

Business Newsletter . . .

Ammonia in Canada

Minor ammonia race seems to be developing in Canada. **Three projected ammonia plants** have been announced in the past few weeks and a fourth is now in final planning stages. Latest entry, Canadian Industries Ltd., is seeking construction bids for a 30-35,000-ton-per-year plant near Kingston, Ont. CIL plans to use low grade petroleum fuel oil as basic raw material. Location on Lake Ontario provides facilities for **Great Lakes transportation** of raw materials and finished products.

And More Ammonia in Canada

Dow Chemical of Canada is expanding its ammonia production at Sarnia, Ont. Completion in April will give total capacity of 80 tons per day. **Other Canadians planning ammonia plants** include: Quebec Ammonia Ltd., 125 tons per day near Sorel, Que., cost \$7.5 million; Northwest Nitro-Chemicals Etzikon, Alberta, \$20 million; Canadian Hydrocarbons, Winnipeg, 80 tons per day for 600-ton-per-day fertilizer plant, cost \$1.5 million.

Ike Supports Benson on Supports

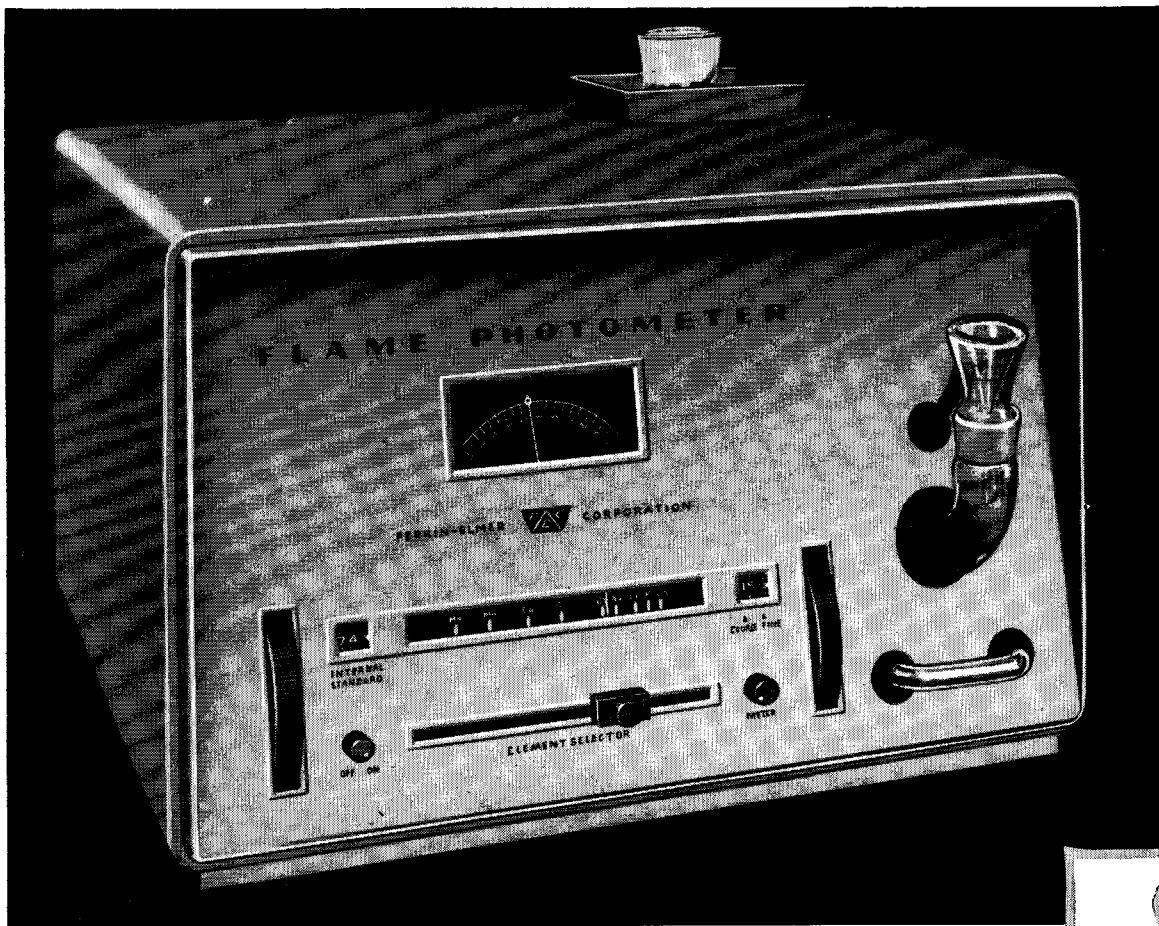
With net farm income for 1954 down 10% the battle over rigid (90% of parity) supports in Congress may be tough. Secretary Benson has restated his **firm opposition to rigid supports**, says they only build up surpluses. President Eisenhower is understood to have assured Benson that **he will personally intervene**, if necessary, to prevent Congress from restoring the rigid support program.

Big Spending for Dairy Legislation

A dairy lobby was the big spender during the **1954 Congressional session** according to the report of lobbyists' expenses from the House Clerk. National Milk Producers Federation spent **more than \$180,000**, other groups swelling the ranks of the farm lobby included: American Farm Bureau, \$83,000; National Farmer's Union, \$70,000. Milk Producers spent more than three times as much as the American Legion (\$60,000).

Spotlight

- Seasonal buying has come back full force to plague the fertilizer industry. Various producers are trying different plans to stimulate fall buying (p. 284)
- What's stirring in potash? Why the recent announcements of new mining companies moving into Carlsbad (p. 288)?
- Business may be better for pesticides producers, but their business practices need improvement (p. 289)
- British Chemical manufacturers are moving into world markets with pesticides in a big way; principal exports are to Commonwealth, but South American markets are being opened up (p. 289)
- No food additives legislation before Congress representing chemical industry viewpoint; bills offered advocate increasing FDA powers (p. 292)



A New Flame Photometer designed for the people who will use it

- as fast as 50 seconds per analysis
- as accurate as $\pm 1\%$
- as dependable as Perkin-Elmer can make it (leader in the field for 10 years—with 1000 proved instruments)
- as simple as dialing a phone

Perkin-Elmer's new MODEL 146 FLAME PHOTOMETER has been functionally designed to give *performance with convenience*. All controls are grouped at the operator's fingertips. Easy-to-read numerical counters replace vernier dials. Drift-free, vibration-proof electronics give maximum sensitivity and stability. Any gas: natural, city, propane, or acetylene may be used.

A prism monochromator permits (1) analysis of *any* element emitting in the visible, (2) high discrimination, (3) rapid selection.

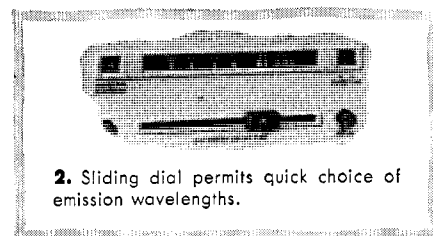
The MODEL 146 FLAME PHOTOMETER with its attractive, colorful design, its assured performance characteristics—is a valuable addition to any laboratory.

THE PERKIN-ELMER CORPORATION
NORWALK • CONNECTICUT

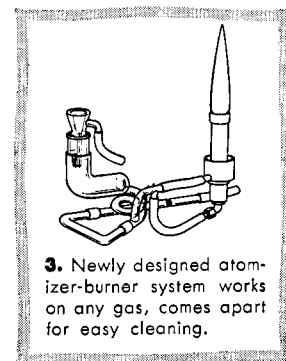
Offices In: Chicago, New Orleans, Silver Spring, Md.



1. Thumb-operated wheels give fast, sure control for internal standard measurements; numerical counters permit instant readings.



2. Sliding dial permits quick choice of emission wavelengths.



3. Newly designed atomizer-burner system works on any gas, comes apart for easy cleaning.

Research Newsletter . . .

Ethylene Oxide Impairs Diets

Researchers at the National Institutes of Health report that treating rat diets with ethylene oxide seriously impairs nutritional qualities. A report in *Science* says that treatment with **ethylene oxide** destroys thiamine and possibly other factors **in stock** diets. **Supplementation** with vitamin mixtures does not restore growth. NIH researchers suggest that proposed sterilization of foods with ethylene oxide be held up until effects of treatment can be more fully established.

Amino Acids in U. S. Diet

A statement in *Ag and Food Research Newsletter* March 1955, said "A shortage of cystine and tyrosine in all foods" was indicated in a National Research Council report. It should have read "**A shortage of analytical values for cystine and tyrosine** in all foods. . ." A later statement should have read ". . . a shortage of analytical values for all amino acids . . ." exists for flour, cereal, and other foods. The Food and Nutrition Board of NRC stated that with the quantity and quality of protein available in the U. S. there appears to be **no need for amino acid supplementation of foods** in this country, although more data are needed.

First Tolerance

FDA has established **first tolerance for pesticide residues** in food under provisions of the Miller Amendment, passed July 1954. Tolerances have been established for residues of SES (2,4-dichlorophenoxyethyl sulfate) weed killer. Six parts per million will be allowed on potatoes or peanuts, 2 p.p.m. on asparagus and strawberries.

Fruit Juice Superconcentrate

A fruit juice superconcentrate, developed by USDA, can be **stored without freezing or refrigeration**. The 7-fold superconcentrates of grape and apple juice may soon be on the market, can be maintained in satisfactory condition for a year at ordinary room temperatures. Secret of the excellent flavor and storage behavior is hot packing of concentrate, at 180° F.

Spotlight

- A review of the mechanism of action of the organic phosphate insecticides indicates that they do not constitute a residue hazard observed conditions of use (p. 312)
- DDVP, new organic phosphate insecticide, was first isolated as an impurity in technical grade Systox; DDVP is equal to parathion in housefly toxicity but less toxic to rats (p. 319)
- Relatively large amounts of DDT accumulating in soils where crops have been treated with this material may become a problem (p. 322)
- Familiarity with a pattern of smog injury makes it possible to establish by visual inspection whether or not plant injury is due to smog (p. 330)
- Studies on the composition of sugar beets and their processing liquors offer significant opportunities for increasing the efficiency of sugar beet processing (p. 346)