albert Einstein College of Medicine, has been appointed professor and chairman of the department of neurosurgery at New York Medical College.

Oscar A. Thorup, Jr., director of the hematology training program and physician in charge of the hematology clinic at the University of Virginia Hospital, has been appointed professor and head of the department of medicine at the University of Arizona College of Medicine as of 1 February.

Charles E. Treanor, a principal physicist at Cornell Aeronautical Laboratory, Buffalo, has been appointed visiting professor of physics at Stanford University for the winter and spring quarters.

Paul L. Koepsell, associate professor of civil engineering at South Dakota State University, has been appointed director of research at the school.

The University of Miami has appointed William C. Knopf dean of the graduate school of engineering, succeeding T. A. Weyher, who has announced plans to retire. Knopf had been chairman of the university's department of electrical engineering and chairman of the division of oceanographic engineering at the Institute of Marine Science.

Recent Deaths

Arthur Z. Arnold, 67; professor of economics at New York University; 28 December.

Dow V. Baxter, 67; professor of forest pathology and silvics at the University of Michigan; 31 December.

Raymond W. Bliss, 77; retired Surgeon General of the U.S. Army during the Korean War; 12 December.

Donald J. Cowling, 85; retired president of Carleton College, Northfield, Minnesota; 27 November.

Walter B. Ellwood, 63; research physicist for Bell Telephone Company; 9 December.

Joseph Erlanger, 91; professor emeritus of physiology at Washington University and co-winner of the 1944 Nobel prize in physiology and medicine; 5 December.

Sulamith Goldhaber, 42; research physicist, University of California's

Lawrence Radiation Laboratory; 11 December.

Clyde H. Hill, 80; professor emeritus and former chairman of the department of education at Yale; 31 December.

Franc D. Ingraham, 67; retired associate professor of surgery at Harvard; 5 December.

Charles Davis Jeffries, 69; professor emeritus of soil technology at Pennsylvania State University; 24 December.

Oliver Kamm, 76; retired scientific director of Parke, Davis, & Company; 5 December.

Howard D. Lightbody, 74; biochemist, retired director of Food Laboratories, Quartermaster Food and Container Institute, Chicago; 1 November.

Perrin H. Long, 66; retired chairman of the medical department at the State University of New York Downstate Medical Center; 17 December.

Frederick Lund, 71; head of the psychology department at Temple University; 20 December.

Dean B. McLaughlin, 65; professor of astronomy at the University of Michigan; 8 December.

Clark Blanchard Millikan, 62; director of the graduate aeronautical laboratories at Caltech since 1961; pioneer in the development of multi-engine, high-altitude airplanes, jet propulsion, and guided missiles, and recipient in 1949 of the Presidential Medal of Merit, the government's highest award for civilians for wartime service: 2 January.

Albert Moore Reese, 93; professor emeritus of zoology at West Virginia University; 30 December.

Duane E. Roller, 71, retired professor of physics at Harvey Mudd College; he was the first editor of the *American Journal of Physics*, and in 1954, editor of *Science* and the *Scientific Monthly*; 24 December.

Harry H. Sobotka, 66; director emeritus of the chemistry department at Mount Sinai Hospital, New York, and a founder and the first president of the American Association of Clinical Chemists; 24 December.

Reston Stevenson, 83; retired professor of chemistry at the City College of New York; 22 November.

Erratum: In a news story on Rockefeller University published 31 December 1965, Alfred E. Mirsky was quoted incorrectly. The 7th paragraph on p. 1791 should have read as follows:

Mirsky, a member of the Rockefeller from the mid-thirties and now both a full professor and librarian, expresses a feeling which is fairly common at the university when he says of behavioral biology, "It's an important part of biology that we've been missing," and goes on to say, "and now the time is ripe."