ment" in 1958 to stop all tests has now dragged far beyond its original 1-year duration, and the position of both the old and new Administrations has all along been that the unpoliced moratorium will be permitted to run only as long as there seems to be a realistic chance of reaching a formal treaty. The Administration must now decide, in the face of what has happened in Geneva, whether to tacitly admit that its warnings about resuming testing if the Russians did not show they were serious about the negotiations was nothing more than empty talk.

This raises the problem of how, if a decision to resume underground testing is made, it is to be presented to the rest of the world, or alternatively, if the *de facto* moratorium on testing is to be continued, how this is to be explained to the critics, inside and outside Congress. These critics have been persuaded to accept relatively quietly the continued extension of the unpoliced ban this long only on the assurance that testing would be resumed once it had become clear that the Russians were not interested in serious negotiations.

Unpleasant Decision

Whatever the decision, and it is likely to be made quite soon, it will be a difficult one for the Administration, and will subject the Administration to a great deal of criticism.

We have never, in so many words, explicitly said we would resume weapon testing if the negotiations were to fail. There have been rather explicit statements about undertaking nonmilitary experiments, either for improving detection systems or for exploring the peaceful uses of nuclear explosions, such as the proposal to use such an explosion to create an artificial harbor in Alaska.

But it is unclear whether a resumption of testing for nonmilitary purposes would do much to soften the certain displeasure of the neutralist nations. It will not be difficult, and probably not even inaccurate, for the Russians to tell the rest of the world that any resumption of testing would, in fact, be a resumption of some phase of weapon testing, regardless of whatever incidental purposes it might serve.

The result of whatever decision is made is bound to be unhappy. But the alternative of simply letting things drag on aimlessly at Geneva, although perhaps easier, seems at least as dismal. —H.M.

News Notes

The Krebiozen Trial

The Krebiozen trial in Chicago has been called off until the fall. The case has substantial implications for the scientific community at large, since it involves the question of how severely a scientist can criticize the work of a fellow scientist without opening himself to a libel suit.

Krebiozen is a drug purported to be effective against cancer, which, so far, has won little scientific support outside the small circle of its sponsors. One of the sponsors, Andrew C. Ivy, head of the department of clinical sciences at the University of Illinois, filed a suit for \$300,000 against George C. Stoddard, chancellor of New York University. Ivy charged that Stoddard had attempted to destroy his reputation as a scientist. The two men were at one time vice president and president, respectively, of the University of Illinois.

The judge in the case ruled that the trial should be put off until the government's National Cancer Institute could evaluate the claims made for the drug, although attorneys for both sides had agreed that the effectiveness of the drug was not the issue in the trial—that the issue was, rather, whether Stoddard had gone beyond the bounds of legitimate criticism in his implication that Ivy was not merely wrong but wrong to the point of professional incompetence.

The controversy is more than a decade old, and both men have suffered through their involvement. Professional sentiment in the field is overwhelmingly against Krebiozen, and in response the Krebiozen supporters have been rather free in suggesting that there is a conspiracy afoot to keep Krebiozen from being recognized and to destroy the reputations of its sponsors.

The Secretary of Health, Education, and Welfare, Abraham Ribicoff, responded to the judge's request for an official evaluation by reiterating the Cancer Institute's readiness to evaluate the drug whenever the Krebiozen supporters were prepared to cooperate in the standard procedures.

According to a statement last year of the Citizens Emergency Committee for Krebiozen, "In view of the history of so-called 'evaluations' in the past, Dr. Ivy does not wish to provide the opportunity for any new 'committee' to use such an evaluation as a device to prevent an actual clinical test because of the risk of the negative influence of such a committee. Such a negative 'committee evaluation,' instead of actual clinical tests, could set Krebiozen back another 10 years."

The National Cancer Institute uses such a committee evaluation as standard procedure to decide whether it is worth going ahead with full clinical tests, which would cost several hundred thousand dollars.

Shake-up in Soviet Science

The controlling influence over scientific development in the Soviet Union appears to have been taken out of the hands of the Academy of Sciences. A new agency, headed by a nonscientist and former production executive, has been given over-all responsibility for the control of all scientific research, and of Soviet contact with foreign scientists.

The new agency is called the State Committee for Coordination of Scientific Research Work. It is headed by Lt. Gen. Mikhail V. Khrumichev, former head of Soviet airplane production and, more recently, deputy chairman of the State Planning Committee. His new job carries the rank of deputy prime minister. The agency is apparently designed to direct Soviet scientific work toward fields holding the strongest promise of practical applications. One of its principal announced objectives is to shorten the time between the making of a scientific advance and its adaptation to practical uses.

The change marks a clear decline in the influence of the Soviet Academy, which had been criticized for allowing needless duplication and for "irrational" allocation of human and material resources available for research.

The reorganization, according to one view, is simply a logical manifestation of the tendency to decentralize that was apparent in the Khrushchev shake-up of industry in 1957 and of agriculture in 1959. The country's 200 specialized research institutes have been taken out from under the central direction of the Academy, which, in this view, will now be free to concentrate its efforts on pure research, leaving the problem of administering and coordinating industrial research to professional industrial administrators.

Other observers have stressed the emphasis, in the announcement, on avoiding duplication and channeling work into the most economically promising areas; this suggests to them less a decentralization than a shift toward greater emphasis on practical applications than on pure research.

Religion and the Election

The University of Michigan's Survey Research Center, one of the more authoritative voices in a field where almost no one hesitates to dismiss opinions that do not coincide with his own, has completed a study that suggests Kennedy lost a net 1.5 million votes because of his religion.

This is not the end of the discussion of who gained from the religious issue, and how much. The size of the sample, 1500, involves a margin of uncertainty as large as the net voting shift reported, assuming the sample was perfectly drawn and perfectly analyzed. Here are the center's estimates:

"Outside the South, Kennedy gained over 5 percent of the two-party vote from fellow Catholics, but lost over $3\frac{1}{2}$ percent from Protestant Democrats and independents, leaving him with a net gain of over $1\frac{1}{2}$ percent.

"Inside the South, Kennedy's gain from Catholics was less than 1 percent, his loss from Protestant Democrats and independents exceeded 17 percent, for a net loss of more than 16 percent.

"Nationally, his gains from Catholics amounted to more than 4 percent, his losses from Protestant Democrats and independents were about $6\frac{1}{2}$ percent, and his net loss over 2 percent of the 68 million votes cast."

Biomedical engineering. Engineering and medicine will be combined in a graduate curriculum leading to a Ph.D. in "biomedical engineering" at three eastern universities—Johns Hopkins, Pennsylvania, and Rochester. The universities will offer the program in September. According to a Johns Hopkins announcement, the new program will "train students in advanced engineering subjects of particular pertinence to research in biological systems, and offer systematic study in how the principles of physical and engineering science apply to biological systems."

Alan Gregg biography. Any material that has to do with the life of Alan Gregg, late of the Rockefeller Foundation, will be welcomed by his biographer, Dr. Wilder Penfield, Montreal Neurological Institute, Montreal, Canada.

Research Notes

Ampoules containing 200 mg of mixtures of pure fatty acid methyl esters will soon be available for distribution to qualified investigators in whose research programs such materials are needed. Investigators desiring these samples should describe briefly the research purposes for which they are to to be used. The committee advising on this distribution program will attempt to fill all deserving requests. Letters should be addressed in duplicate to Dr. William H. Goldwater, Metabolism Study Section, Division of Research Grants, National Institutes of Health, Bethesda 14, Md.

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A bibliography listing 380 U.S. Government research reports, foreign translations, and other technical documents on **Communist Chinese science and technology** has been published by the Office of Technical Services, Business and Defense Services Administration, U.S. Department of Commerce, Washington 25, D.C. The bibliography (SB422) is available from OTS for 10 cents.

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The maximum dollar amount for research grants under the **mental health** small research grant program of the National Institute of Mental Health has been established at \$3500 plus indirect costs. Support is provided for 1 year only, and is not renewable.

The program is intended to encourage the initiation of research in the behavioral, biological, and medical sciences relevant to mental health, by providing limited funds in a relatively rapid and flexible manner. It is designed to be of particular value to promising young investigators or to investigators who are working in institutions whose resources are not readily available for the support of preliminary research explorations.

* * *

Eight standard hydrocarbon blends are now available from the National Bureau of Standards for calibrating instruments used in analyzing gasoline and blending stocks. These standard samples—primarily intended for mass spectrometer calibration—are mixtures containing seven or eight pure hydrocarbons representing C_7 and C_8 paraffins and cycloparaffins in typical virgin and catalytically cracked naphthas. The standards may also be applicable for infrared and gas chromatographic techniques.

Scientists in the News

George B. Kistiakowsky, chairman of the President's Science Advisory Committee under Eisenhower, has received the George Ledlie prize, Harvard's highest faculty award. The prize is awarded every 2 years to the faculty member who has made "the most valuable contribution to science, or in any way for the benefit of mankind." Kistiakowsky was cited for his work both as a science adviser to the government and as a physical chemist.

Owen W. Wangensteen will receive the \$5000 award of the Passano Foundation for work in surgical techniques and postoperative therapy and for his work as a teacher. Five of the 19 previous winners or co-winners of the annual medical award have subsequently received Nobel prizes. Wangensteen is on the faculty of the University of Minnesota School of Medicine.

John H. Lawrence, professor of medical physics and director of the Donner Laboratory at the University of California, Berkeley, will spend part of the spring semester in India giving a series of lectures on atomic energy in medicine and working with H. J. Bhabha, chairman of the Indian Atomic Energy Commission.

Maj. Gen. Clement F. St. John, commander of Walter Reed Army Medical Center in Washington, D.C., has been appointed director of the Medical Center of the University of Cincinnati.

John F. G. Hicks has been named associate director of the Battelle Institute. A chemist, he is at present vicepresident and technical director of Corning Glass.

Wilhelm S. Albrink has been appointed professor and chairman of pathology at the medical center of West Virginia University. His wife, Margaret Albrink, has been appointed associate professor of medicine. Both are currently members of the medical faculty at Yale.

John G. Trump, professor of electrical engineering at MIT, will receive the 1961 Lamme gold medal for work in the design of particle accelerators and x-ray generators which can be used in cancer therapy. The award is made by the American Institute of Electrical Engineers. Wright Rowe Adams, chairman of the department of medicine at the University of Chicago, has been appointed to the new post of associate dean of the biological sciences. Leon Jacobson, director of the Argonne Cancer Research Hospital, which is operated by the University of Chicago for the Atomic Energy Commission, has been appointed temporary chairman of the department of medicine.

Ernst Knöbil, now assistant professor at Harvard Medical School, has been appointed to the new Mellon professorship of physiology at the University of Pittsburgh. The chair was endowed by a grant from the Richard King Mellon Foundation.

Howard T. Karsner, a civilian employee of the Navy, has received the Navy's annual Conrad award for his work in submarine and aviation medicine. The award is named for Captain Robert Conrad, who, as head of the planning division of the Office of Naval Research, organized the Navy's basic research program.

Charles Huggins, director of the Ben May Laboratory for Cancer Research at the University of Chicago, has received the highest honor of the Peruvian Government, the "Order of the Sun." While visiting in Lima, he was called to the presidential palace, with no advance notice that he was to receive the gold medal.

Ernest C. Pollard, chairman of biophysics at Yale, has been appointed professor of biophysics at Penn State. This makes permanent a change made last July, when Pollard came to Penn State as a visiting professor.

Otto H. L. Heckmann, director of the observatory at the University of Hamburg, will receive the James Craig Watson medal for astronomy from the U.S. National Academy of Sciences. He heads an international project to catalog the motions of 180,000 stars visible in the Northern Hemisphere. Heckmann is known for his work in cosmological theory.

Columbia University has announced the appointment of **Robert W. Houston**, professor of chemical engineering, as laboratory director of the Industrial Reactor Laboratories at Plainsboro, N.J. Columbia has signed an agreement to operate the facility, which is owned 28 APRIL 1961 by ten industrial corporations engaged, to varying degrees, in nuclear research. The university has a 9-percent share in use of the laboratories, which include one of the world's largest privately owned nuclear research reactors.

Kenneth M. Endicott, director of the National Cancer Institute, Bethesda, Md., has announced the appointment of **Carl G. Baker** as associate director for program and of **C. Gordon Zubrod** as director of intramural research. Baker was formerly assistant director, with responsibility for intramural nonclinical research. In his new position he will work closely with Endicott in coordinating the major institute programs and with the institute's top extramural advisory committees on policy matters.

Zubrod, formerly clinical director of the institute, has been active in research on the use of drugs in cancer patients. In his new position he will direct both clinical and nonclinical research.

Robert W. Noyes has been appointed professor and head of the department of obstetrics and gynecology at Vanderbilt University School of Medicine, effective 1 October. Noyes is at present associate professor at Stanford University.

Albert V. Baez, a former associate professor of physics at Harvey Mudd College, has been appointed chief of UNESCO's Division of Teaching Basic Sciences in Higher Education. Baez is expected to assume his duties at UNESCO headquarters in Paris sometime this year.

Maurice Ewing, professor of geology at Columbia University and director of the Lamont Geological Observatory, has received Dickinson College's \$1000 Priestley memorial award for his research in oceanography and earth sciences.

Lloyd A. Wood, former chief of the Office of Research Grants and Contracts of the National Aeronautics and Space Administration, has been appointed director of the Physical Sciences Division of the Air Force Office of Scientific Research, Air Force Research Division, Washington, D.C. In his new post he will manage the largest directorate of the AFOSR and will direct the spending of some \$15 million a year for basic research in the fields of nuclear physics, general and solidstate physics, and geophysics. Edward U. Condon, head of the physics department of Washington University, St. Louis, has been named chairman of the Editorial Board of Directors of *International Science and Technology*, a new magazine which will be launched in January 1962, by Conover-Mast Publications Inc., to serve scientists and engineers in industry. **Robert B. Colborn**, who has been with McGraw-Hill Publishing Co. since 1936 and has been assistant managing editor of *Business Week* for the last 10 years, will be editor of the new publication.

Recent Deaths

Elda E. Anderson, Oak Ridge, Tenn.; 61; health physicist at Oak Ridge National Laboratory; former president of the Health Physics Society and chairman of the American Board of Health Physics; 18 Apr.

S. Howard Armstrong, Chicago, Ill.; 49; professor of medicine at the University of Illinois and dean of Cook County Graduate School of Medicine; 11 Mar.

Jules Bordet, Brussels; 90; winner of the Nobel prize for medicine and physiology in 1919; his discoveries in the field of serology were widely applied for the diagnosis of typhoid, tuberculosis, and other infectious diseases; the Wasserman test for diagnosis of syphilis is based on these principles; 6 Apr.

Paul Frederick Brande, Cambridge, Mass.; 30; fellow in physiology at the Harvard Medical School; 1 Apr.

J. Ben Hill, University Park, Pa.; 81; professor emeritus of botany at Pennsylvania State University; 31 Mar.

Matthew A. Hunter, Troy, N.Y.; 82; metallurgist; dean emeritus of Rensselaer Polytechnic Institute; 24 Mar.

Sir David Rivett, Sydney, Australia; 75; chemist; played a major role in the movement to reclaim millions of acres of barren land in the Australian "outback"; had served as chairman of the British Commonwealth Council of Scientific and Industrial Research and as president of the Australian and New Zealand Association for the Advancement of Science; 3 Apr.

Raymond J. Strawinski, Baton Rouge, La.; 44; specialist in hydrocarbon microbiology; associate professor of bacteriology, Louisiana State University; 27 Jan.

Erratum: The officers of the American Meteorological Society said to have been elected this year in a recent news note [*Science* 133, 322 (1961)] were elected last year to 2-year terms.