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