Kodak reports to laboratories on:

a reagent for determining α-keto acids in blood and urine . . . a movie camera for high altitudes and latitudes . . . how goodly the body of microprint literature is

Clarion call from Stoke Poges

Far from the madding crowd's ignoble strife and to the eternal boredom of sophomores, a man named Thomas Gray published in 1751 some thoughts about Life inspired by the country churchyard of Stoke Poges in Buckinghamshire. From the same town, exactly 200 years later, two other individuals whose thoughts about Life were more along the line of what part α-keto acids might play in it, sent to the editor of *The Biochemical Journal* (*52*,38) a paper in which they introduced 1,2-diamino-4-nitrobenzene as a reagent for these acids, proclaiming it more specific than the previous favorite, 2,4-dinitrophenylhydrazine, because it forms stable nitroquinoxalinols which may be separated by paper chromatography.

Actually this new reagent has been slumbering peacefully in our catalog for the past 16 years ever since we began making it as an intermediate toward a benzimidazole. A change of name in the interim toward the *Chemical Abstracts* form, *4-Nitro-o-phenylenediamine* (Eastman 4323), has made the grave a little harder to find. Now the clarion call from Stoke Poges, reinforced by an abstract we offer of a paper in *The Analyst* for August '55 on the use of the reagent in detecting and determining α-keto acids in blood and urine, brings life again to the old amine.

Your order for 25 grams of Eastman 4323 at $2.50 and a note asking for the abstract is all it takes to try this new reagent. It's one of some 3500 Eastman Organic Chemicals we stock. Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company).

K-100 in the cold

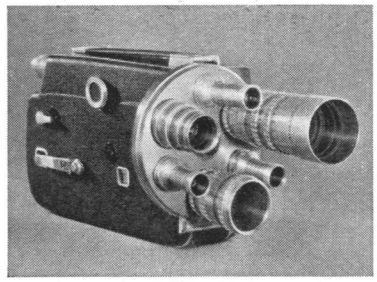
"Walt Disney Productions' Antarctic film will soon be shown on the Disneyland and Mickey Mouse Club TV Shows and will be released as a full-length movie which can be seen at your local movie theatre."

Printing the above sentence seems a fair price to pay for the privilege of saying that the *Cine-Kodak K-100 Cameras* of the Disney crews in Antarctica are functioning properly at −45F without the electric blankets which far costlier 16mm movie cameras require.

Actually, nowadays, smart outfits like the Disney organization find out from an environmental chamber test in advance just what they can or cannot expect from equipment being considered for strenuous duty. Then you hear from them only if the equipment failed to perform as in the test, in which case you hear plenty.

We could attribute the low-temperature performance of this camera to the extra care lavished by aging craftsmen on each *K-100* that leaves their devoted hands. A more credible explanation is afforded by the nylon gears, nylon pulldown cam, and the ball-bearing pulldown mechanism. The pre-stressed spring motor is also of some pertinence to the matter.

The *K-100* is now made in a turret model like this:



Those smaller tubes opposite each of the three *Kodak Cine-Ektar Lenses* contain their respective viewfinder telescope objectives. No Disney tie-in, unfortunately, because this model came out months after the Mickey Mouse emissaries shoved off.

Performance of the K-100 *in the cold should be just as exploitable at high altitudes as at high latitudes. Data recording, for example? A Kodak dealer is nearby.*

A snowball rolling

Somewhere your librarian has to draw the line. Some books and bound volumes simply cost too much in money and space for the good a given organization is likely to get from them. These words are promotion for the microprint idea. It pushes the line which your librarian has to draw about as far as anyone could want it pushed.

A microprint card* is a piece of stiff paper, generally 3″ x 5″ or larger, on which can appear as many as 60 greatly reduced book pages. These cards are read with the aid of optical devices. Of these we are prejudiced in favor of the *Kodagraph Microprint Reader* as the most comfortable to use.

A goodly body of the technical literature in the sciences, the humanities, and even the law and finance is now on sale in this form. To illustrate just how goodly is the body, we have just published a booklet entitled "What's Available on Microprint Cards." It is an attempt at a condensed consolidated catalog of the output of all microprint card publishers known to us and willing that we publicize their offerings. We alone are footing the bill for this project.

Our motives, of course, are selfish. Our scheme with the booklet is to convince a lot more scholars, librarians, and librarians' bosses that there is enough microprint literature around to justify the acquisition of microprint readers. Then, just as surely as the telephone, radio, and television industries grew, microprint grows. The publisher's market grows. The number of titles grows. The need for microprint readers where researchers foregather becomes more obvious. It even occurs to more large companies that since their research people already have readers for the open microprint literature, the companies' own internal reports might be more efficiently circulated in microprint form.

Since, as all this comes to pass, we shall sell more and more photographic materials with which to make microprint cards, there is no reason to hesitate about writing for a free copy of "What's Available on Microprint Cards" to Eastman Kodak Company, Graphic Reproduction Division, Rochester 4, N. Y.

*The term "Microcard" is applied only to certain makes of microprint cards.

Price quoted is subject to change without notice.

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are . . . *serving laboratories everywhere*

Kodak
TRADEMARK

Equipment News

■ THROW-AWAY PETRI DISHES for use in the microbiological laboratory are sterile and pyrogen-free. They are made of optically clear styrene plastic with a heat-distortion point of 90°C, a material that is inert to biological reagents. (Chicago Apparatus Co., Dept. Sci., 1735 N. Ashland Ave., Chicago 22, Ill.)

■ INFRARED SPECTROPHOTOMETER model IR-4, by Beckman, incorporates a double monochromator for spectral purity and high resolution. It may be operated on a double-beam system for quick scans and convenient data presentation, or on a single-beam system for greater quantitative accuracy in chemical analyses. (Beckman Instruments, Inc., Dept. Sci., Fullerton, Calif.)

■ X-RAY DIFFRACTION INSTRUMENT model XRD-5, by General Electric, utilizes a high-speed proportional counter and preamplifier that frees x-ray diffraction techniques from dependence on conventional Geiger counters and permits accurate, rapid analyses. A single-crystal orienting device permits analytic chemists and physics researchers to analyze fibers and wires and to study preferred orientations by the reflection method. Direct count of line area, even for intense, wide lines, can be made at rates exceeding 100,000 counts/sec, with a count capacity of 100 million. The preamplifier enables the detector to perform linearly in a range about 5 times greater than is possible with multichamber Geiger counter assemblies. A helium atmosphere is substituted for air in quantitative determinations of widely known elements of small atomic number. (General Electric Co., Dept. Sci., 4855 Electric Ave., Milwaukee 1, Wis.)

■ OSCILLOSCOPE designed specifically for biological use can monitor physiological processes visibly. Called the Viso-scope, it is exceptionally simple to operate and utilizes a minimum of controls. The unit can be used to view several phenomena simultaneously or alternately by means of a selector switch. Provision for attachment to a recording system has been included. (Sanborn Instrument Co., Dept. Sci., 37 Sanborn St., Cambridge 39, Mass.)

■ ULTRAVIOLET LIGHT ABSORBERS are described in a 20-page booklet published by Antara Chemicals. The absorption characteristics, compatibility in plastics, colors, and other properties of four substituted benzophenones are discussed. Two new products that are used to control harmful effects of ultraviolet radiations are described. (Antara Chemicals, Dept. Sci., 435 Hudson St., New York 14)

■ HISTOLOGICAL FREEZE DRYER is designed to simplify routine preparation of tissues for sectioning and for microchemical and optical studies. The unit can run up to eight sections at one time and is equipped with an individual chamber for evacuating the imbedding medium. Several units may be operated simultaneously from one vacuum pump. Drying time for most tissues is less than 6 hr at temperatures of −40°C bath and −78°C condenser. (E. Machlett and Son, Dept. Sci., 220 E. 23 St., New York 10)

■ TECHNICAL DATA on analysis, preparation, properties, and applications of molybdenum chemicals is available in 68 papers that have been published by Climax Molybdenum. A recently compiled catalog of these bulletins lists several on cyanomolybdates, halides and oxyhalides of molybdenum, organic complexes of molybdenum, heteropolymolybdates, and molybdenum disulfide that are included in a new series prepared for Climax by the Battelle Memorial Institute. (Climax Molybdenum Co., Dept. Sci., 500 5th Ave., New York 36)

■ SOURCE AND MICROWAVE EXCITER, used in high-dispersion interferometry, makes wavelength determinations with accuracies to 1 part/million. Baird's mercury-198 model utilizes a fused quartz electrodeless lamp containing about 0.4 mg of Hg^{198} prepared by transmutation of gold. The portable exciter unit operates at a 12.2-cm wavelength and is powered by a 60-cy/sec, 115-v alternating-current supply. (Baird Associates, Inc., Dept. Sci., 33 University Rd., Cambridge 38, Mass.)

■ THREE ETHANOLAMINES are discussed in a 48-page booklet recently published by the Nitrogen Division of Allied Chemical and Dye. Included are physical property graphs and information on applications and specifications of these substances, as well as data on their physical, chemical, and physiological properties. (Allied Chemical and Dye Corp., Dept. Sci., 40 Rector St., New York 6)

■ CATHODE-RAY TUBE retains traces on its screen for investigation. Operator can erase the screen when pictures have been studied or photographed. The tube has potential applications for electroencephalographic and cardiographic studies and may be of service in geophysics, instrumentation, and computer reading. (Hughes Aircraft Co., Dept. Sci., Culver City, Calif.)