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THE WEEKLY SUMMARY OF CURRENT SCIENCE



STS Winners

See Page 150

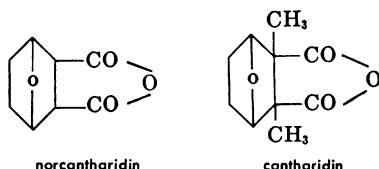
A SCIENCE SERVICE PUBLICATION

Kodak reports to laboratories on:

an unusual endoxo structure . . . what the color-film processing fee buys . . .
a way to revise the phone book every night

Even Hippocrates knew

7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic Anhydride (Eastman 7126) is also known as norcantharidin because cantharidin can be formalistically regarded as derived from it by methylation.



This is idle theorizing about a compound which even Hippocrates knew as the virulent, vesicant essence of the blood of certain species of insects. Cantharides is one of the few drugs the old fellow mentions. Today it is little more than a pathetic but dangerous relic of the days of heroic medicine.

Cantharidin nobody can accuse us of selling, but for the benefit of any chemist fascinated by its strange oxygen bridge across the ring, there is now Eastman 7126 at \$2 a gram.

Eastman 7126 has some 3500 bed-fellows on our stock shelves, all available from Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company).

Colorful tale

Arranging for the processing of *Kodachrome* or *Kodacolor Film* is now a separate transaction from the purchase of the film. In the dicker with the dealer you can, if you wish, ask that he have us do the processing because we are still in the processing business. On the other hand, if you don't specify and he sends it to someone else who can process competently, that's all right, too. As long as the pictures turn out well, we'll be happy.

In the case of *Kodacolor*, we were able to do a little simplifying while changing over from the old processing-paid-in-advance film to the new processing-not-paid-in-advance

product. The new *Kodacolor Film* comes in just one type, good for both natural and artificial light. Balancing for one or the other is deferred until the negative is printed.

With *Kodachrome Film*, where you get no negative, the color balance has to be set in manufacture. The dyes you see in the resultant transparency are formed by the reaction of the oxidation products of three different developers with three different coupler compounds introduced during processing. These couplers themselves have no color.

Kodacolor Film comes with its couplers already present in the emulsion layers. It is processed to a negative with the familiar over-all orange hue.

(Why it's orange instead of just complementary to the original scene is quite simple. The orange comes from the fact that the unreacted coupler in one of the emulsion layers is itself yellow, and the unreacted coupler in another layer has a reddish cast of its own. The couplers should form dyes complementary to the colors recorded by their respective layers. However, the best of magenta dyes for the green-sensitive layer still absorbs some blue light, and this would upset the scheme. Therefore we use as our coupler for this layer a compound that in unreacted form absorbs just as much blue light as the unwanted blue absorption of the dye it forms. Then the difference in absorption between image and no-image in this layer will be right. Similarly, the unreacted coupler in the red-sensitive layer has a little blue- and green-absorption equivalent to the unwanted blue- and green-absorption of the cyan dye it forms.)

If several re-readings of that last paragraph leave it still tightly locked, get the Kodak Data Book "Color As Seen and Photographed," which is part of the Kodak Color Handbook, on sale by your Kodak dealer. It explains better, with diagrams. If all you want are nice color photographs, he can load you up right then and there with all the Kodacolor and Kodachrome Film you want to pay for.

Reviser



Here is one of the latest Kodak cameras, the *Kodak Listomatic Camera*. For the price of one of these, you could buy about 9,000 of our more popular Brownie Holiday Cameras, any one of which could take more interesting pictures. All you can do with this camera is to feed it stacks of punched cards, each bearing a few lines of type that constitute an entry for a big compilation like a directory or catalog. It zips through the cards at a great rate. Out comes film which turns directly into negatives for making printing plates for the pages of your book. All the entries are arranged in orderly, conventional type columns, as regular as in your phone book.

The speed is the thing. You could revise the phone book every night. This is more important to civilization than you might offhand think. Civilization and commerce lean heavily on various books of listings, most of which are out of date before they ever go on the press, simply because the casting of hot metal into the shape of letters takes time and costs money. Some day, because of this machine, it may even be fair to declare it a misdemeanor to possess a badly out-of-date compendium without an archivist's license.

Commercial Controls Corporation, Rochester 2, N. Y., can either sell you a Kodak Listomatic Camera or give your name as a potential customer to some printer who buys one and needs work to keep it busy.

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

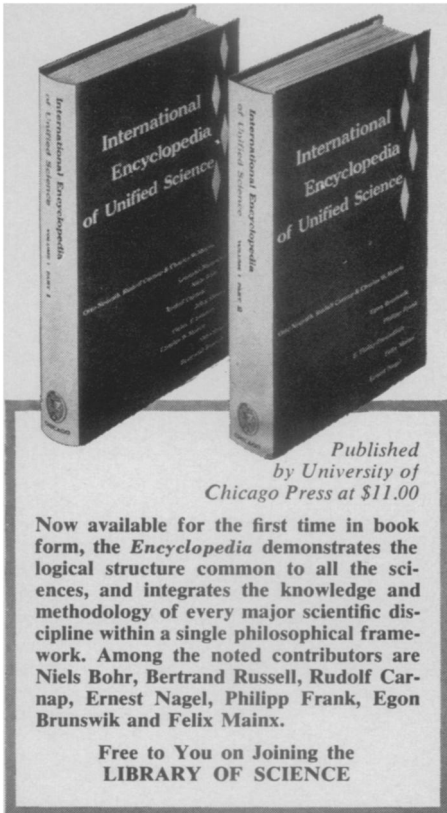
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