# SCIENCE NEWS LETTER





THE WEEKLY SUMMARY OF CURRENT SCIENCE



Niagara Underground

A SCIENCE SERVICE PUBLICATION

# Kodak reports to laboratories on:

a new inexpensive team to take and show 8mm movies...our recent contribution to the improvement of bread...our answer to those who request extra-sensitive film or plates

#### **Brownie team**

You're either very old or you led a particularly austere youth if "Brownie Camera" doesn't recall



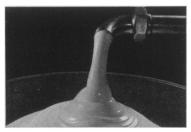
age 12 and your first serious experiences in photography. The trademark "Brownie," one of our most treasured assets, is now applied in the same old spirit to our simplest 8mm movie camera and projector. They're not primarily offered as scientific instruments, but the following considerations may suggest a visit to the nearest Kodak dealer: a) in many kinds of field work there are occasions and moments when even a very inexpensive movie camera is worth a great deal; b) the Brownie Movie Camera sells for only \$39.75, the Brownie Movie Projector for only \$62.50; c) just because a piece of equipment has potential professional value, it's no sin to have a little fun with it once in a while.

#### Bread

Ever since the first neolithic house-wife baked the first loaf of short-ening-bearing bread, substances known as monoglycerides have been formed by the splitting of fats in the baking process. Your own digestive system carries this splitting even farther, since it converts 30 or 40 per cent of any fat you eat into monoglycerides.

The interesting thing is that if before you bake a loaf of bread you add about 1/40 of an ounce of pure

monoglycerides to the shortening that goes into it, you significantly improve the tenderness, texture, volume, and crumb structure of the product. Monoglycerides have been manufactured for this purpose for some years, but they have really come into their own only recently when our high vacuum stills began concentrating them from reaction mixtures which previously constituted the only available commercial form of monoglycerides. Now the shortening for several of the best known bread brands in the land is enhanced with our new Myvatex Food Emulsifier—a 50-50 mixture of our distilled monoglycerides with prime lard. It would have been hard to predict this as the culmination of certain experiments in producing high vacuum undertaken years ago to solve a minor problem of the photographic film business.



Myvatex Food Emulsifier looks like this. If you happen to be in the baking business and are looking about for an emulsifier permitted under the new Federal Bread Standard, by all means send for a sample and technical data from Distillation Products Industries, Rochester 3, N. Y. (Division of Eastman Kodak Company).

#### Sensitivity

Currently, Kodak Tri-X Panchromatic Film is our "fastest" regular product. Excellent stuff it is too, with an Exposure Index of 160, beautiful tone characteristics, and very little granularity for all that speed. It has the important virtue, also, of quick availability from the shelves of any dealer who carries a general line of Kodak products.

Now, what if *Tri-X Pan Film* still isn't sensitive enough for some extraordinary problem that confronts you?

We have two different answers, depending on whether the exposure is 1) taking too many hours or 2) too many seconds, milliseconds, or microseconds. For Case 1, there are Kodak Spectroscopic Plates and Films of Type 103a. For Case 2, we take Type I emulsion and give it Class D sensitization, which extends in strength from 4600 A to 6200 A. Case 1 is chiefly of interest to astronomers, who know all about it. Case 2 occurs more frequently. If it has come up in your laboratory, if you can wait until our Research Laboratories can coat Type I-D emulsion on plates or film for you, and if you are willing to put up with a little less uniformity, and a little poorer pictorial quality and granularity than Tri-X Pan provides, we can give you approximately a 3 to 1 advantage in sensitivity over the latter product under comparable conditions. Better check first, though, to make sure there isn't some way you can use Tri-X Pan Film.

You can order Type I-D plates and films through your Kodak Industrial Dealer. (Address on request from Eastman Kodak Company, Industrial Photographic Division, Rochester 4, N. Y.) We'll even be glad to coat the emulsion for you on 16mm and 35mm movie film, but we'll have to ask you to take at least 10 100-foot rolls of the 16mm or 5 of the 35mm. The 16mm is priced at \$4.98 per roll, and the 35mm at \$8.25 per roll, both on daylight-loading flanged spools. On cores for darkroom loading, they are priced at \$4.37 and \$7.50, respectively.

Prices include Federal Tax where applicable and are 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

# Books Worth While Reading

SCIENCE SERVICE PUBLICATIONS

August Offer Saves 40 %: Complete Set of 10 Items—Only \$7.75

#### 1 ATOMIC FACTS

Just the information about atomic energy that you need to know. Easy to read chapters and fundamental information arranged for easy reference. The H-Bomb ... Our Atomic Future ... Structure of the Atom ... How Atomic Bombardment Works ... Birth of Matter ... Neutron-Proton Exchange ... Mesons Created in the Cyclotron ... The Atomic Nucleus ... Electron Shells ... Units of Mass, Charge and Energy ... Atomic Energy Common, Fire Rare ... Atomic Energy Progress ... Atomic Energy Engineering ... Uranium Prospecting ... Radioactive Wastes ... Acute Radiation Illness ... Isotopes Report Reactions ... Photographing Nuclear Particles ... Radiation Detection Instruments ... In Case of Disaster ... Naming the Isotopes ... First Tracer Chemistry ... Prediction of the Neutron ... The First Tritium ... Slow Neutron Bombardment. Fully indexed, cloth bound.

#### 2 CHEMISTRY SHOW BOOK

For youth who want to conduct experiments, build exhibits and present entertainments upon a chemical theme, this is the book. Three chemical plays are included that can be staged by any group. How to produce chemical surprises. All about fireworks and colored flames. Experiments for the home laboratory explained in simple directions. How to put on a show and demonstrate before an audience. How to make a speech about chemistry. Photography and photographic displays. Chemical quiz corner with answers. Fully indexed, cloth bound. Postpaid \$2.00

#### 3 EXHIBIT TECHNIQUES BOOK

When it is time to show off a science project in science fair or exhibition, the ideas, hints and experience packed into this comprehensive volume will prove invaluable. Many exhibits that have won prizes are pictured in photographs and diagrams as helpful suggestions that can help your own original planning and thinking. What to guard against in laying out your material. How to label, letter and display. Ideas from professional museum preparators. Simple experiments that will be models for those that you will incorporate in your project. How to build a diorama, revolving platform, changing lighting, make models, etc. Index that allows you to find what you want to know. Fully indexed, cloth bound.

Postpaid \$2.00

#### 4 THE CHEMICAL ELEMENTS

Their properties, sources, most important isotopes, characteristic compounds, places in the periodic table and the qualitative analysis scheme, and the histories of their discoveries, all brought together in a compact handbook. Fully indexed, cloth bound.

Postpaid \$2.00

#### 5 THE CHEMISTRY WE USE

A compilation of "Home Lab" experiments, a monthly feature of CHEMISTRY magazine. Written by Burton L. Hawk . . . and designed for a simple but adequate home laboratory in which real chemical preparations can be made . . . The World We Live In, The Air We Breathe, The Water We Drink, The Food We Eat, The Clothing We Wear, The Coins We Spend, The Drugs We Take, Lesser-Known Elements We Study, Other Materials We Use . . . A Practical Introduction to the Chemistry of Everyday Things. Fully indexed, cloth bound. Postpaid \$2.00

### USE OF TOOLS and FUNDAMENTALS OF MECHANICS

Two cloth-bound books that will help anyone in repairs around the house, shop or laboratory. How to use tools for measurement, woodworking, painting, metalworking, soldering, wire splicing. Basic principles and fundamentals to help you understand and operate machinery. Photographs by Fremont Davis, text by Marjorie Van de Water and Morton C. Mott-Smith, Science Service staff. Phototold in over 600 vivid photographs. Original price \$5.00, special combination price—

Postpaid \$1.98

#### 7 ATOMIC BOMB FIRST AID

Just what you need to know about what to do if an atomic bomb strikes. Over 7,000 copies of this fully illustrated booklet have been purchased by hospitals, civil defense organizations, clubs, etc. By Jane Stafford, Science Service medical writer. Revised edition includes new material. Contents: If atom bomb hits . . . check bleeding first . . . new hope for the burned . . . shock and broken bones . . . aid for suffocation victims . . . treatment of the injured. Postpaid 8 for \$1, 100 for \$7.50.

## 8 FROM NOW ON, The Next Fifty Years in Science

Provocative appraisals by Watson Davis, director of Science Service. Twenty appraisals in handsome portfolio form: Food, energy, the earth, chronic ills, ray study, fuels, polio, elements, galaxies, food race, viruses, new foods, publication, antibiotics, weather, talents, oldsters, radiation, silicon, the atom. Postpaid 3 copies for \$1.

#### 9 LAWS OF MATTER UP-TO-DATE

A compilation of 74 informational paragraphs and statements, as affected by atomic advances. By Helen M. Davis, editor of CHEMISTRY magazine. Postpaid 100 copies for \$3. Each 10c

#### 10 PERIODIC TABLE OF ELEMENTS

Both the Mendeleeff and Bohr arrangements, with all 98 elements included. An up-to-date chart of the chemical elements by groups and series including spaces for probable new elements. Postpaid 10 copies for \$1.

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