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WEEKLY SUMMARY OF CURRENT SCIENCE



Rare Swamp Monkeys See Page 40

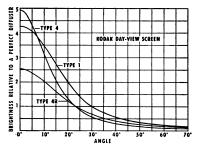
A SCIENCE SERVICE PUBLICATION

# Kodak reports to laboratories on:

special screens for rear projection . . . a roundup of materials for color photography . . . our ambitions in the organic chemical business

## Rear projection

Any intelligent schoolboy knows that to look at a projected real image up close without getting in the way of the beam you catch the image on a diffuser like a ground glass. As the schoolboy grows into an optical engineer, he learns that a) the better the diffusion the more light is likely to be wasted into space where there are no eyes to profit from it and b) ground glass really doesn't diffuse very well, being prone to a "hot" center and



dark corners for the image. As the engineer pursues the subject, he gets involved in the theory of field lenses, the light economy of high overall transmission, the contrast-enhancing value of light-absorbing material to counteract ambient illumination, the question of graininess, and the matter of over what angle the image is to be seen. Eventually he hears about Kodak Day-View Screens, a light-scattering dispersion in gelatin on glass.

Type I is white, of high transmission, with twice as much light transmitted at 30° as ground glass transmits. Type IV is rather black, which improves contrast substantially at high (but not at low) ambient levels. Type IVR is green, which is supposed to be more restful to the eyes in constant use. The curves above give brightness vs. angle on a scale where unity represents the reflectance of a perfect diffuser.

Looking at the curves may be of some help, but it's no substitute for actually trying the three types of screens in any application you may have in mind. If seriously interested, write Eastman Kodak Company, Special Products Sales Division, Rochester 4, N. Y.

### Color

A color photograph speaks more eloquently than one in black-and-white. Here, then, is a rundown of the products we offer for imparting this eloquence and the additional informational capacity it adds to photography.

Kodachrome Film everybody knows about. Comes in 16mm and 8mm for movie cameras and 35mm for still cameras. "You press the button, we do the rest"—our old slogan.

Kodacolor Film is for roll film cameras. We process to a negative without additional charge, and then from your Kodak dealer you order prints or enlargements. No projection, no holding up against the light.

Beyond these two that are familiar to millions of amateurs there is Kodak Ektachrome Film. It comes in roll and sheet film form, and you (or a local lab) convert it to a transparency. If you'd rather have a print to look at, we can make you a Kodachrome Enlargement, provided your original is 4" x 5" or less. If it's larger, we suggest a print by the Kodak Dye Transfer Process. This you can undertake yourself or leave to a commercial laboratory for a creation of smashing visual impact.

(If smashing visual impact is more important to you than strict objectivity, you can work the Kodak Flexichrome Process. This starts from any good black-and-white negative and allows you to assign the colors by hand.)

Finally, if you'll be wanting several duplicates at minimum cost, particularly of exhibition size and with the color brilliance so easily achieved in a transparency, make your original negative on Kodak Ektacolor Film and your duplicates on Kodak Ektacolor Print Film.

Your Kodak dealer sells all these items and also the Kodak Color Handbook (\$4) that delves deeply into the details. Write Eastman Kodak Company, Rochester 4, N. Y., if you have any difficulty finding out what you want to

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

### **Ambition**

Tie a pair of benzene rings together, replace one of the end hydrogen atoms with a fluorine atom, and what have you got? You've got a compound known as 4-Fluorobiphenyl, and what the use of it can be is a matter that, frankly, does not concern us much. Any singularly useful properties it may have are apparently not well known, for our inventory of the compound, pictured below in its entirety, seems to be well balanced to the world's present needs. It is a representative of our group of fluorinated aromatics-poor relations (so far) of the currently booming family of fluorinated aliphatics. It isn't that we bet on the wrong horse when we began making fluorobenzene and the three fluorotoluenes some 20 years ago. We don't figure that way. We do figure that here is one more group of organic compounds that an interested investigator, whenever he turns up, can count on us to have in stock for him. This



sounds incredibly public-spirited, but it just happens to be the nature of our Eastman Organic Chemicals business.

4-Fluorobiphenyl (Eastman 6170) is just one of many hundreds of such examples citable from the list of more than 3500 compounds in List No. 38 of Eastman Organic Chemicals. A copy (if you haven't one at hand) is available without charge from Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company).

