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List of National Bureau of Standards Publications  
on Photography

By Members of the Staff of the  
National Bureau of Standards

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## GENERAL INFORMATION.

This Letter Circular is a list of publications on photography and its applications by members of the staff of the National Bureau of Standards and contains a list of Federal Specifications for photographic materials. Most of these papers have been printed in the regular series of publications of the Bureau and others in the various scientific and technical journals. Copies can usually be consulted at the leading libraries of the larger cities.

For ready reference and convenience in ordering the separate papers of the Bureau, these have been listed with the serial letter and number in one column, and the price in the second column. A complete list of the Bureau's publications (Circular No. 460 and Supplements) is also generally available at such libraries.

Where the price is noted, the publication may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. (stamps not accepted). The prices quoted are for delivery in the United States and its possessions, and to Canada, Columbia, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Newfoundland (including Laborador), the Philippines, the Republic of Panama and Venezuela. Remittances for delivery to other countries must include one-third of the total cost of publications, in addition, to cover postage. Remittances should be made payable to the "Superintendent of Documents, Government Printing Office, Washington 25, D. C. ", and sent to him with the order.

Serial letters are used to designate Bureau publications:

- S - "Scientific Paper". From S1 to S329, inclusive, the separate papers of this series were known as reprints from the "Bulletin of the Bureau of Standards" (Bul. BS). Subsequently, from S-330 to S-572, the separates were known as reprints from the "Scientific Papers of the Bureau of Standards" (Sci. Pap. BS). This series was superseded by the "Bureau of Standards Journal of Research" in 1928.
- T - "Technologic Paper". T-1 to T-202 were issued each independent of the other with individual pagination. Later they were assembled to make the first 15 volumes of this series and subsequent separates were given volume pagination (Tech. Pap. BS). This series was superseded by the "Bureau of Standards Journal of Research" in 1928.

- RP - "Research Paper". These are reprints of articles appearing in the "Bureau of Standards Journal of Research" (BS J. Research) and the "Journal of Research of the National Bureau of Standards" (J. Research NBS), the latter being the title of this periodical since July 1934 (volume 13, number 1).
- M - Miscellaneous Publications of the National Bureau of Standards.
- R - Simplified Practice Recommendations of the National Bureau of Standards.
- TNB- "Technical News Bulletin", a small pamphlet, issued monthly, which describes progress of work in the laboratories and lists new publications. Available by subscription from the Superintendent of Documents for \$1.00 a year (\$1.35 foreign).
- OP- Indicates that the paper is out of print but may be consulted in leading libraries of the larger cities.

For papers in other scientific or technical journals, the name of the journal or of the organization publishing the article is given in abbreviated form, with the volume number (underscored), page, and year of publication, in the order named. The Bureau cannot supply copies of these journals, or reprints from them and it is unable to furnish information as to their availability or price.

To avoid repetition, the addresses of the journals are given below:

The American Society for Metals:  
7016 Euclid Avenue, Cleveland, Ohio.

The British Journal of Photography:  
Henry Greenwood & Co., Ltd., 24 Wellington St.,  
Strand, London, W. C. 2, England.

The Chemical News and Journal of Industrial Science:  
Discontinued Oct. 1932.

Chemisch Weekblad:  
D. B. Centen's Uitgevers-Maatschappij, Amsterdam C.,  
O.Z. Voorburgwal 115, Netherlands.

Die Kinotechnik:  
Photokino-verlag G.M. B.H., Berlin SW 19,  
Stallschreiberst. 33, Germany.

Industrial and Engineering Chemistry:  
Room 706, Mills Building, Washington, D. C.

VIII International Kongress fur wissenschaftliche und  
angewandte Photographie - Dresden, 1931:  
Verlag von Johann Ambrosius Barth, Leipzig, Germany.

Journal of Chemical Education:  
654 Madison Avenue, New York, N. Y.

Journal of the Franklin Institute:  
Franklin Institute, 20th Street and Parkway,  
Philadelphia, Pa.

Journal of the Optical Society of America:  
American Institute of Physics, 175 Fifth Avenue,  
New York, N. Y.

Journal of Physical Chemistry:  
The Williams and Wilkins Co., Mount Royal and  
Guilford Avenues, Baltimore, Md.

Radiology:  
Medical Arts Building, Syracuse, N. Y.

Lefax Handbook:  
Lefax, Philadelphia, Pa.

The Military Engineer:  
Mills Building, 17th St., & Pennsylvania Ave., N. W.,  
Washington, D. C.

Photogrammetric Engineering:  
P.O. Box 18, Benjamin Franklin Station,  
Washington, D. C.

Photographische Industrie:  
Bund der Phototechniker e.v., Berlin N.20,  
Hochstrasse 46, Germany.

The Photographic Journal:  
The Royal Photographic Society of Great Britain  
35, Russell Square, London W.C. 1, England.

Physical Review:  
American Institute of Physics, 175 Fifth Avenue,  
New York, N. Y.

Proceedings of the 7th International Congress of  
Photography - London, 1928:  
W. Heffer & Sons, Ltd., Cambridge, England.

The Review of Scientific Instruments:  
The American Institute of Physics, 175 Fifth  
Avenue, New York, N. Y.

Safety Engineering:  
Box 1259, Albany, N. Y.

Technische Rundschau:  
Berlin, Germany

Transactions of the Society of Motion Picture  
Engineers:  
20th & Northampton Streets, Easton, Pa.



PHOTOGRAPHIC APPARATUS

Title	Series:	Price:
A camera for studying projectiles in flight. H. L. Curtis, W. H. Wadleigh, and A.H. Sellman. Tech. Pap. BS, <u>18</u> 189 (1924) 14pp. 9 illus.	T-255	OP
An instrument for measuring longitudinal spherical aberration of lenses. Francis E. Washer, 1949.	RP-2015	10¢
Resolving power of objectives. P.G. Nutting. Bul. BS, <u>6</u> , 121 (1909) 5 pp. 1 illus.	S-122	OP
Aberrations of long focus anastigmatic photographic objectives. A.H. Bennett. Sci. Pap. BS, <u>19</u> , 587 (1924) 54 pp. 52 illus.	S-494	OP
A magnifying stereoscope and camera: two instruments for airplane mapping. I. C. Gardner, J. O. S. A. and R.S.I., <u>11</u> , 195 (1925).		
A special camera for photographing cylindrical surfaces. Raymond Davis. Sci. Pap. BS, <u>20</u> , 51b (1925) <u>12</u> pp. 13 illus. Sci. et Ind. Phot., <u>6</u> , 115 (1926). Tech. Rund. <u>32</u> , 298 (1926).	S-517	OP
A camera for photographing the interior of a rifle barrel. I. C. Gardner and F. A. Case. J.O.S.A. and R.S.I., <u>12</u> , 159 (1926). Military Eng., <u>18</u> , 480 (1926).		
The distortion of some typical photographic objectives. A. H. Bennett. J.O.S.A. and R.S.I. <u>14</u> , 235 (1927).		
The compensation of distortion in objectives for airplane photography. I. C. Gardner and A. H. Bennett. J.O.S.A. and R.S.I., <u>14</u> , 245 (1927)		
Note on a mercury spark gap for instantaneous photography. L. F. Curtiss. BS J. Research, <u>3</u> , 53 (1929) 3 pp. 2 illus.	RP-81	OP
A new method of analyzing X-ray photographs, L. F. Curtiss. BS J. Research, <u>4</u> , 663 (1930) 3 pp. 4 illus.	RP-171	5¢

PHOTOGRAPHIC APPARATUS

Title	Series:	Price:
Camera for photographing surface of bullets. (July, 1931).	TNB-170	OP
The optical requirements of airplane mapping. I. C. Gardner. BS J. Research <u>8</u> , 445 (1932) 11 pp. 5 illus.	RP-427	OP
Lenses of extremely wide angle for airplane mapping. I. C. Gardner and F. E. Washer, 1948.	RP-1858	10¢
Specifications for a precision mapping camera. (Aug. 1938), Photogrammetric Eng. <u>4</u> , 173 (1938).	TNB-256	OP
Influence of the atmosphere upon the precision of telescope pointing. Francis E. Washer and Leo W. Scott, 1947.	RP-1829	10¢
Improved astrographic camera (Dec. 1936).	TNB-236	OP
Precision camera for testing lenses. I. C. Gardner and F. A. Case. J. Research NBS. <u>18</u> , 449 (1937) 12 pp. 8 illus.	RP-984	10¢

PHOTOGRAPHIC TECHNOLOGY

	Series:	Price:
Action of charred paper on the photographic plate and a method of deciphering charred records. Raymond Davis. Sci. Pap. BS, <u>18</u> , 445 (1922) 6 pp. 3 illus. Brit. J. of Phot. <u>70</u> , 205 (1923).	S-454	OP
Note on the shrinkage of photographic films. H. L. Curtis. J.O.S.A. and R.S.I. <u>7</u> , 275 (1923)		
Spark photography and its application to some problems of ballistics. P. P. Quayle. Sci. Pap. BS. <u>20</u> , 237 (1925) 40 pp. 36 illus.	S-508	OP
Prevention of distortion in lenses used for copying and enlarging. (Feb. 1926).	TNB-106	OP
Action of "hypo" solution on stone tanks. D.W. Kessler. J. Research NBS. <u>16</u> , 161 (1936) 4 pp. 1 illus.	RP-864	OP
Care of film-slides and motion-picture films in libraries. C. G. Weber and J. R. Hill. J. Research NBS. <u>17</u> , 753 (1936) 8 pp. 4 illus. J. Soc. Mot. Pict. Eng. <u>27</u> , 691 (1936).	RP-942	5¢
Relation of camera error to photogrammetric mapping. Irvine C. Gardner. J Research NBS <u>22</u> , 209 (1939). 30 pp. 6 illus. 4 tables.	RP-1177	OP
Resolving power and distortion of airplane-camera lenses. F. E. Washer. J. Research NBS. <u>22</u> , 729 (1939). 18 pp. 4 illus. 13 tables.	RP-1216	OP
A test of lens resolution for the photographer (with test charts). Irvine C. Gardner. Circular of the NBS C-428 (1940). 15 pp. 7 illus. 12 charts.	C-428	50¢
Charts for testing lens resolution. ( 8 pages of charts). Irvine C. Gardner. NBS Misc. Pub. M166 (1940). 48 charts.	M-166	OP
Sources of error in and calibration of the f-number of photographic lenses. Francis E. Washer (1948).	RP-1927	10¢



PHOTOGRAPHIC TECHNOLOGY

	Series:	Price:
Compensation of aperture ratio markings of a photographic lens for absorption, reflection, and vignetting losses. I. C. Gardner, June 1947, 8 pp.	RP-1803	10¢
Relation between entrance and exit pupils of telescopic systems. Irvine C. Gardner (1949).	RP-2017	10¢
Research and development in applied optics and optical glass at the National Bureau of Standards. A review and bibliography. Irvine C. Gardner and C. H. Hahner. July 15, 1949.	M-194	15¢
Locating the principal point of precision airplane mapping cameras. F. E. Washer (1941) 8 p.	RP-1428	10¢
Region of usable imagery in airplane-camera lenses. Francis E. Washer, 23 p. (1945)	RP-1636	10¢
Validity of the cosine-fourth-power law of illumination. Irvine C. Gardner.	RP-1824	10¢
The interpretation and uses of lens tests and camera calibrations. I. C. Gardner. Photogrammetric Eng. <u>3</u> , No. 1, 12 (1937).		
Rapid photomicrography (Aug. 1937). W. H. Mutchler and H. O. Willier, Trans. Am. So. Metals <u>26</u> , 270 (1938).	TNB-244	OP
Glass lined "hypo" tanks. (Oct. 1937).	TNB-246	OP
Dimensional changes in aerial photographic films and papers. R. Davis and E. J. Stovall, Jr. J. Research NBS. <u>19</u> , 613 (1937) 25 pp. 20 illus. Photogrammetric Eng. <u>3</u> , No. 3, 35 (1935). Sci. et. Ind. Phot. (2) <u>9</u> , 108 (1938) (Condensed).	RP-1051	OP

PRESERVATION OF RECORDS

	Series:	Price:
A study of the removal of sulfur dioxide from library air. Arthur E. Kimberly and Adelaide L. Emley. Oct. 17, 1933 9 pages.	M-142	5¢
Summary report of National Bureau of Standards research on preservation of records. A. E. Kimberly and B. W. Scribner. March 16, 1937. 28 p.	M-154	10¢
Resume of research at National Bureau of Standards on materials for reproduction of records. B. W. Scribner. J. Documentary Reproduction (Am. Library Assn., 520 N. Michigan Blvd., Chicago, Ill.), <u>1</u> , No. 1 (1938). Proc. Fourteenth Int. Confer. Int. Federation for Documentation (Oxford, England) (Sept. 1938).		
Evaluation of motion picture film for permanent records. J. R. Hill and C. G. Weber. 1937 5 p.	M-158	5¢
Summary report of research at the National Bureau of Standards on the stability and preservation of records on photographic film. B. W. Scribner. 1939 17 p.	M-162	10¢
Stability of viscose type of Ozaphane photographic film. Arnold M. Sookne and Charles G. Weber. J. Research NBS <u>21</u> , 347 (1938). 7 pp 5 illus.	RP-1134	5¢
Evaluation of motion-picture films by semi-micro testing (Sept. 1938). J. E. Gibson and C. G. Weber. J. Documentary Reproduction (Am. Library Assn., 520 N. Michigan Blvd., Chicago, Ill.), <u>1</u> , No. 4, 282 (1938)	TNB-257	OP
Notes on selection of cellulose acetate film for record purpose. B. W. Scribner. J. Documentary Reproduction (Am. Library Assn., 520 N. Mich. Blvd., Chicago, Ill.), <u>1</u> , No. 2, 210 (1938).		

Series: Price:

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Safeguarding the storage of photographic, motion-picture, and X-ray films. C. R. Brown. Radiology 14, 454 (1930). Safety Eng. 58, 65 (1929).

Permanent photostat paper. (Apr. 1932). TNB-180 OP

Stability of films used for reproduction of records. (Jan. 1935). TNB-213 OP

Stability of motion picture films as determined by accelerated aging. C. G. Weber and J. R. Hill. J. Research NBS. 17, 871 (1936) 11 pp. 7 illus. J. Soc. Mot. Pict. Eng. 27, 677 (1936). RP-950 OP

APPLICATIONS OF PHOTOGRAPHY

Title	Series:	Price:
Luminous efficiency of the firefly. H. E. Ives and W. W. Coblenz. Bul. BS. <u>6</u> , 321 (1909) 15 pp. 6 illus.	S-132	OP
Wavelength measurements in spectra from 5600 A to 9600 A. W. F. Meggers. Bul. BS. <u>14</u> , 371 (1918) 25 pp. 7 illus.	S-312	OP
The application of dicyanin to the photography of stellar spectra. P. W. Merrill. Bul. BS. <u>14</u> , 487 (1918) 19 pp. 11 illus.	S-318	10¢
An apparatus for photographing interference phenomena. James B. Saunders (1945) 30 p.	RP-1668	10¢
Corona photography during the eclipses of 1936 and 1937. I. C. Gardner. Nat. Geographic Soc. Solar Eclipse Series (National Geographic Society, Washington, D. C. ), No. 1, 39 (1939).		
A photographic method of detecting changes in a complicated group of objects. M. H. Stillman. Sci. Pap. BS. <u>16</u> , 437 (1920) 12 pp. 9 illus.	S-392	OP
Photomicrography of paper fibers. R. E. Lofton. Tech. Pap. BS. <u>16</u> , 629 (1922) 22 pp. 28 illus.	T-217	OP
"Camera finish" at the race track. I. C. Gardner. J. Research NBS. <u>18</u> , 467 (1937) 8 pp. 3 illus.	RP-986	5¢
Optical and photographic methods for the detection of invisible writing. I. G. Priest and E.P.T. Tyndall. Phys. Rev. <u>14</u> , (1919) (Abst. of lecture).		

EMULSION TECHNOLOGY

Title	Series:	Price:
The photographic emulsion. I. The comparison of emulsion made with different bromides. B. H. Carroll and D. Hubbard. J. Phys. Chem. <u>31</u> , 906 (1927). Sci. et Ind. Phot. <u>7</u> , 146 (1927) (abstract).		
Mechanism of color sensitization and hypersensitization (Nov. 1927).	TNB-127	OP
Sensitization of photographic emulsions by colloidal materials. B. H. Carroll and D. Hubbard. BS. J. Research <u>1</u> , 565 (1928) 24 pp. 1 illus. Brit. J. Phot. <u>75</u> , 711 (1928) Phot. Ind. <u>27</u> , 321 (1929).	RP-20	OP
Analysis of photographic emulsion (Sept. 1930).	TNB-161	OP
The photographic emulsion: After ripening B. H. Carroll and D. Hubbard. BS. J. Research <u>7</u> , 219 (1931) 41 pp. 8 illus. Sci. et Ind. Phot. (2) <u>2</u> , 444 (1931) (abstract).	RP-340	OP
The preparation of photographic emulsions. B. H. Carroll. J. Chem. Education <u>8</u> , 2341 (1931).		
A summary of emulsion knowledge. B. H. Carroll. Brit. J. Phot. <u>79</u> , 622, 637, 654, 684 (1932).		
The photographic emulsion: The silver ion-gelatin equilibrium. B. H. Carroll and D. Hubbard. BS. J. Research <u>7</u> , 811 (1931) <u>7</u> pp. 1 illus. Sci. et Ind. Phot. (2) <u>3</u> , 124 (1932).	RP-376	5¢
Automatic apparatus for intermittent washing. B. H. Carroll. Ind. & Eng. Chem. Analyt. Edit. <u>4</u> , 323 (1932).		
The photographic emulsion: The silver ion and hydrogen ion concentrations and sensitivity. B. H. Carroll and D. Hubbard. BS. J. Research <u>8</u> , 481 (1932) 25 pp. 9 illus. Sci. et Ind. Phot. (2) <u>3</u> , 285 (1932).	RP-430	10¢



Title	Series:	Price:
The photographic emulsion. Analysis for non-halide silver and soluble bromide. B. H. Carroll and D. Hubbard. BS. J. Research <u>8</u> , 711 (1932) 17 pp. 2 illus. Sci. et Ind. Phot. (2) <u>3</u> , 375 (1932).	RP-447	OP
The photographic emulsion: Variables in sensitizing by dyes. B. H. Carroll and D. Hubbard. BS J. Res. <u>9</u> , 529 (1932) 17 pp. 9 illus. Sci. et Ind. Phot. (2) <u>4</u> , 12 (1933).	RP-488	OP
The photographic emulsion: The mechanism of hypersensitization. B. H. Carroll and D. Hubbard. BS. J. Research <u>10</u> , 211 (1933) 18 pp. 1 illus. J. Soc. Mot. Pict. Eng. <u>18</u> , 600 (1932). Sci. et Ind. Phot. (2) <u>3</u> , 245 (1932); (2) <u>4</u> , 146 (1933). Die Kinotechnik <u>14</u> , 263 (1932).	RP-525	OP
The photographic emulsion: Sensitization by sodium sulfite. B. H. Carroll and D. Hubbard. BS. J. Research <u>11</u> , 743 (1933) 22 pp. 10 illus. Sci. et Ind. Phot. (2) <u>5</u> , 113 (1934).	RP-622	OP
The photographic emulsion: Notes on stability of finished plates. B. H. Carroll, D. Hubbard, and C. M. Kretchmen. BS. J. Research <u>12</u> , 223 (1934) 8 pp. 3 illus.	RP-646	OP
Kinetics of reactions between silver bromide and photographic sensitizers. B. H. Carroll and D. Hubbard. BS. J. Research <u>12</u> , 329 (1934) 16 pp. 5 illus. Sci. et Ind. Phot. (2) <u>5</u> , 214 (1934).	RP-659	OP

SENSITOMETRIC APPARATUS:

Title	Series:	Price:
A new microphotometer for photographic densities. W. F. Meggers and Paul D. Foote. Sci. Pap. BS. <u>16</u> , 299 (1920) 10 pp. 6 illus. J. O. S. A. and R. S. I. <u>4</u> , 24 (1920).	S-385	OP
A new method for the determination of photographic filter factors. Raymond Davis. Sci. Pap. BS. <u>17</u> , 79 (1921) 11 pp. 4 illus. J. O. S. A. and R. S. I. <u>4</u> , 300 (1920). Phot. J. <u>61</u> , 168 (1921). Brit. J. Phot. 69, 430 (1922).	S-409	CP
A nonintermittent sensitometer (time scale exposure machine) with clock controlled motor drive. Raymond Davis. Sci. Pap. BS. <u>20</u> , 345 (1925) 26 pp. 20 illus. Chem. News and J. Ind. Sci. <u>131</u> , 354 (1925). Sci. et Ind. Phot. <u>6</u> , 24 (1926).	S-511	15¢
A new registering photodensitometer. E. A. Harrington. J.O.S.A. and R.S.I. 16, 211 (1928).		

## LIGHT FILTERS:

Title:	Serial:	Price:
Reproducible liquid filters for the production of "White Light". (Abstract of lecture). Raymond Davis and K. S. Gibson. J.O.S.A. and R.S.I. <u>14</u> , 135 (1927). Sci. et Ind. Phot. <u>7</u> , 91 (1927).		
Reproducible liquid filters for the determination of the color temperature of incandescent lamps. Raymond Davis and K. S. Gibson. Phys. Rev. <u>29</u> , 916 (1927) (Abstract of lecture).		
Filters for the reproduction of sunlight and the determination of color temperature. Raymond Davis and K. S. Gibson. J.O.S.A. and R.S.I. <u>16</u> , 33 (1928) (Abstract of lecture).		
Artificial sunlight for photographic sensitometry. Raymond Davis. Proc. 7th Int. Cong. Phot., London, p. 161. Sci. et Ind. Phot. <u>8</u> , 158 (1928). Trans. Soc. Mot. Pict. Eng. <u>12</u> , 225 (1928).		
Methods for determining the color of sunlight and daylight. K. S. Gibson and Raymond Davis. J.O.S.A. and R.S.I. <u>18</u> , 442 (1929).		
Filters for converting artificial light to sunlight. (Oct. 1928).	TNB-138	OP
Davis-Gibson mean sunlight filters (Apr. '30)	TNB-156	OP
Filters for the reproduction of sunlight and daylight and the determination of color temperature. Raymond Davis and K. S. Gibson. Misc. Pub. BS, M-114 (1931) 165 pp. 33 illus. Sci. et Ind. Phot. (2) <u>2</u> , 167 (1931) (abstract) Chem. Weekblad <u>29</u> , 28 (1932) (abstract).	M-114	45¢
A correlated color temperature for illuminants. Raymond Davis. BS. J. Research <u>7</u> , 659 (1931) 23 pp. 3 illus.	RP-365	10¢

LIGHT FILTERS:

Title:	Serial:	Price:
The relative spectral energy distribution and correlated color temperature of the N.P.L. White Light Standard. Raymond Davis and K. S. Gibson. BS. J. Research <u>7</u> , 791 (1931) 7 pp. 2 illus.	RP-374	OP
Filters for producing the color of the equal energy stimulus. Raymond Davis and K. S. Gibson. BS. J. Research <u>12</u> , 263 (1934) 5 pp. 3 illus. Sci. et Ind. Phot. (2) <u>5</u> , 183 (1934)	RP-652	5¢

SENSITOMETRIC MEASUREMENTS:

Title:	Series:	Price:
Hypersensitizing commercial panchromatic plates. S. M. Burka. J. Frank. Inst. <u>189</u> , 25 (1920).		
Dyes for photographic sensitizing. W. F. Meggers and E. J. Stimson. J.O.S.A. and R.S.I. <u>4</u> , 91 (1920)		
Studies in color sensitive photographic plates and methods of sensitizing by bathing. F. M. Walters, Jr., and Raymond Davis. Sci. Pap. BS. <u>17</u> , 353 (1921) 23 pp. 22 illus. Lefax Handbook (Dewey 722-Lefax 00) (1921) (abstract). Brit. J. Phot. <u>69</u> , 416 (1922).	S-422	OP
Sensitometry of photographic emulsions and a survey of the characteristics of plates and films of American manufacture. Raymond Davis and F. M. Walters, Jr., Sci. Pap. BS. <u>18</u> , 1 (1922) 120 pp. 22 illus. 86 charts. Brit. J. Phot. <u>70</u> , 509, 525, 539, 554 (1923).	S-439	OP
Solarization and photographic reversal by desensitizers. B. H. Carroll. J. Phys. Chem. <u>29</u> , 693 (1925). Sci. et. Ind. Phot. 5, 139 (1925) (abstract).		
The photochemical oxidation of Leuco-bases. B. H. Carroll. J. Phys. Chem. <u>30</u> , 130 (1926).		
Experimental study of the relation between intermittent and nonintermittent sector-wheel exposures. Raymond Davis. Sci. Pap. BS <u>21</u> , 95 (1926) 45 pp. 28 illus. Sci. et Ind. Phot. <u>6</u> , 187 (1926).	S-528	20¢
Sensitization for the entire visible spectrum. B. H. Carroll. J.O.S.A. and R.S.I. <u>13</u> , 35 (1926). Sci. et Ind. Phot. <u>6</u> , 179 (1926) (abstract).		
The effect of light on silver chloride in chemical analysis. G.E.F. Lundell and J. I. Hoffman. BS. J. Research <u>4</u> , 109 (1930) 6 pp.	RP-134	OP



SENSITOMETRIC MEASUREMENTS:

Title:	Series:	Price:
Spectral sensitization of photographic emulsions (Notes on bathing with Pinacyanol-Pinaflavol Mixtures). B. H. Carroll and D. Hubbard. BS. J. Research <u>4</u> , 693 (1930) 6 pp. 1 illus. Brit. J. Phot. <u>77</u> , 429 (1930).	RP-173	OP
A comparison of resolving power and sensitivity of photographic plates with varying development. B. H. Carroll and D. Hubbard. BS. J. Research <u>5</u> , 1 (1930) 11 pp. 1 illus. Sci. et Ind. Phot. (2) <u>1</u> , 142 (1930) (abstract).	RP-183	OP
An experimental study of several methods of representing photographic sensitivity. Raymond Davis and G. K. Neeland. BS. J. Research <u>7</u> , 495 (1931) 23 pp. 19 illus. Sci. et Ind. Phot. (2) <u>3</u> , 16 (1932). J. Soc. Mot. Pict. Eng. <u>18</u> , 742 (1932). Bericht VIII Int. Phot. Kong., Dresden 1932, <u>8</u> , 150. Sci. et Ind. Phot. (2) <u>3</u> , 295 (1932).	RP-355	OP
Sensitometric Method of evaluating blueprint papers. R. Davis and G. K. Neeland. The International Blue Printer (International Assn. Blue Print and Allied Industries, 506 S. Wabash Ave., Chicago, Ill.), <u>14</u> , No. 4, 6 (1941).	TNB-288	OP
Variation of photographic sensitivity with different light sources. Raymond Davis and G. K. Neeland. BS. J. Research <u>7</u> , 843 (1931) 8 pp. 6 illus. Sci. et Ind. Phot. (2) <u>3</u> , 128 (1932). J. Soc. Mot. Pict. Eng. <u>18</u> , 732 (1932).	RP-378	OP
Photographic developers (Apr. 1932).	TNB-180	OP
Photographic reversal by desensitizing dyes. B. H. Carroll and D. Hubbard. BS. J. Research <u>10</u> , 449 (1933) 16 pp. 8 illus. Sci. et Ind. Phot. (2) <u>4</u> , 223 (1933).	RP-541	OP
A comparison of several developers and the specification of relative sensitivity. Raymond Davis and G. K. Neeland. BS. J. Research <u>11</u> , 379 (1933) 29 pp. 4 illus. Sci. et Ind. Phot. <u>5</u> , 12 (1934)	RP-598	OP

SENSITOMETRIC STANDARDIZATION:

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The unit of photographic intensity (Report of O.S.A. Committee) L. A. Jones, Chairman, J.O.S.A. and R.S.I. <u>12</u> , 56 (1926). Proc. 7th Int. Cong. Phot., London, 1928, p. 152.	
Resolutions dealing with the photographic unit of intensity, presented at the 7th International Congress of Photography. Report of the O.S.A. Committee on Standards of Photographic Intensity. L. A. Jones, Chairman. J.O.S.A. and R.S.I. <u>18</u> , 162 (1929).	
A note on the speed of photographic emulsions. Raymond Davis and G. K. Neeland. J.O.S.A. <u>21</u> , 416 (1931). Sci. et Ind. Phot. (2) <u>2</u> , 334 (1931).	
The photographic unit of intensity. (Report of O.S.A. Committee). K. S. Gibson, Chairman. J.O.S.A. <u>21</u> , 654 (1931).	

SIMPLIFIED PRACTICE RECOMMENDATIONS OF THE NATIONAL  
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Photographic paper (recommended sizes). Prac. Recom. NBS. R98 - 43	Simp.	R98-43	5¢
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NOTE:- The only government publication dealing with general photography, such as lenses, negative making, printing, enlarging, etc., is the Air Corps Training Manual No. 2170-5 entitled "Basic Photography". This book is presently out of print and is being revised. When revised and republished it will be available from the Superintendent of documents, Government Printing Office, Washington 25, D. C.

The American Standards Association, 70 East 45th Street, New York 17, New York has developed a series of Standards and Recommended Practices for Photography and Cinemaphotography which are available for purchase. The ASA will be pleased to furnish copies of its catalog and price list.

FEDERAL SPECIFICATIONS FOR PHOTOGRAPHIC MATERIALS

Title of Specification	Spec. Symbol	Price:
Cloth; sensitized	DDD-C-471	5¢
Cloth; Photo-mounting	DDD-C-431	5¢
Mats, lantern-slide	G-M-111	5¢
Mounts, x-ray film, dental	G-M-656	5¢
Preservers; negative, kraft-paper (photo-graphic)	G-P-641	5¢
Brackets, storage; (for) x-ray film hangers	GG-B-636	5¢
Cabinets, developing; x-ray film, dental (complete with developing-tank and accessories)	GG-C-55	5¢
Hangers; x-ray film, developing and drying	GG-H-109	5¢
Hangers, x-ray film (dental); developing and drying	GG-H-111	5¢
Illuminators; for x-ray film	GG-I-446	5¢
Illuminators, magnifying; for dental x-ray films	GG-I-450	5¢
Safelights; darkroom and viewing	GG-S-86	5¢
Tanks; photographic, x-ray processing	GG-T-95	10¢
Aluminum - potassium-sulfate (potash-alum); for photographic purposes	O-A-421	5¢
Ammonium-dichromate; for photographic use	O-A-498	5¢
Ferric ammonium oxalate, photographic	O-F-166	5¢
Mono-methyl paraminophenol-sulfate	O-M-571	5¢
Hydroquinone (1,4-dihydroxybenzene), photographic	O-H-886a	5¢
Potassium bromide; for photography	O-P-551	5¢

FEDERAL SPECIFICATIONS FOR PHOTOGRAPHIC MATERIALS

Title of Specification	Spec. Symbol	Price:
Potassium ferricyanide for photographic use.	O-P-555	5¢
Potassium iodide; for photography	O-P-558	5¢
Film, x-ray, diagnostic	L-F-345	10¢
Sodium-carbonate; granular (monohydrate crystals).	O-S-581a	5¢
Sodium-sulphite; anhydrous for photography	O-S-606	5¢
Trays; photographic, enameled	RR-T-646	5¢
Ink; marking, quick-drying, for photographic film.	TT-I-545	5¢
Ink; stamp-pad, red, for photographic prints	TT-I-554	5¢
Ink; numbering-machine, for photographic negatives.	TT-I-547	5¢
Paper, blueprint (sensitized and unsensitized).	UU-P-79b	5¢
Paper, brownprint (sensitized and unsensitized and transparentized)	UU-P-141a	5¢
Paper, photographic, black-line	UU-P-416	5¢
Paper, photographic, blotting, white	UU-P-417	5¢
Paper, photographic, negative	UU-P-418	5¢
Tape, photographic; paper, pressure-sensitive	UU-T-123	5¢
Tissue; dry-mounting, photographic	UU-T-431	5¢
Lamps; photographic, flash	W-L-122	5¢
Cement; rubber (artists' and photographers' and cold-patching).	ZZ-C-191a	5¢
Tanks; photographic, hard-rubber, developing and fixing.	ZZ-T-91	5¢



