

The Death of Irwin G. Priest

Irwin G. Priest at work with his Colorimetric Apparatus

Irwin G. Priest, Chief of the Colorimetry Section of the Optics Division of the Bureau of Standards, and one of the foremost authorities on color measurements, died at his home in Washington, D. C., Tuesday, July 19, 1932. He had been ill for some time but the immediate cause of death was a cerebral hemorrhage.

Mr. Priest had spent his entire active life in the Bureau of Standards, where his work on color brought him world-wide recognition. An indefatigable worker, and a thorough painstaking investigator, he laid the foundations for the measurements of color in precise physical terms. He was successful in developing exact color nomenclature, methods of measurement, and in basing color specifications upon accurately determinable physical quantities.

He developed many apparatus for color work, but his outstanding achievement was the design of the rotatory dispersion colorimetric photometer, for use in determining color, temperature and intensity for incandescent illuminants and for various phases of daylight such as sunlight, overcast sky and blue sky. He also designed apparatus for the determination of color in terms of dominant wave length purity and brightness.

While he was one of the foremost in recognizing the value and importance of the spectrophotometer in colorimetric analysis, and contributed many ideas to its development, he allotted most of this work to others in the section, devoting the larger part of his time to various fundamental color problems. The late Dr. Smalley interested him in the color problems of the vegetable oil industry in about 1912, and since then Mr. Priest had devoted a large portion of his efforts to those specific problems. It was largely as a result of these studies that he developed the dispersion colorimetric photometer. After determining the fundamental facts of the color problems, and designing the apparatus to solve them, he made a complete investigation of the Lovibond color system of red and yellow glasses, calibrating not only the complete Bureau of Standards set of some 500 glasses, but also many others, this research problem alone requiring the efforts and time of Mr. Priest and

several of his assistants for several years. After this investigation was completed, Mr. Priest undertook an investigation of the accuracy of the Lovibond glasses in actual use in the vegetable oil industry, this study being assisted directly by the American Oil Chemists' Society by the placing of a research associate, Miss Walker, in the Bureau of Standards at its own expense.

In 1928, Mr. Priest with the assistance of several of his associates studied the color sense of some sixty members of the American Oil Chemists' Society at its convention in New Orleans, using Stilling Charts and a Marten photometer in this work.

For all this cooperation, the American Oil Chemists' Society conferred upon him the honor of honorary life membership as a mark of its appreciation.

Mr. Priest was also a charter member, secretary, vice president and president of the Optical Society of America. He was also research associate for the Munsell Color Co. at the Bureau while on leave from official duties.

In 1931, he was a delegate from the Department of Commerce at the sessions of the International Illumination Congress and the International Congress on Illumination in Great Britain, where his research work on illumination was of great value.

Mr. Priest was born near Loudonville, Ohio, on January 27, 1886. After graduating from Ohio State University with the BA degree in 1907 where the honor of Phi Beta Kappa membership was conferred on him, he was immediately appointed to the scientific staff of the Bureau of Standards. The calibre of his work earned him rapid promotions until he was appointed chief of the Colorimetry Section in 1913. In 1917 at Washington, he was married to Miss Edna Ryan, of Washington, who survives him. Funeral services were conducted at his home Thursday, July 21, 1932, and interment was at Loudonville, Ohio.

He was a member of the American Physical Society, American Associate for the Advancement of Science (Fellow), Optical Society of American Phychologists' Association, Washington, Phi Beta Kappa, Sigma Xi, American Oil Chemists' Society (Honorary), and of the Cosmos Club of Washington.

The list of publications from his pen, or from

the pens of his associates under his supervision, is very large, including descriptions of the apparatus designed by him with the results given by their use, descriptions of the calibration of the Lovibond System, results of the many pieces of research carried out by him, etc.

Changes in Federal Specifications

P-S-571 Soap; Grit, Cake; and CO-L-131 Laundry-Appliances

The Federal Specifications Board has authorized the following changes in the subject specifications, pending formal revisions thereof:

Soap; Grit, Cake P-S-571:

Add the following as a second sentence on Page 6, Paragraph H-2a. This is applicable to the Navy, only:

"Cases shall be strapped at both ends with either $\frac{5}{8}$ or 0.018 inch nailed straps; or $\frac{1}{2}$ -inch by 0.020-inch sealed straps; or not less than 0.095-inch diameter (No. 13 gage) galvanized round wire."

Laundry Appliances OO-L-131:

The following changes are applicable to the Navy only:

H-2c—Add at end of paragraph—"except that plans and specifications required by paragraph 4 (m) of those specifications to be submitted with bids will not be required."

H-2d(1)—Delete paragraph.

H-2d(2)—Delete paragraph.

H-2e—Delete entire paragraph and substitute the following:

"Plans for approval.—As any work undertaken prior to approval of plans and specifications will be done at the contractor's risk, such data shall be submitted promptly for approval. Accordingly, within ten days after award of contract, the contractor shall submit for the approval of the Bureau concerned via the Inspector concerned plans and specifications of the laundry appliances involved, in addition to plans and specifications of electrical equipment. In general this information shall consist of the following:"

H-2f.—Delete entire line and substitute the following:

"The plans shall include the following:"

H-2g.—Line 2, after "size," insert "and 4 sets of specifications."