

SCIENCE

4 September 1959

Volume 130, Number 3375

Editorial	Money Still Isn't Everything	533
Articles	Redistribution of Wealth through Inflation: <i>A. A. Alchian</i> and <i>R. A. Kessel</i>	535
	Contrary to the generally accepted view, business firms do not necessarily gain through inflation.	
	Freedom in Research: <i>J. R. Pierce</i>	540
	Like food, we should have it in sufficient measure, but we should not need to assure ourselves by gluttony.	
	Stratospheric Carbon-14, Carbon Dioxide, and Tritium: <i>F. Hagemann</i> et al.	542
	The program of high-altitude balloon sampling reveals new information about the stratosphere.	
News of Science	Congress Studies Research Programs To Develop Industrial Uses for Agricultural Products	553
Book Reviews	R. Aron's <i>On War</i> , reviewed by <i>W. T. R. Fox</i> ; other reviews	559
Reports	Fossil <i>Canis</i> from the Tar Pits of La Brea, Peru: <i>C. S. Churcher</i>	564
	Effect of Anxiety on the Akerfeldt Test: <i>H. Persky</i> and <i>H. J. Grosz</i>	565
	Hybridization of <i>Salmonella</i> Species by Mating with <i>Escherichia coli</i> : <i>L. S. Baron, W. M. Spilman, W. F. Carey</i>	566
	Radiation-Induced Crystallization of Sucrose: <i>G. Susich, A. O. King, L. M. Dogliotti</i>	567
	Photosensitive Site in Lettuce Seeds: <i>H. Ikuma</i> and <i>K. V. Thimann</i>	568
	Magnitude of the Moon Illusion as a Function of the Age of the Observer: <i>H. Leibowitz</i> and <i>T. Hartman</i>	569
	Self-Regulation of Brain-Stimulating Current Intensity in the Rat: <i>L. Stein</i> and <i>O. S. Ray</i>	570
	Simple Method for Determining Potential Evapotranspiration from Temperature Data: <i>L. R. Holdridge</i>	572
	Decrease in Threshold without Depolarization in Cyanide-Treated Muscle: <i>R. Guttman</i> and <i>S. M. Ross</i>	572
Departments	Meeting Notes; Forthcoming Events; New Products	574



NOW!

*AUTOMATIC Spectrophotometric
and Electrometric Titrations with the*

NEW

**SARGENT-MALMSTADT
AUTOMATIC
SPECTRO-ELECTRO
TITRATOR**

Designed and manufactured by
E. H. SARGENT & CO.
Patents Pending

S-29700 Spectro-Electrometric Titration Apparatus—Model SE, SARGENT-MALMSTADT . . . \$690.00

For SPECTROPHOTOMETRIC TITRATIONS

Provides direct automation of most titrations now being performed which inherently or in conjunction with an indicator provide a spectrophotometric end point. These include acid-base, oxidation-reduction, complex formation and some precipitation reactions, indicators being available for most of the titrations currently performed by manual methods.

For ELECTROMETRIC TITRATIONS

Provides facilities to perform automatic derivative potentiometric titrations as performed by the S-29690 SARGENT-MALMSTADT automatic potentiometric titrator. Provision is made for the convenient connection of simple circuits for constant current potentiometric, "polarized electrode" and similar titrations.

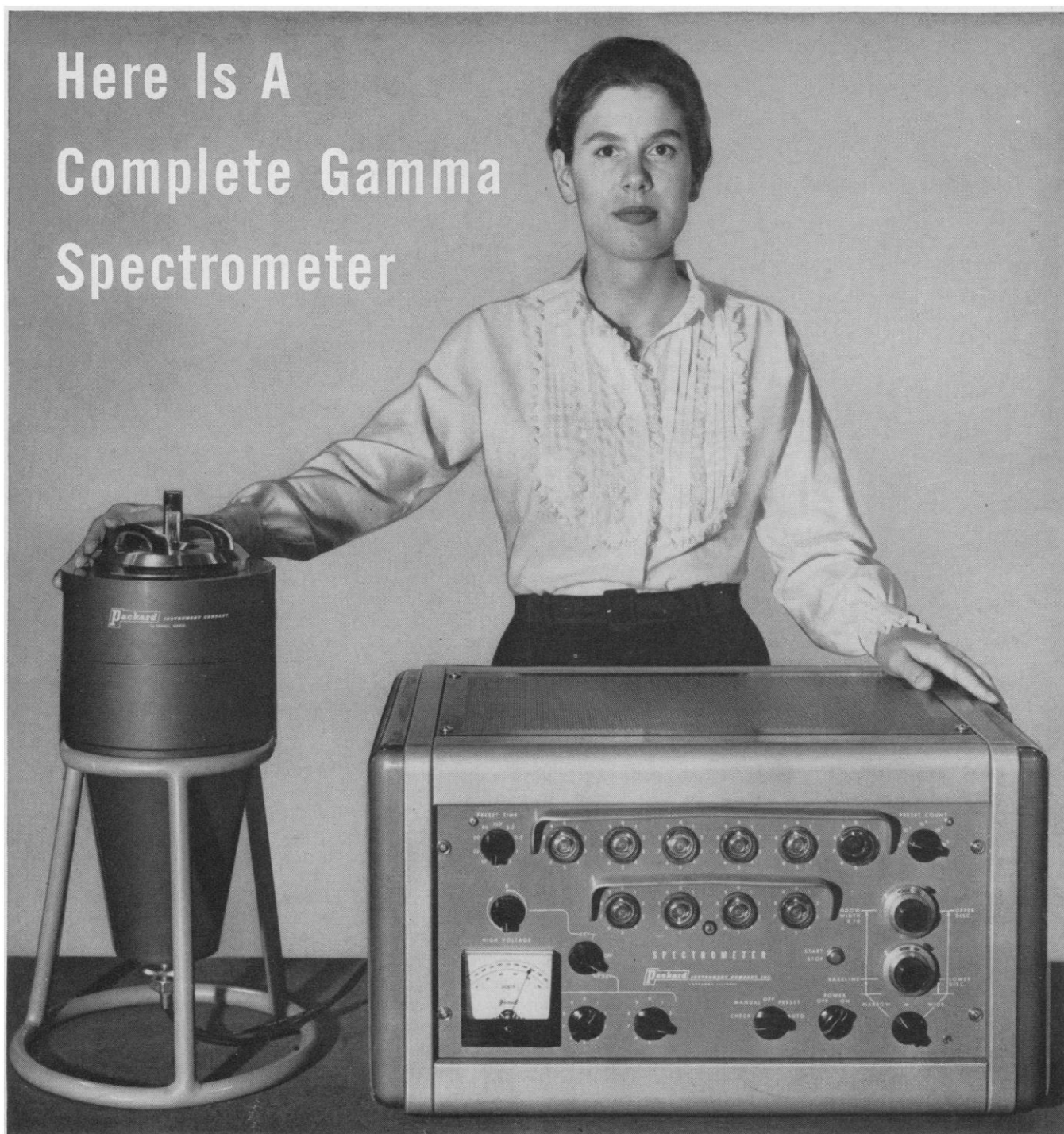
For complete information contact your nearest Sargent Division or write: Dept. SE, Chicago, Illinois

SARGENT

SCIENTIFIC LABORATORY INSTRUMENTS • APPARATUS • SUPPLIES • CHEMICALS

E. H. SARGENT & COMPANY, 4647 W. FOSTER, CHICAGO 30, ILLINOIS
DETROIT 4, MICH. • DALLAS 35, TEXAS • BIRMINGHAM 4, ALA. • SPRINGFIELD, N. J.

Here Is A Complete Gamma Spectrometer



This transistorized spectrometer is by far the smallest and most compact available—yet it has more important and unique features than any other on the market today. Furthermore, it can be used directly with the Packard Auto-Gamma Sample Changer for completely automatic counting of test tube samples.

Write for Complete Information. Request Bulletin 400.

Packard Instrument Company, Inc.
DEPT. A • P. O. BOX 428 • LA GRANGE, ILLINOIS
SAN FRANCISCO • CHICAGO • NEW YORK

Meetings

Nuclear Fuels

The U.S. Atomic Energy Commission, in cooperation with AEC contractors, will sponsor a 2-day symposium for management and technical personnel on the reprocessing of nuclear fuels, in Richland, Washington, 20-21 October. The symposium is designed to renew the technology currently available for reprocessing spent fuels from research, test, and power reactors. The Atomic

Energy Commission plans to reprocess in existing AEC facilities spent fuels from civilian reactors until such service is available from private industry.

The symposium will be open to private reactor operators, fuel fabricators, AEC and AEC-contractor personnel, foreign visitors, and certain other management and technical personnel. Management and technical personnel wishing to attend the meeting may obtain details from the program coordinator, Mr. J. T. Christy, Hanford Operations Office, U.S. Atomic Energy Commission, Richland, Wash.

International Conservation

The seventh general assembly and technical sessions of the International Union for Conservation of Nature and Natural Resources will be held in Warsaw, Poland, 14-24 June 1960, with field trips both during and after the assembly. The Polish Government promises excellent arrangements. The program will include an introductory session on "The Impact of Man and Modern Technology on Nature and Natural Resources." Pesticide problems will be considered in sessions under the title "Ecological Effects of the Biological and Chemical Control of Undesirable Plants and Animals," and there will also be papers on "Management of Wild Grazing Animals in Temperate Zones and Its Relation to Land Use."

Those wishing to receive detailed announcements of the Warsaw meeting may write to the Secretary-General, IUCN, 31 rue Vautier, Brussels, Belgium. Correspondence may also be directed to either of the two U.S. members of the executive board of the union—Harold J. Coolidge, National Research Council, Washington, D.C., and Edward H. Graham, Soil Conservation Service, Washington, D.C.

Animal Care Panel

The 10th annual meeting of the Animal Care Panel will be held at the Sheraton Park Hotel, Washington, D.C., 29-31 October. Some 500 research workers interested in the care of laboratory animals are expected to attend. Programs and information may be obtained from Mr. Burton Hill, Animal Care Panel, NAS-NRC, 2101 Constitution Ave, NW, Washington 25, D.C., who is in charge of advanced registration. The price of the hotel rooms will be \$9 single and \$15 double.

Many movies about laboratory animal care have been filmed in the last few years. A number of these movies have been selected by the Program Committee and they will be shown continuously each day in the area adjoining the exhibit hall. The formal program will consist of six sessions of four papers each. There will be about 70 commercial exhibits and a large number of scientific exhibits.

Logic, Methodology, and Philosophy

An International Congress for Logic, Methodology and Philosophy of Science will be held at Stanford University from 24 August to 2 September 1960 under the auspices of the International Union for History and Philosophy of Science.

ONE SOURCE for ALL

CHROMATOGRAPHIC MATERIALS

- Ready to Use
- In Convenient Quantities
- Performance Tested and Standardized

FROM the LARGEST MANUFACTURER in the Chromatography Field

FOR THE PAPER CHROMATOGRAPHER

Filter Papers —

Major brands in sheets and strips to suit your needs.
Qualitative, acid washed, and hardened grades, in wide range of flow rates.
Specify properties you need. We will help select the paper.

Impregnated Papers

Dyes, Reagents, Sprays, Solvents

FOR THE COLUMN CHROMATOGRAPHER

Active solid materials —

Silicic acid graded by method of Hirsch
Magnesiated silicas by method of Walling, strong surface activity
Aluminum oxides, activity grade 1 by Brockmann and Schodder analysis;
other grades on request
Silica gels — narrow mesh ranges, 30-40, 40-50, 50-60, 60-80, 80-100, 100-200
Molecular sieves — narrow mesh ranges from 1/8" pellets to finer than 100 mesh.
— Pore sizes to 13 Angstroms

FOR THE GAS CHROMATOGRAPHER

POLY-ETHYLENE-GLYCOL-SUCCINATE

Only compound to resolve completely the methyl esters
of unsaturated fatty acids.

Controlled cross linking for high temperature applications.
Available in liquid form or coated on Celite 545, 60-80, and 80-100 mesh.

Column Packing Materials — (a few examples of the many materials available)

Diatomaceous silicas washed to high purity, screened to narrow mesh ranges
Liquids specially processed for chromatography

Polyethylene glycols, phthalate esters, silicones
Triphenyl methane, hexadecane for hydrocarbon studies
Adipate esters, apiezones for high boiling alcohols & esters

Prepared column packing materials

All above liquids available impregnated on suitable inert carrier.
Over 500 combinations of immobile phase liquid and solid support in
5 mesh ranges.

"SAVE YOUR TIME FOR RESEARCH"

- Single Source Supply
- Custom Preparation

WRITE TO
DEPARTMENT A
FOR LITERATURE



RESEARCH SPECIALTIES CO.

200 SOUTH GARRARD BLVD.

RICHMOND, CALIFORNIA



**A TIME TAPE
or LABEL**
eliminates contact
... the major cause
of contracting
STAPH!

Be SAFE . . . be SURE, always use TIME TAPE or LABELS — the safest, fastest and most modern labeling procedure ever developed. They are pressure-sensitive and resist heat, cold and moisture. They require no wetting or licking to use. Simply apply and press on!

Complete labeling procedures available for every department in the hospital. Protect patient and personnel with TIME TAPES and LABELS!

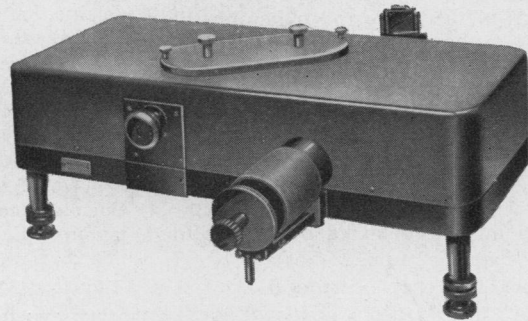
You are under no obligation to learn how you can eliminate contact and cross-infection. Simply write for complete information . . . today!
Dept. 59L

PROFESSIONAL TAPE CO., INC.
355 BURLINGTON RD. • RIVERSIDE, ILL.



LEISS

Single and Double MIRROR-MONOCHROMATORS



with exchangeable prisms for the
visible, ultraviolet, infrared from
200 millimicrons to 20 microns

Write for Bulletin #980 to

PHOTOVOLT CORP.
95 Madison Ave. New York 16, N.Y.



SCIENTISTS and ENGINEERS **GOVERNMENT and NON-GOVERNMENT**

SAVE UP TO \$30 OF EVERY \$100

THAT YOU SPEND ON Auto Insurance

IMPORTANT NEWS FROM GEICO

If you are in Non-Government employment in a technical or professional capacity, you are now entitled to the same guaranteed savings on auto insurance that government employees have enjoyed for 22 years.

Standard Family Policy. You get the Standard Family Auto Policy, the same policy used by nearly all leading insurance companies.

Personal 24-Hour Claim Service. Your GEICO claim representatives stand ready to help you day and night—24 hours a day. Settlements are prompt and fair without red tape.

819 Claim Representatives, Coast-to-Coast, to serve you wherever you drive in the U. S., its possessions, and Canada.

Satisfies All Laws. Your GEICO policy can comply with all Financial Responsibility Laws and the compulsory insurance requirements in New York and North Carolina.

Guaranteed Savings. You save a full 30% on Collision coverage—as much as 30% on Comprehensive coverage and 25% on Liability coverage. Average country-wide savings for all auto insurance coverages is 25%.*

GEICO rates are on file with state insurance regulatory authorities and are guaranteed by GEICO to represent above savings from Bureau Rates.

Pay In Installments if you wish.

Over 550,000 Policyholders—97% renew their expiring policies every year.

*In Texas where rates prescribed by the State Board of Insurance must be charged, dividends up to 30% are being paid on currently expiring policies.

Here Is How GEICO Can Offer You Such Big Savings

GEICO'S "direct-to-the-policyholder" sales system successfully eliminates the major expenses of the customary method of selling insurance. GEICO insures only drivers in "preferred risk" occupational groups—that is, careful drivers who are entitled to preferred rates.

**MAIL COUPON TODAY FOR YOUR EXACT RATE
NO OBLIGATION • NO AGENT WILL CALL**

Must Be Over
Age 21 and
Under 65
111

Name.....

Residence Address.....

City..... Zone..... County..... State.....

Age..... ☐ Single ☐ Married ☐ Male ☐ Female

Occupation.....

Location of Car (if different from residence address).....

Is car principally kept and used on a farm or ranch?.....

Yr.	Make	Model (Dlx., etc.)	Cyl.	Body Style	Purchase Date	<input type="checkbox"/> New
					Mo. Yr.	<input type="checkbox"/> Used

1. (a) Days per week car driven to work?..... One way distance is..... miles.

(b) Is car used in any occupation or business? (Excluding to and from work)
☐ Yes ☐ No

2. Additional male drivers under age 25 in household at present time:

Age	Relation	Married or Single	% of Use



**GOVERNMENT EMPLOYEES
INSURANCE COMPANY**

Capital Stock Company not affiliated with U.S. Government
WASHINGTON 5, D. C.

GOVERNMENT EMPLOYEES INSURANCE CO.
Government Employees Insurance Bldg., Washington 5, D. C.