# News of Science

## Science Reporting

In view of the current concern about the responsibility of scientists for keeping the public informed about scientific progress and at the same time for maintaining accuracy and avoiding the stigma of the publicity seeker (see the editorial in *Science*, 12 Aug.), there should be considerable interest among scientists in the article by Gwinn Owens, science writer, in the November *Johns Hopkins Magazine*. Interpreting science to laymen, says Owens, is primarily a problem of accurate translation. The scientist must recognize the nature of the audience, which necessitates that the story first of all be interesting if it is to be news at all.

There is also the question regarding what the public has the *right* to know. This grows not only out of the fact that what the scientist is doing in the laboratory may change the layman's life, but also out of the fact that the public, directly or indirectly, is paying for the research. At the same time, the scientist must resist pressure upon him to speak of results prematurely—he must never allow impatience for "results" on the part of the public to lead him to jump the gun and raise hopes falsely.

Owens agrees with the editorial writer of the *Southern Medical Journal* who has criticized the "debacle" of the publicizing of the poliomyelitis vaccine last spring, insofar as misinterpretation of the reports of the trial use of the vaccine and the right of the investigator to control his own investigations may be concerned; but he holds also that the editorial writer missed an important point in not recognizing "the urgent need for popular understanding and support if large-scale, non-government research is to survive in this country." Popular articles on research bring the pennies that amount to millions of dollars for research in medical fields.

The crux of the discussion, then, is the question: "How do we bridge the gap between the scientist and the interested public?" Owens suggests that there is no better way than close collaboration between the scientist and the reporter. "The scientist's part is to make sure that the reporter understands the project thoroughly. This may mean simplifying technical terms and descriptions of procedures. Chances are, the reporter knows something about the work, for essentially he is a middle man. He knows less than the professional, but more than the potential reader."

Owens feels that the scientist is often oversensitive about the use of terms that seem "imprecise" or even inaccurate; or is too unwilling to admit practical benefits even where these exist. On the other side, the reporter has the responsibility for telling the truth to the public, and must not actually distort it.

This article raises a number of other interesting problems. What it does not clarify is how the necessary collaboration between a busy scientist and a busy reporter is to be worked out. What are the minimum provisions that will insure accuracy of account, interest and timeliness in the report, and fair treatment on all sides?—B.G.

## News Briefs

■ The University of Chicago's Institute for Nuclear Studies became the Enrico Fermi Institute of Nuclear Studies in ceremonies honoring the memory of Fermi that took place on 18 Nov. A portrait of Fermi was displayed for the first time. It is the work of Mrs. Alex Langsdorf, whose husband is a nuclear physicist at Argonne National Laboratory.

■ For the second time in 18 months the Air Research and Development Command's Air Force Cambridge Research Center will sponsor an intensive study of a solar eclipse. Some 63 scientists, technicians, and airmen, representing a dozen agencies, have left the United States for observation posts in Africa, Ceylon, Burma, Thailand, Viet Nam, and Formosa, where they will study an annular eclipse that will take place on 14 Dec.

Advance parties from the American Geographical Society of New York already have charted the stations where special instruments are being set up. Project scientist for the forthcoming observations is Robert Fitzpatrick, geophysicist with the Terrestrial Sciences Laboratory, Geophysics Research Directorate, AFCRC.

Working closely with Fitzpatrick during the past 6 months have been a number of agencies with long experience in the scientific observation of solar eclipses. Among them are the Georgetown University Observatory of Washington, D.C., headed by Francis J. Heyden, the American Geographical Society of New York, and the Air University Arctic-Desert-Tropic Information Center of Maxwell Air Force Base, Montgomery, Ala.

Specialists from a number of universities also will take part in the observations. Teams of astronomers will man stations at 11 sites along the path of the eclipse. The research groups will include men from Georgetown University, University of Pittsburgh, Indiana University, Milwaukee Astronomical Society, Johns Hopkins University, Pennsylvania State University, Swarthmore College, University of North Carolina, Loyola University, Ohio State University, and Yale University.

The determination, as exactly as possible, of the shape and size of the earth is the main purpose of the eclipse expedition. By determining the exact difference in the time of the occurrence at different sites, it is possible to determine the distance between the sites.

Two methods will be used to take measurements; the first, a photographic method, consists of photographing the sun's image during the onset of the eclipse. At the same time that the picture is taken a radio time signal is recorded so that the time of the photograph is known to within 1 millisecond. After the return of the expeditions, all photographs will be measured (there will be 500 pictures from each site), and the exact time of any given phase of the eclipse can be determined.

In the second method a photoelectric cell will be trained on the sun. By means of electronic amplifiers and recorders, an ink record of the variation of light during the eclipse will be obtained. This record is also made simultaneously with an accurate radio time signal, so that the exact time of any phase can be determined. The entire eclipse will last about 2 hours, from its beginning in Africa to its ending just north of Formosa.

■ Workmen began pouring concrete on 17 Nov. for India's Bhakra Dam, which may be the world's highest when it is finished in 1961 or 1962. Pouring of the concrete is scheduled to continue nonstop for 4 years until the dam stands more than 700 feet—possibly 750 feet—above the bed of the Sutlej River.

Bhakra Dam, key construction in a $327-million Bhakra-Nangal irrigation and power project, is rising in a gorge of the Sutlej River in the Himalayan foothills 225 miles north of New Delhi. When completed, Bhakra will have a capacity of 900,000 kilowatts.

India is paying the cost. American

engineers, led by Harvey Slocum of Alhambra, Calif., have been employed by the Indian Government as advisers. Some 30 to 40 Americans have assisted in the preliminary construction and planning during the past 3 years.

Slocum, who has been construction chief at such United States dams as Shasta and Grand Coulee, describes Bhakra as probably the most difficult dam ever undertaken. He says that this is because of the remoteness of the site, the geologic formations in the gorge, and the lack of sufficient trained personnel to supervise the work force of more than 70,000.

Preparation of the site has taken years. The gorge was scraped, diversion dams and tunnels were built to route the Sutlej around the dam site, railroads were constructed to carry the concrete from the mixing plants, conveyor belts were installed, and floodlights were set up for 24-hour operation.

■ Successful clinical trial of an experimental vaccine against one type of common respiratory illness has been announced jointly by the U.S. Public Health Service and the Johns Hopkins Medical Institutions. Experiments indicate that the vaccine provides substantial protection for human beings against one of the nine viruses in the APC (adenoidal, pharyngeal, conjunctival) group, a family of respiratory viruses discovered several years ago.

The research, conducted with human volunteers, dealt with type 3 APC virus, which causes a 5-day illness marked by fever, sore throat, and conjunctivitis. The illness can be sporadic or occur in sharp outbreaks or epidemics.

Diseases of the upper respiratory tract are so widespread that the average American experiences an estimated six attacks each year. Studies have shown that 40 to 50 percent of the persons who are absent from their jobs because of illness are incapacitated by common respiratory diseases. APC infections represent only one part of this problem.

The research team emphasized that its work is still in the preliminary stage and that the vaccine is purely experimental. There is no plan to produce the vaccine for public use in the near future.

Results of the studies, indicating substantial protection by the vaccine against induced infection, are reported in the 5 Nov. issue of the *Journal of the American Medical Association.* The authors are R. J. Huebner, J. A. Bell, W. P. Rowe, T. G. Ward, R. G. Suskind, R. S. Paffenbarger, and J. W. Hartley. All are Public Health Service investigators with the exception of Ward, who is associate professor of microbiology at Johns Hopkins University School of Hygiene and Public Health.

Serving as volunteer subjects for the vaccine tests were 83 inmates of the Federal Reformatory at Chillicothe, Ohio, and the Maryland State Reformatory for Males at Breathedsville. The two institutions have been cooperating with research workers for the past 2 years in respiratory virus studies that laid the groundwork for the vaccine trial.

■ With the publication of the November 1955 issue of the *American Annals of the Deaf,* the 100th volume of this journal was completed. The journal was founded in 1847 at the American School for the Deaf in Hartford, Conn., but publication was suspended during the Civil War and was not resumed until 1868, when the editorial office was located at Gallaudet College, the national college for the deaf in Washington, D.C., where it has since remained.

*American Annals of the Deaf* is the official organ of the Convention of American Instructors of the Deaf, founded in 1850, and of the Conference of Executives of American Schools for the Deaf, founded in 1868. According to the Library of Congress, the *Annals* is probably the oldest educational journal in the United States, and is the oldest publication in the world on the education of the deaf.

The entire scope of educational work for the deaf in the United States and Canada has expanded greatly since the close of World War II. The plight of the war-deafened veterans, the increased use of electronic amplification in hearing aids, the growth of the preschool movement in schools and classes for the deaf, and the rapid development of services for parents of deaf and hard-of-hearing children during the past 10 years awakened great interest in the education of the deaf. Because of this increased interest, with the accompanying expansion in the publication of textbooks, newspaper articles, magazine articles, and radio and television programs, Powrie V. Doctor, editor of the *American Annals of the Deaf,* has felt it advisable to call attention to the resources that are obtainable through the journal's office.

## Scientists in the News

MAX F. DAY of the Division of Entomology, Commonwealth Scientific and Industrial Research Organisation of Australia, has been appointed for 2 years to the Australian Scientific Liaison Office, Washington, D.C. Day, who obtained his doctorate at Harvard University, was in the Liaison Office during World War II.

LEO KANNER, professor of psychiatry and pediatrics at Johns Hopkins University and director of the children's psychiatric service at the Johns Hopkins Hospital, will serve as Knapp visiting professor at the University of Wisconsin in the second semester of the current academic year. During his stay at Wisconsin he will teach in the medical school, deliver several public lectures, and lead discussions on child behavior. Kanner is the author of a large number of both technical and popular works on child psychiatry, among them *A Miniature Textbook of Child Psychiatry,* and articles dealing with psychiatry, psychology, education, medical history, and folklore.

LEWIS H. WRIGHT, an anesthesiologist and a member of the staff at E. R. Squibb and Sons for more than 25 years, has been named to receive the 1955 Distinguished Service award of the American Society of Anesthesiologists. The announcement was made at the recent annual meeting of the society in Boston, Mass., a meeting that marked the organization's 50th anniversary.

WILLIAM E. RANZ, associate professor in engineering research at Pennsylvania State University, received the 1955 Junior Award in chemical engineering from the American Institute of Chemical Engineers during its annual banquet on 29 Nov. He was honored for his paper "Friction and transfer coefficients for single particles and packed beds," which was published in *Chemical Engineering Progress* in 1952.

ELVIN C. STAKMAN, emeritus professor of plant pathology at the University of Minnesota and a former president of the AAAS, has been serving as Hitchcock professor at the University of California, Berkeley. The six public Hitchcock lectures have been concerned with various aspects of plant disease, the world's food supply, international cooperation in scientific research, and scholarship in the academic world today.

K. H. GUSTAVSON, head of the Swedish Tanning Research Institute, Stockholm, has received the IVA grand gold medal, the highest award of the Royal Swedish Academy of Technical Sciences (IVA). He was honored for his pioneering contributions to the chemistry and reactivity of collagen and for his investigations of the mechanism of tannage, particularly his research on the reaction of chromium compounds with hide protein in chrome tanning.

Gustavson is president of the International Union of Leather Chemists' Societies. He has been a member of the American Chemical Society for 35 years and worked in this country as a leather chemist for many years.