

EGG *milli-mike*[®]
INSTRUMENTS

EG&G's milli-mike instruments were the first and are, by a substantial margin, the most advanced in the field of submillimicrosecond recording and measurement.

EGG **MODEL 707**
OSCILLOSCOPE

DC to 2000 Mc bandwidth...
 0.2 millimicrosecond rise time... single transient and repetitive signal capability...
 ...sensitivity: 55 mv/trace width. Small spot size, maximum resolution. Six calibrated sweep speeds: 5, 30, 100, 300, 1000 and 3000 millimicroseconds/cm. Easy to operate invaluable for measurement of diode recovery time, ultra-high-frequency phenomena and in many other applications.



EGG **MODEL 751**
PULSE GENERATOR

All solid-state, transistorized, high-speed pulse generator produces positive pulses of fast rise time (less than 1 millimicrosecond). Repetition rate: 10 cycles to 100 kc. Output pulse width: 2 to 100 millimicroseconds. Pulse amplitude: 20 v. into 50 ohms approx. Operable in any position. Price: \$285.



EGG **MODEL 850**
CAMERA SYSTEM

Optimized, fully integrated system for photographic recording of the fastest transients at 1:1 magnification.



EGG **MODEL 760**
DIODE RECOVERY CABLE SYSTEM

Model 760, a complete system for accurate observation and measurement of diode recovery time in the millimicrosecond region. Controls and meter on front panel of sturdy metal case.



EGG **MODEL TR-6**
PULSE INVERTERS

Model TR-6 — coaxial-ferrite balun with excellent frequency response for converting 50 ohm single-ended to push-pull 100 ohm signals. Model 819 (for use with EG&G Model 751 Pulse Generator) to provide negative pulse output.



EGG **COMPLETE SYSTEMS**
RADIATION MEASUREMENTS

Complete systems using EG&G detectors and Model 707 Scope... available for measurement of high-frequency pulsed radiation.



EGG **TRANSFORMERS, POWER SUPPLIES**

EG&G is outstandingly well staffed and equipped to design and produce custom-built transformers, chokes, magnetic amplifiers, DC to DC converters, pulse transformers and power supplies for military or commercial use... and trigger transformers for all types of flash tubes.

Full technical information on all products available on request.

EGG **Edgerton, Germeshausen & Grier, Inc.**

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new. However, because our corporate protection of proprietary art often prevents full publication of crystal growing procedures, one exception may be the paper on synthetic sapphire, which describes in great detail the results of 30 years of Soviet experience in growing gem-grade corundum, including the precise design of all the mechanisms in the Verneuil apparatus.

The volume belongs in any complete library on crystal growth, but hardly on the shelf of the individual researcher.

Physical Methods in Chemical Analysis, Vol. 1. (2nd ed.) Walter G. Berl, ed. 686 pp. Academic Press Inc., New York, 1960. \$19.00. Reviewed by H. A. Liebhafsky, General Electric Research Laboratory.

THIS is either the second (p.v.) or the second revised (p.ix) edition (What, precisely, is meant by "second revised edition" anyhow?) of the first volume in an excellent series that contained three volumes in the first edition. The great debt that modern analytical chemistry owes to physics is clear from the several contributions, each by a different author or authors. These contributions are: Absorption Phenomena of X-Rays and γ -Rays, X-Ray Diffraction Methods as Applied to Powders and Metals, X-Ray Diffraction as Applied to Fibers, Spectrophotometry and Absorptimetry, Emission Spectrography, Infrared Spectroscopy, Raman Spectra, Refractive Index Measurement, Mass Spectrometry, Electron Microscopy, and Electron Diffraction. In most cases, there is welcome emphasis on the physical basis of the method treated, which tends to make the book interesting to any physicist glad to see his science doing indispensable service in another field.

So far as this reviewer could establish, the material in the book is of high quality, well presented, and free of serious errors. But, there is no mention of Volume 3 in the prefaces, and this omission is serious because Volume 3 deals in part with the interaction of radiant energy with matter, even though descriptions of all methods based on these interactions are promised us in Volume 1 (p.ix). One can also find on that page: "While the techniques under discussion are the same as in the first edition, the material has been rewritten, revised, and brought up to date." This is painting with too broad a brush, as is evident from even a cursory examination. In the case of emission spectrography, for example, only one reference (19a) has been added to the bibliography, which has been rearranged, and the section on direct reading equipment cites a 1944 reference for one of various schemes "proposed and used in the last 2 or 3 years". A prospective buyer of a new edition should be alerted at the beginning to any changes in plan, and he is certainly entitled to concise but exact information on the extent of revisions even in an established work—especially in the present case, what with other major compilations of analytical methods under way.