Chemical Corner

Edited by Irving M. Ewig for the Society's Laboratory Practice Committee. Suggestions should be sent to Society headquarters marked for the attention of Mr. Ewig. Neither the Society nor the Editor assumes any responsibility for the validity of the statements contained in this column. They are intended as suggestions for further investigation by interested persons.

Foam Prevention Tributyl phosphate has good antifoaming properties and in addition is colorless and odorless. This product is marketed by Apex Division of Food Machinery and Chemical Corp., Niro, W. Va.

Substitute for Metol *British Kinematography* has an article in the February 1952 issue (vol. 20, no. 2) describing a substitute for metol. It is 1-phenyl 3-pyrazolidene. It is white and odorless; and persons sensitive to metol poisoning are reported unaffected by this so-called Phenidone. Like metol it is sensitive to pH and is soft working when used alone. In combination with hydroquinone it gives a more rapid, less grainy image and produces less fog. It also yields a high contrast with hydroquinone and has a lower exhaustion rate. It is possible to match a metol-hydroquinone developer with a phenidone-hydroquinone developer.

Construction of Water Purifier An interesting article, "Pure water for your darkroom," in *American Photography*, (vol. 45, 341–346, June 1951), by H. F. Walton, describes a method for constructing a water-purification, ion-exchange unit. All that is required is some laboratory glassware and commercial resins.

Try It Before You Buy It A method for rapid identification of nickel alloys, stainless steels, etc., might be of value in the motion picture laboratory where the question of materials of construction of processing equipment often comes up. Such a quick test procedure has been described in a pamphlet by Henry B. Lee of Eastman Kodak and published as Special Technical Bulletin #98 by the American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa. The metals or groups of metals for which methods of testing are described are nickel, monel metal, inconel, stainless steel #316, other chrome nickel, nickel stainless steels, straight chromium stainless steels as a class, etc. All the requirements for testing are seven common chemicals, a stirring rod, a medicine dropper, a porcelain spot plate and an abrasive cloth.

Tank Cleaning Advice L. B. Russell Chemicals, Inc., of 60 Orange St., Bloomfield, N.J., markets a chemical preparation called "Wizz" which is used for cleaning developing tanks. Reported safe to handle, noncorrosive and useful with any type of material, it is dissolved in water. The solution is kept overnight in the developer tank which is then washed out thoroughly to leave the tank free of chemical deposit and crustation. Periodic treatment of developer tanks will add to uniformity of the developer and lengthen its life, eliminate dirt problems and generally improve processing.

Film Processing Chemistry A series of articles by various authorities dealing with some fundamental chemistry of film processing appeared in *British Kinematography*, vol. 20, no. 2, Feb. 1952. One of these articles discusses the various chemical constituents of a developer and their roles; the chemical reactions of a developer and the products formed. The matter of the dependence of the rate of replenishment on the amount of bromide that can be tolerated in the developer is discussed. It is also pointed out that the work of development is performed by metol while hydroquinone serves to reverse the oxidized metol back to its original functional state and thereby becomes oxidized itself. Therefore, the maintenance of the metol concentration in the developer is easy compared to that of hydroquinone. Some suggestions about electrolytic recovery of silver and the regeneration of hypo are also discussed.

Testing the Exhaustion of a Fixing Bath L. G. Sandys presents his views about how to increase the efficiency of fixing baths and methods of testing in an article, "Efficiency and conservation of fixing baths," published in *The British Journal of Photography*, Vol. 98, pp. 662–3, Dec. 1951. If a yellow precipitate persists upon the addition of a 4% potassium iodide solution to ten parts of the fixer, it is exhausted. This can be confirmed by agitation with a paddle of some kind and if a lasting froth develops it indicates that the bath is spent.

Temperature Control for Film Processing Solutions U.S. Patent #2,584,294 assigned to Remington Rand describes a procedure for isolating the developer and fixer sections of a processing machine by a compartment and circulating heated air from the drying compartment through this chamber.

Filter-Aid Aid During the present strike at Johns Manville, users of their Celite filter aids find themselves in a difficult situation. Perhaps the Brown Company of Berlin, N.H., have a solution to this problem with their "Solka-floc" which they claim (1) prevents "leak through" in the filtration process, (2) enables high flow rates, (3) enables controlled porosity in the filter cake and (4) reduces labor cost by diminishing the number of times filter presses have to be cleaned. The general sales office is at 150 Causeway St., Boston, Mass.

New Method of Rust Prevention VPI (Vapor Phase Inhibitor) is chemically known as dicyclohexyl ammonium nitrate and is manufactured commercially by Monsanto Chemical Company. By vaporizing and allowing it to deposit on the product, it is reported to prevent corrosion. It may be used by impregnating paper and lining a drawer with this paper. This will prevent corrosion of anything kept in this drawer. However, its methods of application are numerous. It is nonflammable and will reach areas where usual corrosion preventatives cannot be applied. One gram of VPI provides protection for one cubic foot of metal if properly wrapped to prevent loss of vapor.

Meetings

American Society of Photogrammetry, Annual Meeting, Jan. 14–16, Shoreham Hotel, Washington, D. C.

American Institute of Electrical Engineers (Symposium on the Science of Music and Its Reproduction — 3d Lecture), Jan. 15, Engineering Societies Bldg., New York, N. Y.

Society of Motion Picture and Television Engineers, Southwest Subsection Meeting, Jan. 16, Dallas, Tex.

American Institute of Electrical Engineers, Winter General Meeting, Jan. 19–23, New York, N. Y.

American Physical Society, Annual Meeting, Jan. 22–24, Cambridge, Mass.

Institute of Radio Engineers Conference and Electronics Show, 5th Annual Southwestern Conference and Show, Feb. 5–7, San Antonio, Tex.

American Institute of Electrical Engineers (Symposium on the Science of Music and Its Reproduction — 4th Lecture), Feb. 20, Engineering Societies Bldg., New York, N. Y.

National Electrical Manufacturers Association, Mar. 9–12, Edgewater Beach Hotel, Chicago, Ill.

Society of Motion Picture and Television Engineers, Southwest Subsection Meeting Mar. 16, Fort Worth, Tex.

Inter-Society Color Council, Annual Meeting, Mar. 18, Hotel Statler, New York, N. Y.

Optical Society of America, Mar. 19–21, Hotel Statler, New York, N.Y.

American Physical Society, Joint Meeting with APS Southeastern Section, Mar. 26–28, Duke University, Durham, N.C.