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November 10, 1956

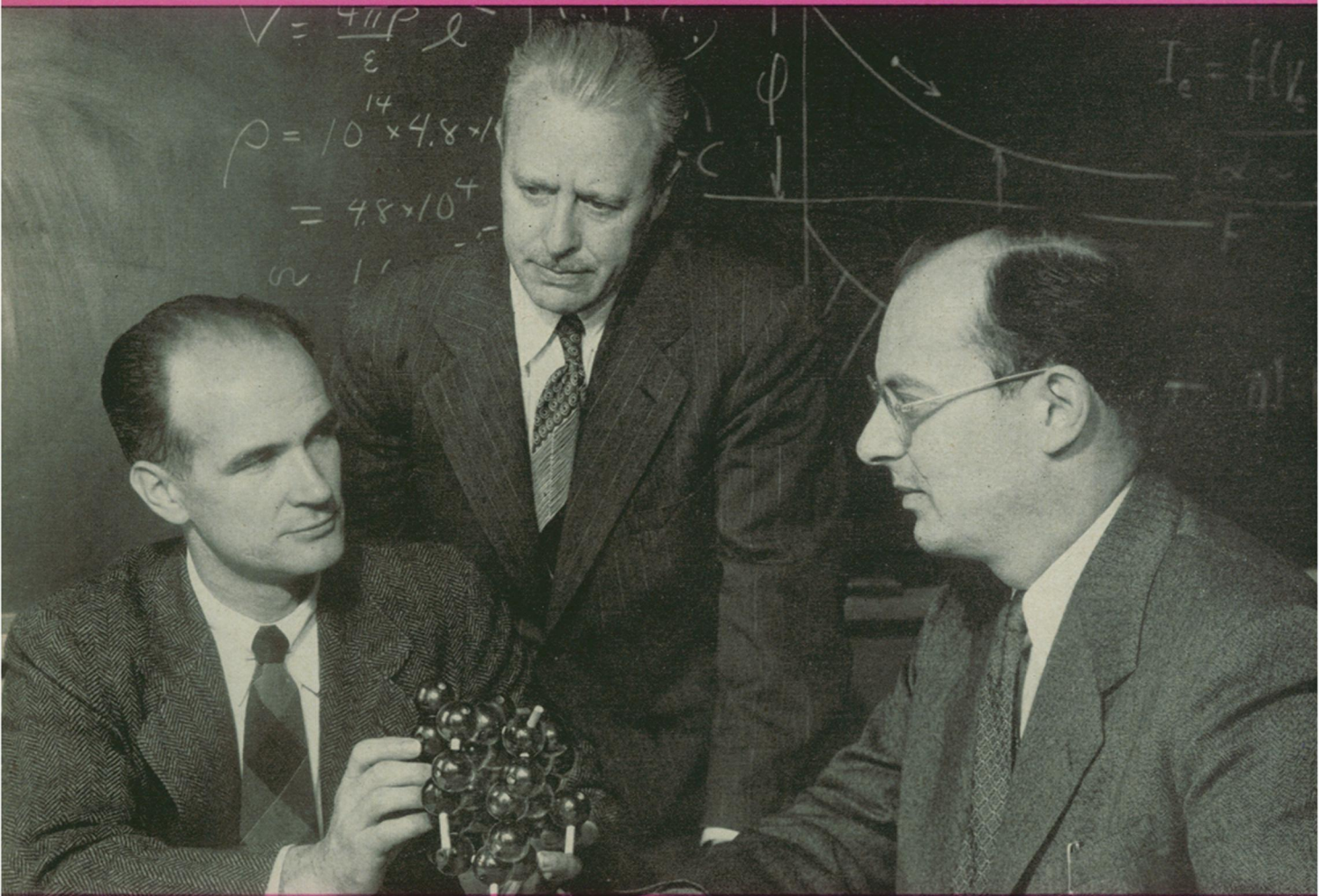
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PAGES 289-304

SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Physics Nobelists

See Page 291

A SCIENCE SERVICE PUBLICATION

Kodak reports to laboratories on:

how to draw a crowd into a tent . . . a material to coat a pattern on metal . . . a pair of replacements for the orchard grass around the old apple tree

Slowdown in color

In the heat of debate we once heard an advertising man cry out, "What's a product? Anybody can make a product. The real art is selling a product."

Though since moved on to fields where his artistry could more lushly flower, he wasn't entirely wrong, just too sweeping in his value judgements. In the market place—particularly in the industrial market place—many a wonderfully ingenious and efficient product of the engineering mind and hand fails to ring the bell as loud and clear as expected, simply because too few potential customers know how the thing works. One way to draw a crowd into the tent for educational purposes is to show them movies. Showmanship isn't all; some mechanisms can be seen at work in no other way than through movies which slow down the action fifty times or more. Sometimes recognition of this is all the showmanship needed.

There was a time when these high speed movies were used only for development and trouble-shooting. Long miles of high speed film still quite justify themselves in the form of black-and-white rush negatives shown once to taut little engineering groups, but more and more high speed shooting is done on *Kodachrome Film* and even on *Commercial Kodachrome Film*, which is chosen only with advance knowledge that numbers of full-color copies will be required for circulation.

"*High Speed Motion Pictures*," a new booklet obtainable from Eastman Kodak Company, Sensitized Goods Division, Rochester 4, N. Y., tells about the Kodak High Speed Camera and about the films spoiled for this kind of movie making.

Mr. Gabler beats the glue

You should see what a fine job Bob Gabler has been doing lately in converting the steel industry over to

Kodak Photo Resist. Who is Bob Gabler? A man we keep in Pittsburgh to help work out any photographic ideas that come up in the various industries there. What is *Kodak Photo Resist*? A liquid which quickly hardens to a tough, tenacious coating on metal, but only in areas where bright light has hit it before flushing with a certain solvent called *Kodak Photo Resist Developer*.

Before Mr. Gabler showed *Kodak Photo Resist* to the men who make the tensile measurements on sheet steel, they had mostly been using old-fashioned bichromated glue as the light-sensitive substance for photographically printing a measurement grid onto their samples before deformation. Bichromated glue is not nearly as light-sensitive as *Kodak Photo Resist*, but more annoying to the steel testers is its tendency to flake off in the test instead of stretching with the metal the way a grid pattern of *Kodak Photo Resist* does. Bob, of course, had no way of knowing in advance that *Kodak Photo Resist* would work out so well, since the product is one we thought we were making merely for photoengravers, photolithographers, and electronic-circuit printers. But when the steelmen called, he went in there pitching and everything turned out OK. That's what we pay him for.

If you have a problem for a Kodak Technical Representative like Bob Gabler or if you just want literature on Kodak Photo Resist, write Eastman Kodak Company, Graphic Reproduction Division, Rochester 4, N. Y.

Chicken economics

Even if your only relationship with chickens is to enjoy them fried or roasted, chicken economics is more interesting than you might think. No longer is the chicken the symbol of dietary luxury that it used to be when chickens lived on the crude scratch feed that the farmer's wife

threw them. Maybe the chicken is no healthier today than it was then, but the chicken business is healthier, and people can afford to eat its product on weekdays.

When the ratio of pounds of feed to pounds of marketable chicken is carried to two decimal places (as the ag schools do in teaching that new folkway, cost accounting), little room is left in the feed bag for certain protective substances that the chickens' free-running ancestors used to get from the orchard grass around the old apple tree. Such things the chemical industry now provides. Poets of pastoral bent may rankle, but certainly not the people who make the machines that cut the gears that go into the automatic transmissions that drive the station wagons that successful farmers now buy. And chicken sandwiches taste better than ever.

As part of the chemical industry, we not only make real vitamin E for feed manufacturers in a form more than 200 times as concentrated as found in dried orchard grass, but now we have launched *Tenox BHT, Agricultural Grade* to preserve and extend whatever vitamin A and vitamin E are already present in natural feed materials. This butylated hydroxytoluene has emerged victorious as a chemical anti-oxidant of unassailable safety even in human food. Now it is for the feedmen, the poultry growers, and their academic advisors to decide merely how much protection from what business risks is worth how much cash outlay.

Myvamax Vitamin E Feed Supplement, commercial data about it, and a spate of scientific literature are obtainable from Distillation Products Industries, Rochester 3, N. Y. (Division of Eastman Kodak Company). Tenox BHT, Agricultural Grade, in the form of free-flowing, non-dusting granules of a particle size to assure rapid, permanent blending is now on sale by Eastman Chemical Products, Inc., Kingsport, Tenn. (Subsidiary of Eastman Kodak Company).

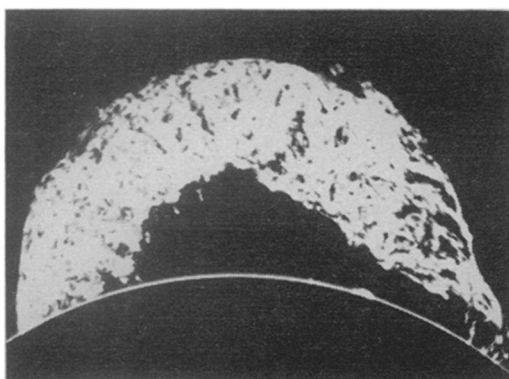
This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are . . . *servicing laboratories everywhere*

Kodak
TRADE MARK

ON TELEVISION

NOVEMBER 19

“Our Mr. Sun”



Pictures of natural phenomena figure prominently in “Our Mr. Sun,” like this High Altitude Observatory movie of an explosion on the sun.

*The first in a series
of TV shows about science,
sponsored by the*

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Presenting scientific information with the drama, excitement and humor of popular entertainment.

The science programs have been in preparation for several years under the guidance of a distinguished scientific advisory group. They are a serious attempt to bring to the public an understanding of the meaning of science and the work of scientists, showing their part in modern life and culture and helping to inspire interest in science among young persons.

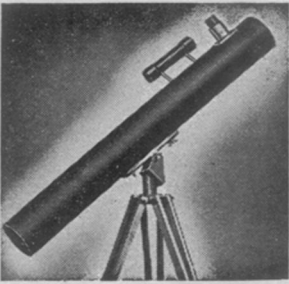
“Our Mr. Sun” is a full-hour film in color, deals with solar physics, solar astronomy and the uses of solar energy. Its accuracy and authenticity are assured by a panel of the world’s leading scientists in solar studies, including Dr. Farrington Daniels, Dr. Armin Deutsch, Dr. Donald Menzel, Dr. Walter Orr Roberts and Dr. Otto Struve. Produced and directed by the Academy Award-winning director Frank Capra; animated drawings by UPA Pictures, Inc.

*Tune in this special science telecast on the **CBS-TV Network, 10 to 11 P.M., E.S.T.,
November 19, 1956.** Check local listings for time and station.*

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How to Condense and Project Light with Lenses	9044-Q	75¢
Reticles and Their Uses	9039-Q	45¢
ULTRA CLOSE-UP Photography	9042-Q	60¢
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Questions

ANIMAL PHYSIOLOGY—How does a dog's heart react to sight of an empty plate? p. 296.

□ □ □

CARDIOLOGY—What improvement has been made in obtaining records of the heart's current? p. 292.

□ □ □

ENDOCRINOLOGY—How early can pregnancy now be diagnosed? p. 295.

□ □ □

GEOPHYSICS—What is the "dawn chorus"? p. 292.

□ □ □

PHYSICS—Of what components may low temperature "brains" be built? p. 293.

□ □ □

PUBLIC HEALTH—What new weapon may be used to fight tropical dysentery? p. 296.

□ □ □

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Do You Know?

Human *milk* contains four to five times as much enzyme activity as cow's milk, which may make the milk proteins more nutritionally usable.

A new type of *X-ray equipment* permits a physician or hospital to offer virtually complete diagnostic medical X-ray service with an investment of less than \$5,000.

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