increase financial support for basic research in behavioral science; (iv) make available special facilities for behavioral science, including buildings and equipment; and (v) support centers devoted to foreign area studies."

Revised Apportionments on Fish and Game Restoration

Revised apportionments of federal aid funds to the states for restoration of fish and game have been announced by the Department of the Interior. The new apportionment is based on Treasury certifications of money available from excise taxes on certain sporting goods. Under the revisions the 48 States and Hawaii will receive $21,306,000 for fish and game restoration instead of the $25,130,000 previously announced. The revised figure for game restoration is $16,974,000 compared with the $19,130,000 allotted previously; the amount available for the restoration of fish is $4,332,000 instead of $6,000,000.

This money is distributed to the individual states and to Hawaii in accordance with formulas established by law and based upon license sales and land and water areas. Distribution is made on a reimbursable basis, with the states financing projects initially and being repaid $3 in federal aid money for each $4 expended, or a net expenditure of $1 state money and $3 from federal funds.

In addition to the afore-mentioned apportionments, Alaska is to receive $90,000 for game restoration and $75,000 for its sport fishery. Guam, Puerto Rico, and the Virgin Islands will each receive $12,000 for game restoration, and each will get $10,000 for fish restoration. These amounts are fixed by law rather than by formula.

Legislation also provides that no state can receive more than 5 percent of the total apportioned for game restoration, nor can it receive less than 0.5 percent of that amount. Limits for fish restoration apportionment are 5 percent maximum and 1 percent minimum.

Kolthoff Comments on Soviet Trip

I. M. Kolthoff, head of the analytical chemistry department of the University of Minnesota, has recently returned from the U.S.S.R., where he attended a symposium for scientists in his field and lectured at Moscow University. Some of his comments about the trip follow.

"When I arrived in Moscow December 1 it had been 12 years since my last visit to the Russian capital. The great official respect for scientists and the prestige of the Russian Academy of Sciences which were already quite evident in 1945 were made plain to me immediately again. At the airport, the reception committee expedited my passage through customs and immigration procedures with no fuss or red tape and no bother to me.

"I had been invited to Moscow to take part in a three-day symposium. . . . Other participants . . . included 18 scientists from the 'satellite' countries. . . . Harry Irving of Oxford University was the only other guest from a capitalist country.

"There were, in addition, three Chinese chemists present—two men and a woman. One of the men and the young lady had taken their Ph.D. degrees in the United States (University of Wisconsin, 1937, and University of Illinois, 1951). . . . The third Chinese chemist had won his Ph.D. at the University of Munich under the late Professor Hoenigschmidt, one of the world's experts on the determination of atomic weights.

"Although all three Chinese were avowed Communists and supporters of the Red Government in Peiping, the two American-educated chemists referred with affection to their stay in the United States. Indeed, throughout all the many talks and discussions which we had in Moscow, Irving and I never heard a disagreeable word about the United States and Britain.

"The Chinese trio spoke flawless English, and we conversed without inhibition. They admitted that their education system is not yet as advanced as Russia's; it is possible to get only a bachelor's degree in China. But they hope study for advanced degrees will become possible reasonably soon.

"I was impressed by the large number of Chinese studying for advanced degrees at Moscow University. This educational link between Russia and China is not without significance in world affairs, and I could not help regretting once again our government's policy which makes it impossible for us to play a part in training China's future scientific and educational leaders.

"The Chinese chemists invited me to visit them at home and proposed to have an official invitation extended to me on their return. I would have been happy to accept, but sadly had to admit that again in this respect State Department policy might stand in the way.

"This is too bad, for scientific visitors like myself are in a unique position to establish much-needed relations with countries like China. From scientific contacts frequently come exchanges of opinion on other matters.

"As to scientific research in the Soviet Union, we found that—as was true in 1945—most work is carried out in special institutes, which are under the auspices of the U.S.S.R. Academy of Sciences and entirely separate from a university. Except for the fact that most of the advanced research workers also teach at a university (with extra pay), there is no direct relationship between a university and the institutes. . . . Emphasis is entirely on fundamental research, for which apparently unlimited funds are being made available.

"In 1945, I had noticed that practically none of the instruments and equipment was of Russian make. This time I was impressed, if not awed, by the fact that almost all the instruments for refined measurement are made in Russia. . . . .

"The number of research workers in chemistry is greater in Russia than in this country. The quality of their work varies from excellent and good to acceptable. Their papers and journals, in general, compare favorably with those in the Western World. . . . [But] the great advancements in pure and applied science are brought about by contributions of an original and fundamental nature. In this respect the Russians have not got the lead over the West as far as chemistry is concerned. But they definitely hold their own. . . .

"There is no reason for hysteria now. But we do need fully to recognize the fact that fundamental research is the source of applied research and that no nation can remain strong without leadership in basic research."

Grants, Fellowships, and Awards

Behavioral sciences. The most serious difficulty encountered by the Russell Sage Foundation in its work for more effective collaboration between the social sciences and the professional services is the scarcity of trained personnel. In order to help meet this shortage, the foundation offers postdoctoral residencies in operating agencies or professional schools for the purpose of providing qualified sociologists, social psychologists, and anthropologists with specialized training and experience relevant to professional practice. Award recipients must not be over 35 years of age and must definitely be interested in careers involving applications of behavioral science in a field of professional practice. For information, write to the Russell Sage Foundation, 505 Park Ave., New York 22, N.Y.

Biophysics. The Massachusetts General Hospital has established a biophysics training program designed to assist candidates holding doctorate degrees in mathematics, physics, or engineering to apply their knowledge to biological and medical problems. This program is supported by the National Institutes of Health and is presented with the co-

operation of Massachusetts Institute of Technology. Appointments will be for a minimum period of two or three years. The salary range will depend on previous research experience and other qualifications. For information, communicate with the Physics Research Laboratory, Massachusetts General Hospital, Fruit St., Boston, Mass.

Gravity. The Gravity Research Foundation has announced that for the ninth year it is offering five awards for short essays on gravity. The awards will be made on 2 June for the best 1500-word paper on the possibilities of discovering: (i) some partial insulator, reflector or absorber of gravity, or (ii) some alloy, or other substance, the atoms of which can be agitated or rearranged by gravity to throw off heat, or (iii) some other reasonable method of harnessing, controlling, or neutralizing gravity. Essays must be received *before 15 April* by the Gravity Research Foundation, New Boston, N.H. The foundation will send detailed instructions on request.

Medical student research. The Lederle Laboratories Division of the American Cyanamid Company has announced that it is making available to medical schools throughout the United States and Canada its publication, *Lederle Medical Student Research Fellowships.* These fellowships, in amounts not exceeding $600 per year for any one individual, are intended to relieve in part the financial burden of students who desire to devote their summer vacations to research in the preclinical departments. The selection of students to receive such awards will be made by the dean of the medical school, or by the regularly constituted committee of the faculty charged with such selections.

News Briefs

Beginning 31 March, the Atomic Energy Commission will no longer accept new requests for gamma irradiation service from the public when the requested service is readily available commercially. A recent commission survey indicates that at least 16 academic and industrial organizations are prepared to provide gamma irradiation service on a commercial basis. A list of these organizations, showing the gamma flux available, the number and size of samples that can be accommodated, and the approximate amount of space available, may be obtained from the Office of Industrial Development, Atomic Energy Commission, Washington 25, D.C.

* * *

The Crop Protection and Pest Control Exhibition that is being organized by *World Crops,* international journal of agriculture, will be held 12–15 May at the Royal Horticultural Society's new hall in London. The organizers hope for a minimum attendance of 25,000, drawn from all over Europe.

* * *

Russell Cave, near Bridgeport, Ala., the oldest known site of human habitation in the southeastern United States, has been given to the Federal Government by the National Geographic Society as a national archeological monument.

* * *

As part of the safety precautions for the forthcoming nuclear tests at the Eniwetok Proving Ground, the U.S. Atomic Energy Commission has announced the danger area that will be established in the Pacific Ocean effective 5 April. The area is generally rectangular in shape and comprises roughly 390,000 square nautical miles. It is approximately the same size as the danger area used in the 1956 test series, but its east and west boundaries have been shifted approximately 120 nautical miles to the west. It is estimated that most, if not all, of the danger area will be disestablished during August 1958.

* * *

Plans for the new museum building of history and technology for the Smithsonian Institution have been approved by a Special Joint Committee of the Senate and House of Representatives, the Regents of the Smithsonian Institution, the Commission of Fine Arts, the National Capital Planning Commission, and the General Services Administration. Construction will start early next summer.

* * *

The following chemicals are wanted by the National Registry of Rare Chemicals, Armour Research Foundation of Illinois Institute of Technology, 13 W. 33rd St., Chicago 16, Ill.: 2-hydroxy-*n*-caprylic acid; α-methyl styrene oxide; *p*-dinitrosobenzene; *l*-ethylcyclohexanol; *m*-hydroxyphenylpropionic acid; monofluoroacetic anhydride; *n*-pentacosane; *l*-phenylcyclohexene; *n*-dotriacontane; 4-chloro-2-hydroxy-3,3-dimethylbutyric acid; pentaphenylethane; *n*-tetracosane; 2,4-dichloro-3,3-dimethylbutyric acid; mellon; cinchomeronic acid (pyridine-3:4-dicarboxylic acid); α,α-dimethylsuccinic acid; 1,2-anthraquinone; diethyl disulfide; humulene; and 2-methylacrylic acid (isocrotonic acid).

* * *

A millenary celebration for Al–Mas'udi, 10th-Century Arab geographer, traveler, and encyclopedist, was held recently in India at Muslim University, Aligarh, under the joint auspices of the Institute of Islamic Studies, Aligarh, and the Indian Society for the History of Science. In addition to the many Indian papers presented, there were some 30 papers from different parts of the world, including the United Kingdom, the United States, the Soviet Union, France, the Netherlands, Egypt, Lebanon, and Iran. Among those present from abroad were Bernard Lewis, Von Grunebaum, Myron Smith, Academician Tolstov, Nicola Ziadeh, and Said Naficy.

* * *

The Columbia Broadcasting System has announced that a televised symposium on science, "The Role of the Scientist in America's Future" will take place on 16 March from 5 to 6 P.M. Participants will include Joseph Kaplan, Howard L. Bevis, Clifford C. Furnas, and William L. Laurence of the *New York Times.*

* * *

The National Science Foundation has announced plans for a conference on "Research and Development and Its Impact on the Economy," to be held in Washington in the spring. The conference will focus attention on the economic importance of the nation's research and development activities, now estimated to account for annual expenditures of about $10 billion, more than 2 percent of the gross national product. The effect of such expenditures in stabilizing and promoting the growth of the economy, especially in periods of recession, will be one of the principal topics of discussion.

Scientists in the News

LAURENCE H. SNYDER, retiring president of the AAAS and chairman of its board of directors, will become president of the University of Hawaii on 1 July. He is at present dean of the Graduate College at the University of Oklahoma.

MANSON BENEDICT, professor of nuclear engineering, has been appointed head of the department of nuclear engineering that is to be established at Massachusetts Institute of Technology.

Under the new cultural and technical exchange agreement between the United States and the U.S.S.R., HUBERT A. LECHEVALIER, an associate professor of microbiology at the Rutgers Institute of Microbiology and codiscoverer of neomycin, plans to leave for Moscow in about 6 months. Lechevalier is an assistant to Selman A. Waksman, winner of the 1952 Nobel Prize in physiology and medicine as codiscoverer of streptomycin.

In exchange, the Soviet Union has agreed to send the Rutgers Institute G. K. SKRIABIN, a ranking member of the microbiological research team directed by N. A. Krassilnokov of the Soviet Academy of Sciences. Skriabin is expected to arrive here early in March.