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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



"Diagnostic Test"

See Page 195

A SCIENCE SERVICE PUBLICATION

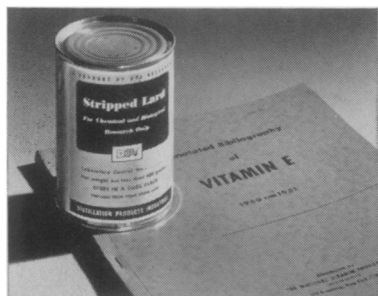
Kodak reports to laboratories on:

**Stripped lard and vitamin E . . . teaming x-rays with the microscope . . .
a new approach to an old printing process**

Vitamin E

The strange lard which we put up in the can below has absolutely no future in the supermarkets. The only sales point in its favor is the fact that it does *not* contain a certain wholesome food ingredient. The missing ingredient is vitamin E, and its removal to less than 5 micrograms per gram of fat (accomplished by molecular distillation, a specialty of the house) is a service we perform for those who want to see what happens to creatures kept alive without vitamin E.

It so happens that we are major producers of vitamin E (obtained not from lard but from vegetable oils) for the pharmaceutical and feed industries, and thus find ourselves in the unusual position of



trafficking both in a commodity and in the absence of that same commodity. The latter, of course, is small business, but there is a good deal of research going on about vitamin E. Over 600 scientific papers on work in this field during 1950 and 1951 are summarized in a bibliography recently compiled in our laboratories.

Volume II, Annotated Bibliography of Vitamin E, 1950 and 1951, is available from *The National Vitamin Foundation, Inc., 150 Broadway, New York 7, N. Y.*

A hermetically sealed tin containing 400 grams of stripped lard is available at \$2 from *Distillation Products Industries, Rochester 3, N. Y.* (Division of Eastman Kodak Company).



Microradiography

Of the total film acreage that we produce for the finding of voids, fractures, porosities, inclusions, and other defects in man, metal, and beast, an infinitesimal fraction is used in the sub-technique of microradiography. This is in effect two-stage x-ray photomicrography: a film or plate of high resolution is exposed to x-rays through a thin specimen section and then an optical enlargement is made of the resultant radiographic image. Thus by differential x-ray absorption is revealed the distribution of various elements in the microstructure of the specimen. For accurate identification, it is helpful to employ the line-emission from the tube target, but it is not convenient to keep changing targets in order to find the sets of line-emissions desired. Furthermore the continuous spectrum plays a distracting *obligato* to the nice, clear-cut relations of *K*-emissions and absorptions.

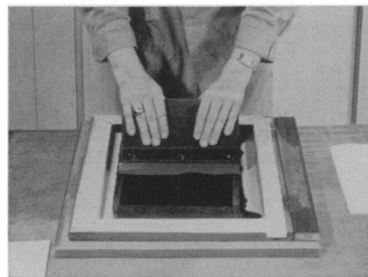
Unworried by the knowledge of how little the consumption of materials for microradiography contributes to their salaries, a few of our research people have been attacking this problem and have just put out a paper that tells how to use a variety of dependably homogeneous *K*-radiations from interchangeable x-ray fluorescence targets that you can put in an attachment for your low voltage x-ray tube.

Anyone who wants to make one like it can get a reprint from us of the paper, "Application of Fluorescence X-rays to Metallurgical Microradiography." Write X-ray Division, Eastman Kodak Company, Rochester 4, N. Y.

Silk screen

Should you want to reproduce just about any kind of pattern in just about any kind of medium on just

about any kind or shape of surface, you ought to look into the new Kodak Ektagraph Process. You start with an image on film or plate and some 20 minutes later Copy No. 1 is ready to dry. Your total outlay



for all the equipment and supplies for a uniquely versatile printing plant that you can store in a desk drawer needn't exceed the cost of a decent pair of shoes. This represents our contribution to silk screen printing, one of the oldest forms of the art of printing, wherein the material which serves as the ink is squeezed through permeable areas in a silk screen. Specifically, our contribution is a film that can be handled by incandescent room light and incorporates its own tanning developer. After exposure and immersion in the processing solutions, the unexposed gelatin washes away in warm water, the film is placed face down and dried on the silk screen, the film base is peeled off, and the gelatin pattern dries down to block off the desired interstices in the screen. Then you're ready to print a complex circuit in silver paste, an instrument dial, an illustration for a monograph, or a portrait of an ancestor on a shaving mug. Preserves fine detail, too.

Kodak Ektagraph Film is sold by Kodak Graphic Arts dealers, and full information about it is available from Eastman Kodak Company, Graphic Arts Division, Rochester 4, N. Y.

**This is one of a series of reports on the many products
and services with which the Eastman Kodak Company and
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