RD:GKN:NML IV-7

DEPARTMENT OF COMMERCE BUREAU OF STANDARDS Washington

Letter Circular LC-332

June 30, 1932.

PUBLICATIONS RELATING TO PHOTOGRAPHY

PUBLICATIONS INCLUDED

This circular is intended to furnish references to the papers relating to photography which have been written by members of the Staff of the Bureau of Standards. These references are given in chronological order in two lists, one applying to the official Bureau of Standards publications, and the other to those appearing in outside journals. Both lists include, not only papers dealing directly with photography, but also a few where the photographic method has been applied to some problem in a novel or interesting manner.

BUREAU OF STANDARDS PUBLICATIONS

Circular C24 with supplements, gives a classified list of all the official Bureau of Standards publications together with a brief abstract of each. The significance of the letter or letters preceding the number of the paper is as follows:

C = Circulars of the Bureau of Standards

LC = Letter Circulars of the Bureau of Standards

M = Miscellaneous Publications of the Bureau of Standards

- R = Simplified Practice Recommendations of the Bureau of Standards
- S = Scientific Papers of the Bureau of Standards

T = Technological Papers of the Bureau of Standards

RP = Research Papers of the Bureau of Standards (Superseding classes S and T starting in July 1928 and being papers originally published in the Bureau of Standards Journal of Research and available in the form of reprints.

TO OBTAIN GOVERNMENT PUBLICATIONS

The Bureau of Standards publications, if not out of print and excepting letter circulars, may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. The prices stated in this circular are those formerly charged but are subject to change. No figures are given for the latest papers. For these the price should be obtained from the Superintendent of Documents. (Postage stamps are not accepted.) Letter Circulars may be obtained free of charge from the Bureau of Standards, Washington, D.C. as long as available.

PUBLICATIONS OUR OF PRINT

Publications marked with an asterisk (*) are out of print but may be consulted at the leading libraries. A list of Government depository reference libraries is given in the Supplement to C24, Nov., 1930, pp. 14-21.

TO OBTAIN ARTICLES APPEARING IN OUTSIDE PUBLICATIONS

Articles by members of the Staff of the Bureau of Standards appearing in other than Government publications are listed separately. These publications may usually be found in the larger libraries or in some cases, obtained from the publishers. Reprints may, in a few cases, be obtained by applying directly to the authors.

LIST OF FEDERAL SPECIFICATIONS FOR PHOTOGRAPHIC MATERIALS

The following list is taken from the complete list of all Federal Specifications given in the Federal Standard Stock Catalogue, Section IV, revised to July 1, 1931. Copies of Federal Specifications may be purchased from the Superintendent of Documents, Washington, D.C.

| Specification Symbol | Title of Specification | Original F.S.B.No. |
|-------------------------|--|--------------------|
| G-M-111 | Lantern slide mats | - |
| G-P-641 | Paper negative preservers | - . |
| 0-M-571 | Mono-Methyl-Paraminophenol Sulphate (supersedes U-M-191) | 421 |
| 0-S-581 | Sodium-Carbonate; granular (monohydrate crystals) | 432 |
| 0-S-606 | Sodium Sulphite; anhydrous (for photography) | 586 |
| UU-P-81 | Blueprint paper, permanent-record (sensitized and unsensitized). (Supersedes UU-P-83) | 179 |
| UU-P-86 | Blueprint paper, semi-perman- ent-record (sensitized and unsensitized) (supersedes UU-P-88) | 180 |

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| Specification Symbol | Title of Specification | Original F.S.B.No. |
|-------------------------|--|--------------------|
| UU-P-91 | Blueprint paper, temporary- record (sensitized and un- sensitized (supersedes UU- P-93) | 181 |
| UU-P-141 | Brownprint paper, permanent- record (sensitized and un- sensitized (supersedes UU- P-143) | 182 |
| UU-P-416 | Photographic black-line paper | |
| UU-P-418 | Photographic negative paper | - |

CHRONOLOGICAL LISTS OF REFERENCES

The list of Bureau of Standards Publications is divided into two sections. In the first are given the Scientific, Technologic, and Research papers, and in the second section, articles appearing in the Technical News Bulletin. The T.N.B. is a monthly publication of the Bureau obtainable by annual subscription from the Superintendent of Documents. The articles appearing therein are brief reports of the progress being made in the various fields of the Bureau's work.

Consecutive numbers have been assigned to the references in the list of Outside Publications in order to facilitate the use of the Author and Subject indexes given at the end of this circular.

BUREAU OF STANDARDS PUBLICATIONS

1. Scientific, Technologic, and Research Papers.

| B. of S. | | | | |
|---------------|---|--|------------|-------|
| No. | Title of Paper | Authors | Date | Price |
| S132 | Luminous Efficiency of the Firefly | Herbert E. Ives and W.W. Coblentz | 8-09 | 5¢ |
| S312 | Wavelength Measure- ments in Spectra from 5600A to 9600A | W.F. Moggers | 1-16-18 | 10¢ |
| S 2 18 | The Application of Dicyanin to the Photography of Stellar Spectra | | 4-13-18 | 10¢ |
| S385 | A New Microphotometer for Photographic Enn-sities | | 6-30-20 | 5¢ |
| S 392 | A Photographic Method of Detecting Changes in a Complicated Group of Objects | M.H. Stillman | 7-31-20 | 5¢ |
| S409 | A New Method for the Measurement of Photo- graphic Filter Fact- ors | Raymond Davis | 2-5-21 | √ 5¢ |
| S422* | Studies in Color Sensitive Photo- graphic: plates and Methods of Sensi- tizing by Bathing | F.M. Walters, Jr and Raymond Davis | . 11-15-21 | 15¢ |

Much of the material in S422 was first published in the following Circular of the Bureau of Standards which is no longer available:

Color Sensitive (unsigned) 11-6-19
Photographic Plates

| B. of S. | 4 | en de la company | | |
|-------------|--|---|-----------|-------------------|
| No . | Title of Paper | Authors | Date | Price |
| S439* | Sensitometry of Photographic Emulsions and a Survey of the Characteristics of Plates and Films of American Manufacture | Raymond Davis and F.M. Walters, Jr | | 35́¢ |
| first publi | Much of the material is shed in the following standards which are no | Photographic Circ | | |
| 1 | Testing of Photographic Emulsions and a Description of the Apparatus used in Photographic Sensitometry | Raymond Davis | 1918 | |
| 2 | An Atlas of Photographic Emulsions | Raymond Davis and F.M. Walters, Jr | r d | Confi- lential |
| T217 | Photomicrography of Paper Fibers | R.E. Lofton | 8-2-22 | 5¢ |
| S454 | Action of Charred Paper on the Photo- graphic Plate and a Method of Decipher- ing Charred Records | Raymond Davis | 10-18-22 | 5¢ |
| T255 | A Camera for Study- ing Projectiles in Flight | H.L. Curtis W.H. Wadleigh and A.H. Sellman | 3-19-24 | |
| S494 | Aberrations of Long Focus Anastigmatic Photographic Object- ives | A.H. Bennett | 10-16-24 | 20¢ |
| S508 | Spark Photography and Its Application to Some Problems of Ballistics | Phillip P. Quaylo | e 6-15-25 | 20¢ |

| | | 4. | |
|----------|--|-------------------------|-------------|
| B. of S. | Title of Paper | Authors | Date Price |
| S511 | A Nonintermittent Sensitometer (Time Scale Exposure Mach- ine) with Clock- Controlled Motor Drive | | 8-20-25 15¢ |
| S517 | A Special Camera for Photographing Cylindrical St r- faces | Raymond Davis | 12-5-25 10¢ |
| S528 | Experimental Study of the Relation be- tween Intermittent and Nonintermittent Sector-Wheel Pho- tographic Exposures | | 5-18-26 20¢ |
| RP20 | Sensitization of Photographic Emulsions by Colloidl Materials | | |
| R98 | Photographic Paper (Recommended sizes) | | |
| RP134 | The Effect of Light on Silver Chloride in Chemical Analyses | G.E.F. Lundell and | 5¢ |
| RP173 | Spectral Sensitization of Photographic Emulsions (Notes on Bathing with Pinacyanol-Pinaflavol Mixtures) | and Donald Hubbard | 5-30 5¢ |
| RP183 | A Comparison of Resolving Power and Sensitivity of Photographic Plates with Varying Development | and o-Donald Hubbard | 7-30 5¢ |
| Mll4 | Filters for the Reproduction of Sunlight and Daylight and the Determination of Color Temperature | and K.S. Gibson | 1-31 45¢ |

| B. of S. | | | | |
|----------|---|--|-------|-------|
| No. | Title of Paper | Authors | Date | Price |
| RP340 | The Photographic Emulsion- After Ripening | Burt H. Carroll and Donald Hubbard | 8-31, | 10¢ |
| RP355 | An Experimental Study of Several Methods of Represent- ing Photographic Sensitivity | Raymond Davis and G.K. Neeland | 9-31 | 10¢ |
| RP365 | A Correlated Color Temperature for Il- luminants | Raymond Davis | 10-31 | 10¢ |
| RP374 | The Relative Spectral Energy Distribution and Correlated Color Temperature of the N.P.L. White-Light Standard | and | 11-31 | 5¢ |
| RP376 . | The Photographic Emulsion: The Silver Ion-Gelatin Equilib- rium | and | 11-31 | 5¢ |
| RP378 | Variation of Photo- graphic Sensitivity with Different Light Sources | and | 11-31 | 5¢ |
| RP427 | The Optical Require- ments of Airplane Mapping | I.C. Gardner | 4-32 | ** |
| RP430 | The Photographic Emulsion: The Silver Ion and Hydrogen Ion Concentrations and Sensitivity | Burt H. Carroll and Donald Hubbard | 4-32 | ** |
| RP447 | The Photographic Emulsion: Analyses for Non-Halide Sil- ver and Soluble Bromide | Burt H. Carroll and Donald Hubbard | 6-32 | ** |

^{**} Refer to the heading, "TO OBTAIN GOVERNMENT PUBLICATIONS".

2. Articles Appearing in the Technical News Bulletin.

| | | | | . , , ; | |
|---|--------|--|-------|---------------------------------------|------|
| - | C.N.B. | | | | |
| | No. | Title of Article | Date | | Page |
| | 99 | A New Sensitometer | 7-25 | | 6 |
| | 106 | Prevention of Distortion in Lenses Used for Copying and Enlarging | 2-26 | | 6 |
| | 123 | Photographic Emulsion Investigations | 7-27 | | 2 |
| | 127 | Mechanism of Color Sensitization and Hypersensitization | 11-27 | | 5 |
| | 138 | Filters for Converting Artificial Light to Sunlight | 10-28 | | 143 |
| | 147 | Safeguarding Storage of Photographic Films | 7-29 | | 65 |
| | 156 | Davis-Gibson Mean Sunlight Filters | 4-30 | , , , , , , , , , , , , , , , , , , , | 32 |
| | 158 | Resolving Power and Sensitivity and the Effect of Varying Development on Photographic Plates | 7-30 | | 60 |
| | 161 | Analysis of Photographic Emulsions | 9-30 | | 86 |
| | 168 | Sunlight and Daylight Filters | 4-31 | | 34 |
| | 170 | Camera for Photographing Surface of Bullets | 7-31 | | 62 |
| | 172 | Ripening of Photographic Emulsions | 8-31 | | 84 |
| | 173 | Methods of Representing Photographic Sensitivity | 9-31 | | 98 |
| | 180 | Permanent Photostat Paper | 4-32 | | 36 |
| | 180 | Photographic Developers | 4-32 | | 37 |
| | 180 | Further Studies of Photographic Emulsions | 4-32 | 3. | 38 |
| | 180 | Optical Requirements for Lirplane Mapping | 4-32 | | 38 |
| | 182 | Analytical Methods for Photograph- ic Emulsions | 6-32 | | 55 |

OUTSIDE PUBLICATIONS

| | etheratina (CC those | | | | |
|------|---|---|--|------------|--------------|
| Ref. | Name of Publication | Title of Paper | Authors | Date | Vol. |
| 1 | Physical Review (abstract of lecture) | Optical and Photographic Methods for the Detection of Invisible Writing | I.G.Pri est and E.P.T.Tyndal | | 14 p.188 |
| 2 | Journal of the Franklin Institute | Hypersensitizing Commercial Pan- chromatic Plates | S.M.Burka | 1-20 | 189 P•25 |
| 3 | Journal of the Opti- cal Society of America and Review of Scientific In- struments (reprint of S385) | A New Micropho- tometer for Pho- tographic Densities | and | 1-20 | 4,1 p.24 |
| 4 | Journal of the Optical Society of America and Review of Scientific Instruments | | | | 4,3 p.91 |
| 5 | Journal of the Opti- cal Society of America and Review of Scientific In- struments (reprinted as S409) | Measurement of Photographic Fil- | Raymond Davi | s 9-20 | 4,5 p.300 |
| 6 | The Photographic Journal (reprint of S409) | A New Method for Measurement of Photographic Eil- ter Factors | Raymond Davi | | 61 p.168 |
| 7 | Lefax Handbook (abstract of S422) | Color Sensitive Photographic Plates and Methods of Sensitizing by Bathing | e and | 9-21 | |
| 8 | The British Journal of Photography (reprint of S422) | Studies in Color Sensitizing by Bathing | F.M. Walters and 7- Raymond Davi | 14-22 | 69 p.416 |
| 9 | The British Journal of Photography (reprint of S409) | A New Method for Measurement of Photographic Filter Factors | Raymond Davi 7- | s 21-22 | 69 p.430 |

| Ref. | Name of Publication | Title of Paper | Authors | Date | Vol. |
|------|--|--|---------------------------------|---------|----------------------------------|
| 10 | Journal of the Optical Society of America and Review of Scientific Instruments | Note on the Shrinkage of Photographic Films | H.L. Curtis | 3-23 | 7,3 p.275 |
| 11 | The British Journal of Photography (reprint of S454) | Action of Charred Paper on the Pho- tographic Plate and a Method of Deciphering Char- red Records | Raymond Davis | 4-6-23 | 70 p.205 |
| 12 | The British Journal of Photography (Reprint of S439) | Sensitometry of Photographic Emulsions and a Survey of the Characteristics of Plates and Films of American Manufacture | Raymond Davis and F.M. Walters, | 8-24-23 | p.509 p.525 p.539 p.554 |
| 13 | Journal of Physical Chemistry | Solarization and Photographic Rc-versal by Desensitizers | Burt H. Carrol | 1 6-25 | 29 p.693 |
| 14 | | Solarization and Photographic Reversal by Desensitizers | Burt H. Carrol | 1 8-25 | 5,8 p.139 |
| 15 | The Chemical News and Journal of Industrial Science (abstract of S511) | A Nonintermittent Sensitometer | Raymond Davis | 12-4-25 | 131 p.354 |
| 16 | Journal of Physical Chemistry | The Photochemical Oxidation of Leu- co Bases | Burt H. Carrol | 1 1-26 | 30 p.130 |

| Rof. | Name of | | | | |
|------|--|---|--|------|---------------|
| No. | | Title of Paper | Authors | Date | Vol. |
| 17 | 9 1 | Sensitometer Non- Intermittent a Moteur Controle par Pendule | Raymond Davis | 2-26 | 6,2 p.24 |
| 18 | Journal of the Optical Society of America and Review of Scientific Instruments | A Camera for Photographing the Interior of a Rifle Barrel | - and | 2-26 | 12,2 p.159 |
| 19 | Optical So- cicty of Ameri | The Unit of Photographic Inten-sity (Report of O.S.A. Committee) | Chairman | 6-26 | 12,6 p.56 |
| 20 | Science et Industries Photograph- iques (Translation of S517) | Appariel pour la Photographie des Surfaces Cylind- riques | | 6-26 | 6,6 p.115 |
| 21' | Journal of the Optical Society of America and Review of Scientific Instruments | Sensitization for The Entire Visib Spectrum | | 7-26 | 13,1 p.35 |
| 22 | Tochnischo Rundschau (translation of S517) | Eine Spezialkam- era Zum Photo- graphieren von Zylinderflachen | Raymond Davi Trans. by Dr Alfred Grad- enwitz | • | 33,32 |
| 23 | Science et Industries Photograph- iques (translation of S528) | Influence des Poses Intérmit- tentes sur l'ac- tion Photograph- iques | Raymond Davi | | 6,10 p.179 |

| Ref. No. | Name of Publication | Title of Paper | Authors | Date | Vol. |
|-------------|--|--|-------------------------------------|-------|---------------|
| 24 | | Sensitization for the Entire Visible Spec- trum | B.H. Carroll | 10-26 | 6,10 p.187 |
| 25 | Journal of the Optical Society of America and Review of Scientific Instruments (abstract of lecture) | Liquid Filters for the Pro- | Raymond Davis and K.S. Gibson | 2-27 | 14,2 p.135 |
| 26 | Journal of the Optical Society of America and Review of Scientific Instruments | The Distortion of Some Typical Photographic Objectives | A.H. Bennett | 3-27 | 14,3 p.235 |
| 27 | Journal of the Optical Society of America and Review of Scientific Instruments | The Compensation of Distortion in Objectives for Airplance Photography | I.C. Gardner and A.H. Bennett | 3-27 | 14,3 p.245 |
| | Science et . Industries Photograph- iques (abstract of 25) | Filtres Colored pour "Lumiere Blanche" | Raymond Davis and K.S. Gibson | 5-27 | 7,5 p.91 |
| 29 | Physical Review (abstract of lecture). | Reproducible Liquid Filters for the Deter- mination of the Color Tempera- ture of Incan- descent Lamps | Raymond Davis and K.S. Gibson | 6-27 | 29,2 p.916 |

| Ref. | Name of | | | | |
|------------|---|--|--------------------------------------|----------|--------------|
| No. | Publication | Title of Paper | Authors | Date * | Vol. |
| 2 9 | Journal of Physical Chemistry | The Photographic EmulsionI. The Comparison of Emulsions Made with Different Bromides | B.H.Carroll and Donald Hubbar | | 31 p.906 |
| 31 | Science et Industries Photograph- iques (abstract of 30) | The Photographic Emulsion I. The Comparison of Emulsions Made with Different Bromides | B.H. Carroll and Donald Hubbar | | 7 p.146 |
| 32 | Journal of the Optical. Society of America and Review of Scientific Instruments (abstract of lecture) | Filters for the Reproduction of Sunlight and the Determination of Color Temperature | Raymond Davis and K.S. Gibson | 5-28 | 16,5 p.33 |
| 33 | | The Unit of Photographic Intensity-Report of the O.S. A. Committee on the Unit of Photography ic Intensity | Chairman | 7-28 | p.152 |
| 34 | Proc. 7th Int. Cong. Phot., London | Artificial Sun- light for Photo- graphic Sensi- tometry | Raymond Davis and K.S. Gibson | 7-28 | p.161 |
| 35 | Science et Industries Photograph- iques (translation of 34) | Lumiere Solaire Artificielle paur Sensitometrie | Raymond Davis and K.S. Gibson | 9-28 | 8,9 p.158 |
| `36 | | - Sensitization of Emulsions by Col- loid Materials | B.H. Carroll and Donald Hubbar | 11-30-28 | 3 p.72 |

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| Ref. | Name of Publication | Title of Paper | Authors | Date | Vol. |
| 37 | Transactions of the Society of Motion Picture Engineers | Artificial Sun- light for Photo- graphic Sensi- tometry | Raymond Davis and K.S. Gibson | 1928 | 12,33 p.225 |
| 38 | Journal of the Optical Society of American and Review of Scientific Instruments | Resolutions Deal- ing with the Pho- tographic Unit of Intensity, Pre- sented at the 7th International Con- gress of Photo- graphy- Report of the O.S.A. Committ on Standards of Ph tographic Intensit | Chairman ce | 3-29 | 18,3 p.162 |
| 39 | Journal of the Optical Society of America and Review of Scientific Instruments (abstract of lecture) | Methods for Deter- mining the Color of Sunlight and Daylight | and | 6-29 | 18,6 p.442 |
| 40 | Photograph- ische Indust- ric (translation of RP20) | Sonsitization of Emulsions by Col- loid Materials | B.H. Carroll and Donald Hubbard | | 27 p.321 |
| 41 | Journal of the Radiological Society of North America (Radiology) | Safeguarding the Storage of Photographic, Motion Picture, and X-ray Films | C.R. Brown | 5-30 | 14 p.454 |
| 42 | British Journal of Photography | Sensitizing with Pinacyanol-Pinaflavol Mixtures | B.H. Carroll and Donald Hubbard | | 77 p.429 |
| 43 | Science et Industries Photographiques (abstract of RP183) | A Comparison of Resolving Power and Sensitivity of Photographic Plates with Vary- ing Development | B.H. Carroll and Donald Hubbard | (2) | 1,11 p.412 |

| | | * * | | |
|-------------|--|---|---------------------------------------|-------------------------------|
| Ref. No. | Name of Publication | Title of Paper | Authors | Date Vol. |
| 44 | Science et Industries Photograph- iques (abstract of M114) | Filters pour la Reproduction de la Lumiere Sol- aire (etalon Sensitometrique) | Raymond Davis | 5-31 (2) $\frac{2}{p}$.167 |
| 45 | Journal of the Optical Society of America | A Note on the "Speed" of Photographic Emulsions | Raymond Davis and G.K. Neeland | 7-31 <u>21</u> ,7 p.416 |
| | Science et Industries Photograph- iques (translation of 45) | Expression de la Sensibilite des Emulsions Photo- graphiques | Raymond Davis and G.K. Neeland | 9-31 (2) <u>2,</u> 9 p.334 |
| 47 | Journal of the Optical Society of America | | K.S. Gibson, Chairman | 10-31 <u>21,</u> 10 p.654 |
| 48 | Science et Industries Photograph- iques (abstract of RP340) | The Photographic Emulsion- After Ripening | B.H. Carroll and Donald Hubbard | D . T. T. |
| 49 | Journal of Chemical Education | The Preparation of Photographic Emulsions | B.H. Carroll | 12-31 <u>8,12</u> p.234 |
| 50 | Chomical Week- blad (abstract of Ml14) | Filters for the Reproduction of Sunlight and Day-light and the Determination of Color Temperature | Raymond Davis and K. S. Gibson | 1-9-32 |
| 51 | Science et Industries Photograph- iques (translation of RP355) | Etude exteriment- ale de quelques Methodes d'ex- pression de la sensibilite | Raymond Davis and G.K. Necland | 1-32 (2) <u>3</u> ,1 |

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|-------------|---|--|--------------------------------------|---------------|---------------|
| Rof. No. | Name of Publication | Title of Paper | Authors | Date | Vol. |
| 52 | Science et Industries Photograph- iques (translation of RP376) | L'emulsion photo- graphique: L'equi- libre Gelatino- Ions Argent | and | 4-32 (2) | 3,4 p.124 |
| 53 | Industrics Photograph- iques | Variations de la Sensibilitie Photo- graphique vis-a- vis de diverses sources de lumiere | G.K. Necland | 4-32 (2) | 3,4 p.128 |
| 54 | Journal of the Society of Motion Picture Eng- incers | The Mechanism of Hypersensitization | B.H. Carroll and Donald Hubbard | 5 - 32 | 18,5 p.600 |
| 55 | Journal of the Society of Motion Picture Eng- incers (reprint of RP378) | Variation of Photographic Sensitivity with Different Light Sources | Raymond Davis and G.K. Necland | 6-32 | 18,6 p.732 |
| 56 | Journal of the Society of Motion Pic- ture Engineers (rewrite of RP355) | Variation of Photographic Sensitivity with Development Time | Raymond Davis and G.K. Necland | 6-32 | 18,6 p.742 |
| 57 | Kongressband, 8 Internation- aler Photo- graphisher Kongress (translation of RP355) | shiedener Method- en, die Photograph- ische Empfindlich- keit Darzustellen | and G.K. Neeland | (in | press) |
| | 4.50 A | | | | |

SUBJECT INDEX

In the following index the Bureau of Standards Publications are indicated by their official numbers. Papers appearing in other than Government publications are designated by the reference numbers given in the preceding list of Outside Publications. These numbers are inclosed in parenthesis to distinguish them from Government publications.

GENERAL PHOTOGRAPHY

Apparatus:

Abberations of long focus lenses S494
Camera for photographing bullets in flight T255
Camera for photographing the interior of rifle barrels (18)
Camera for photographing cylindrical surfaces S517, (20),(22)
Distortion of photographic objectives (26)
Compensation for distortion in airplane objectives (27)
Optical requirements for airplane mapping RP427

Applications:

Photographic method of spectral energy measurement S132
Photographic method for detection of invisible writing (1)
Photographic method of detecting changes in a complicated object S392

Infra-red spectroscopy S312, S318

Photomicrography:

Of paper fibers T217

Simplified Practice Recommendations:
Photographic Paper sizes R98

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Methods for the storage of films (41)

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After ripening RP340, (48)
Gelatin-silver ion equilibrium of RP376, (52)
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Hypersensitization, mechanism of (54)
Silver ion and hydrogen ion concentrations RP430
Analysis for nonhalide silver and soluble bromide RP447

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Apparatus:

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Light Filters:

For reproduction of sunlight and daylight M114, (34), (35), (37) (44), (47), (50)Miscellaneous RP365, RP374, (25), (28), (32), (39)

Measurements:

Intermittency effect S528, (23)

Sensitivity:

Methods of measurement of RP355, (51), (52), (54)

Tests of S439, (12) Change in, with different light sources RP378, (55) Spectral sensitization S422, RP173, (2), (4), (7), (8), (16), (21), (24), (42)

Miscellaneous:

Effect of light on silver chloride in analyses RP134 Reversal by desensitizing dyes (13), (14)

Standardization: (see also under Light Filters) Unit of photographic intensity, report of committee on (19) (33), (38), (47)Nomenclature, note on need for definite (45), (46)

AUTHOR INDEX

In this index, Bureau of Standards publications are 'listed by their official number in the celumn headed B. of S. Numbers. Other papers included in the list of Outside Publications are given in the column headed Reference Numbers.

| Name of Author | B. of S. Numbers | Reference Numbers |
|----------------|--|--|
| i.H. Bennett | S494 | 26, 27 |
| C.R. Brown | | 41 |
| S.M. Burka | | 2 |
| B.H. Carroll | RP20, RP173, RP183, RP340, RP376, RP430, RP447 | 13, 14, 16, 2h, 24, 30, 31, 36, 40, 42, 43, 48, 49, 52, 54 |
| F.A. Case | • 1 | 18. |

W.W. Coblentz S132

| Name of Author | B. of S. Numbers | Reference Numbers |
|----------------|---|---|
| H.L. Curtis | ₩255 | 10. |
| R. Davis | S409, S422, S439, S454, S511, S517, S528, M114, RP355, RP365, RP374, RP378 | 5,6,7,8,9,11,12,15, 17,20,22,23,25,28, 29,32,34,35,37,39, 44,45,46,50,51,53, 55,56,57 |
| P.D. Footo | \$385 | 3 |
| K.S. Gibson | Mll4, RP374 | 25,28,29,32,34,35, 37,39,44,47,50 |
| I.C. Gardner | RP427 | 18, 27 |
| J.I. Hoffman | RP134 | |
| D. Hubbard | RP20, RP173, RP183, RP340, RP376, RP430, RP447 | 30,31,36,40,42,43, 48,52,54 |
| H.E. Ives | S132 | |
| L.A. Jones | | 19, 33, 38 |
| R.E. Lofton | T217 | |
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| P.W. Morrill | S318 | |
| 7.F. Moggers | S312, S385 | 3, 4 |
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| P.P. Quayle | S508 · | |
| A.H. Sollman | T255 | |
| M.H. Stillman | S392 | |
| F.J. Stimson | | ٠. · |
| E.P.T. Tyndall | | 1 |
| W.H. Wadleigh | T255 | |
| | | |

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