dency of the AAAS, he will take a leave of absence from his post as associate director of the National Bureau of Standards and will resign from the Editorial Board of *Science*.

Polish Scientist Asks Political Asylum

Jerzy Leon Nowinski, Polish specialist in thermoelasticity, has been granted political asylum by the United States. Nowinski, who for the past 7 years has been a professor at the University of Warsaw, arrived here in November to serve as a guest professor at Johns Hopkins University. Shortly after learning that his wife and 7-year-old daughter had reached safety in England, he told the Federal Bureau of Investigation in Baltimore of his desire to stay in this country. His family will join him.

Nowinsky himself did not apply originally for his passport to come to the United States. After he had been invited by Johns Hopkins to be a guest lecturer in its graduate school, his colleagues in the Polish Academy of Science, where he was associate editor of the academy journal, urged the government to let him make the trip as a matter of scientific prestige.

In a press conference on 3 January, Nowinski, who is a Roman Catholic, explained his action by saying: "I was rather disappointed with the political, the moral, and the religious conditions in Poland after the war. Also, our child had to attend school and my wife and I decided she must attend a school with better religious and moral conditions."

Although he was treated well because of his scientific position in Poland, Nowinski commented: "It is this feeling of freedom we feel so strongly in the United States that compares with the difficult problem of living in Poland."

When asked for his opinion about whether or not Russia was ahead of the United States in developing an intercontinental ballistic missile, Nowinski said that he was not in a position to know. He would not say what contribution he might make to this country's missile program, but said that he would be willing to work in that area if asked.

Meteorologists Object to New Civil Service Pay Rates

In accord with a department circular from the U.S. Civil Service Commission on 9 December 1957, increased minimum pay rates have been established for professional engineers and certain scientists through grade GS-17 [*Science* **127**, 21 (3 Jan. 1958)]. Noting the omission of meteorologists from the positions listed under the amended salary scale, the American Meteorological Society has sent the following telegram to Harris Ellsworth, chairman of the U.S. Civil Service Commission; John W. Macy, Jr., executive director of the Civil Service Commission; Sinclair Weeks, Secretary of Commerce; Neil H. McElroy, Secretary of Defense; James R. Killian, Jr., Special Assistant to the President for Science and Technology; and to the chairmen of the Senate and House Post Office and Civil Service Committees:

"The American Meteorological Society deplores the exclusion of meteorologists from the salary adjustment recently announced for scientists and engineering personnel in Civil Service. The society feels that the long-term objectives of attracting promising young men and women to the meteorological profession and to important work in civil and defense science will best be achieved by eliminating salary differentials that impose a financial penalty on scientists and professional people selecting meteorology as their primary field of interest. The nature and the importance of the scientific problems in meteorology and the urgency of further advances in this field are sufficiently well known in our opinion to merit a reexamination of this salary policy. We respectfully request reconsideration of the directive excluding meteorologists from this salary adjustment program."

AAAS Cardiovascular and Socio-Psychological Awards

Irvine H. Page, head of the Research Division, Cleveland Clinic, Cleveland, Ohio, has received the AAAS Ida B. Gould Memorial Award for Research on Cardiovascular Problems. The $1000 prize, which is sponsored by the Richard and Hinda Rosenthal Foundation, was given for the second time at the Association's recent meeting in Indianapolis.

Early in his career, Page spent 3½ years working on the chemistry of the brain; the results, along with a survey of the literature, appeared in *Chemistry of the Brain*, the second book on the subject ever published. Page completed a number of papers on the chemistry of phosphatides and on the synthesis of a large series of cholesterol esters; then, in 1929, he began to study the chemistry of arteriosclerosis.

At the Rockefeller Institute (1931–37) Page worked with D. D. Van Slyke on the chemical substances in blood and tissue that control the caliber of blood vessels, hence blood pressure. This investigation culminated in the discovery, with Helmer, of the peptide angiotonin (now called angiotensin). This occurred after Page had gone to Indianapolis, where he directed the Lilly clinic and laboratory for clinical research at Indianapolis City Hospital from 1937 to 1945.

Thirteen years ago Page and his group moved to the Cleveland Clinic Foundation, where they have been since. During the war Page, with his close associate Corcoran, was occupied with the problem of shock. Transfusion of blood into arteries instead of veins was studied with Kohlstaedt, and this method of transfusion still has important applications. Page's group also found that one of the important components of the shock mechanism is failure of the blood vessels to respond to stimulation or loss of cardiovascular reactivity. In addition, a substance was isolated in the blood of shocked dogs that caused severe contraction of blood vessels.

After the war, work on the constrictor substances in the blood was continued, and a method for testing the constrictor substance that forms when blood coagulates was elaborated and some of the properties of this substance determined. This resulted in a study with Rapport and Green that led to the isolation and crystallization of serotonin. Rapport determined the final structure as 5-hydroxytryptamine; this was synthesized by Hamlin. Page's subsequent studies on serotonin, like those of many others, have shown it to be concerned with a variety of functions of the body, including intestinal motility, stopping of bleeding, transmission of nerve impulses, pain, and functioning of the brain.

Page, with Corcoran and Dustan, contributed a long series of studies on hypertensive patients having diseases produced by such drugs as hydralazine, hexamethonium, and mecamylamine. Angiotensin was synthesized, with Schwarz and Bumpus, last year and its properties studied in animals [*Science* **125**, 886 (3 May 1957)]. There is little doubt that in some types of hypertension angiotensin is the substance that raises the blood pressure.

The Cleveland group has carried out extensive studies on the chemical changes associated with arteriosclerosis. For example, the importance of the β-lipoproteins in the blood for the production of arteriosclerosis has been demonstrated.

* * *

Irving A. Taylor, assistant professor of psychology at Pratt Institute, was awarded the 1957 AAAS Socio-Psychological Prize of $1000 at Indianapolis for his essay on "Similarities in the Structure of Extreme Social Attitudes." Taylor has been engaged in study of this subject for the past 5 years. There is an apparent trend in certain areas of psychological literature to regard what has been frequently called the "authoritarian" and "equalitarian" attitudes as polar opposites with contrasting clusters of social characteristics. The purpose of Taylor's

prize-winning study was to test the hypothesis that extreme authoritarians and equalitarians would exhibit an important perceptual similarity.

The California 30-item F scale and a social distance scale containing ethnic minority groups was administered to 253 summer students at the University of Houston along with perceptual closure scales designed specifically for the study. Subjects scoring in the same relative category—that is, in the low, middle, and high quarters on both the F scale and the social distance scale—were selected and compared with regard to percentage of perceptual closure. The results indicated a statistically significant curvilinear relationship; high and lows reduced the size of the openings by only 12 percent. Whereas the difference between the extremes was not significant, the difference between either extreme and the middle was significant at the 5-percent level of confidence.

Examination of population characteristics also revealed a surprising number of similarities between extremes. Although not all of these findings were statistically significant, the practically exceptionless tendency for extremes to vary together was highly indicative. The extreme groups, for example, were found to be somewhat older and of a higher level of education than the middle group. There were substantially more women in the extreme categories than men. Both extremes reported significantly lower parental incomes than did the middle. These findings, if confirmed in subsequent research, would tend to modify the prevalent beliefs that authoritarianism increases with age, that women tend to be more equalitarian in attitude than men, and that extreme equalitarians come from lower economic levels. In summary, then, it was found that the extremes were more similar to each other than either one was to the middle group with regard to perceptual and demographic characteristics.

The results of this study indicate the need for re-examining the generally held view that the attitude structures of the extreme authoritarian and equalitarian are essentially different. They also indicate that the results of studies reporting differences where only the California scales and the two extremes are considered are in need of re-examination.

Nuclear Progress Summarized

The Atomic Industrial Forum recently published "The Atomic Industry—1957," its annual progress report on developments in commercial applications of atomic energy during the year. The U.S. atomic industry completed the construction of 16 nuclear reactors, including seven power-type reactors and nine research and test reactors, for both private and governmental purchasers in the United States and abroad, according to the report. The power-type reactors include those designed for naval ship propulsion and for prototype and demonstration power plants. In addition to these projects, industry continued or began the construction of 59 reactors, 35 of which are power-type reactors and 24 of which are research and test reactors, and received orders for the manufacture of ten new reactors—five for the production of electric power and five for research and test purposes.

Also, according to the report, American industry signed contracts for the construction of seven uranium ore processing mills, 13 companies announced plans to enter the field of nuclear fuel element production and research, one company began construction of a privately owned feed materials plant, three companies completed construction of plants for the production of zirconium, and two companies completed construction of plants for the production of beryllium.

Grants, Fellowships, and Awards

Arctic Research. The Carnegie Corporation of New York supports scholarships which are tenable at McGill University, Montreal, and which are normally offered to students proceeding to a doctoral degree in a subject calling for active field research in arctic or subarctic North America. Candidates who do not intend to proceed to a degree are not necessarily disqualified. The awards have an average value of $1500 for the academic session and $1250 for the expenses of a summer's field expedition. If renewed for a second session, grants average $1750.

Applications should be submitted before 1 March to the Secretary of the Carnegie Arctic Program, McGill University, 539 Pine Ave. W., Montreal, Canada, and should include a confidential recommendation of the candidate's qualifications in his or her selected field and a clear statement of the intended arctic or subarctic research project. No particular form of application is required.

Science Teaching. Nominations for Science Teacher Achievement Recognition awards designed to stimulate and recognize superior laboratory instruction in science in grades 7 through 12 in public, private, and parochial schools in the United States must be submitted before 15 February to the National Science Teachers Association, 1201 16th St., NW, Washington 6, D.C. Entries must be based on creative, laboratory-type procedures that may be utilized in the effective teaching of science. Recognition will be in the form of cash awards, medallions, plaques, and certificates of merit. The program is conducted by NSTA under a grant from the National Cancer Institute, U.S. Public Health Service.

Zoological Nomenclature

The International Commission on Zoological Nomenclature has announced that, beginning 30 June 1958, it will start voting on the following cases involving the possible use of its plenary powers for the purpose specified against each entry. Full details of these cases were published on 30 December 1957 in the *Bulletin of Zoological Nomenclature* (vol. 13, parts 10/11, and vol. 16, part 1): (i) *Selene* Lacépède, 1803; *rostrata* Lesueur, 1817 (*Muraena*); *latipinna* Lesueur, 1821 (*Mollienesia*); *fuscus* Storer, 1839 (*Syngnathus*); establishment of precedence of, over other names published in the same work and on the same date (Cl. Pisces). (ii) *Monograptus fimbriatus* var. *similis* Elles (G.L.) & Wood (E.M.R.), 1913; *Monograptus triangulatus* var. *major* Elles & Wood, 1913; *Monograptus communis* var. *rostratus* Elles & Wood, 1913; designation of lectotypes for (Cl. Graptolithina). (iii) *Calandra* (*Calendra*) Clairville & Schellenberg, 1798, suppression of, in favor of *Sphenophorus* and *Sitophilus*, both of Schoenherr, 1838, respectively, in interests of universality of nomenclature; *abbreviatus* Fabricius, 1787 (*Curculio*) and *oryzae*, emendation to of *oryza* Linnaeus, 1763 (*Curculio*), validation of (Cl. Insecta, Order Coleoptera).

Comments should be sent as soon as possible in duplicate to the secretary of the commission, Francis Hemming, 28 Park Village East, Regent's Park, London, N.W.1, England.

Scientists in the News

ERNEST H. VOLWILER, president and general manager of Abbott Laboratories, North Chicago, Ill., and a leader in medicinal chemistry, has won the 1958 Priestley Medal of the American Chemical Society. The gold medal, highest honor in American chemistry, will be presented to Volwiler for "distinguished services to chemistry" at the society's 133rd national meeting in San Francisco in April.

Volwiler's first contribution to medicinal chemistry was the commercial production of anesthetics during World War I, after German sources for these supplies were cut off. He developed manufacturing techniques for such anesthetics as Anesthesin, Benzocaine, and Novocaine. Later Volwiler's efforts to improve synthetic drugs resulted in the