

AGING . . . Some Social and Biological Aspects

A symposium presented at the AAAS Chicago Meeting

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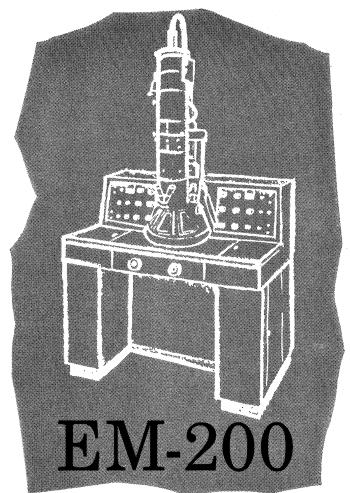
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RESOLUTION MAXIMA?

A worthwhile description of the many new design features of the new Norelco EM-200 Electron Microscope is not possible in this limited space. Many years of effort and design experience has been devoted to elimination of instrumental limits on electron microscope performance and to details which assure reliable operation as well as to provide maximum flexibility for special research techniques.

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The hotels for the AAAS Denver meeting have established special, low rates and have reserved appropriately large blocks of rooms for this meeting. Thus everyone making room reservations for the AAAS meeting is assured substantial savings.

The list of hotels and the reservation coupons below are for your convenience in making your hotel reservation in Denver. Please send your application, *not* to any hotel directly, but to the AAAS Housing Bureau in Denver and thereby avoid delay and confusion. The experienced Housing Bureau will make assignments promptly; a confirmation will be sent you in two weeks or less.

If requested, the hotels will add a comfortable rollaway bed to any room, at \$3.00 per night. Mail your application now to secure your first choice of desired accommodations. All requests for reservations must give a definite date and estimated hour of arrival, and also probable date of departure.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

For a list of the headquarters of each participating society and section, see page 197, Science, 21 July. The Hilton is the AAAS headquarters hotel.

Rates for Rooms with Bath*							
Hotel	Single for one	Double for one	Double for two	Twin Beds for one	Twin Beds for two	Studio Twins	Suites
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* All rooms are subject to a 2% Colorado State sales tax.

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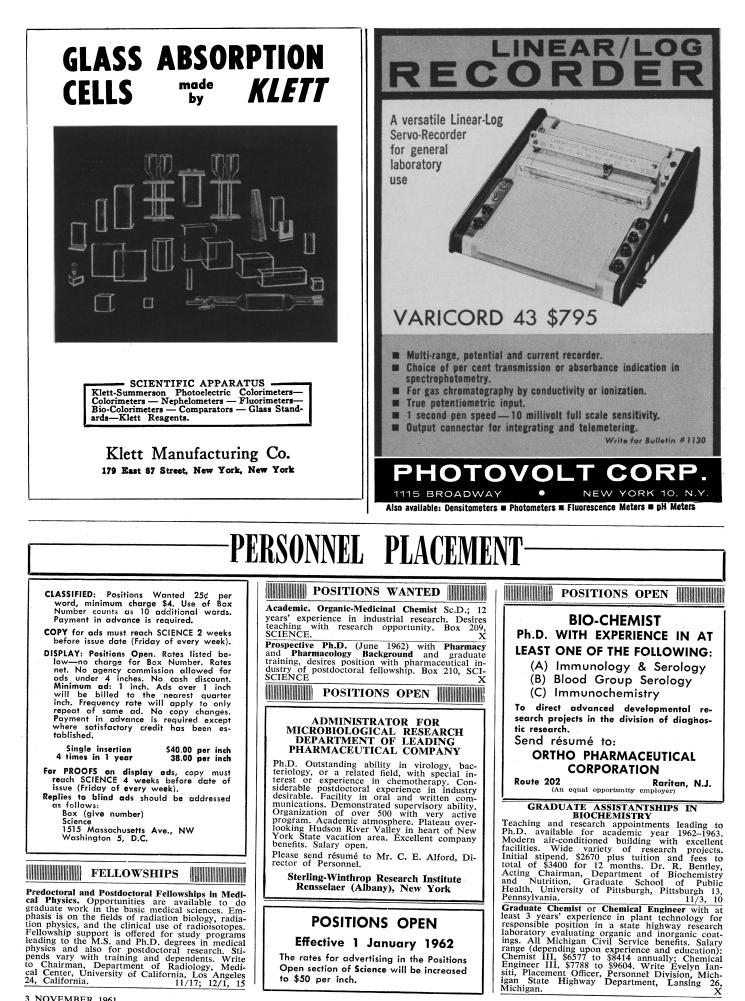
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Please reserve the following accommodations for the 128th Meeting of the AAAS in Denver, 26-31 December 1961:

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3 NOVEMBER 1961

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UNIVERSITY OF SASKATCHEWAN SASKATOON, CANADA

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Box 208, SCIENCE

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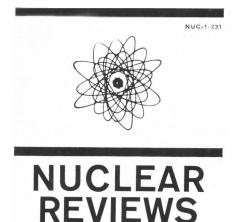
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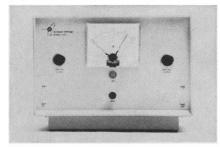
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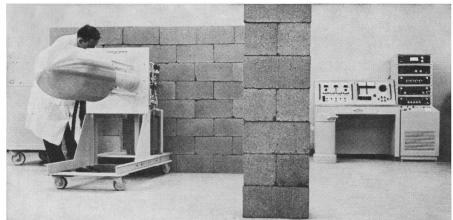
THE LABALARM-A NEW AREA MONITOR

The chirping, buzzing, or clanging alarm designed into a monitor is useful for a variety of laboratory chores. Applications include positive indication of the end of radiation exposure in gaging or radiography, accurate indication of dose received by personnel working with sources, development of radiation isodose curves, and accurate monitoring of background radiation in low-level counting rooms when used with a chart recorder.



The new 1629 Labalarm not only protects against radiation hazard, it is also an instrument with practical features for everyday use even in laboratories where no personnel hazard exists.

The Labalarm is a precision ratemeter with provision for connecting a remotely positioned scintillation, G-M, neutron, or alpha detector. An audible alarm tone automatically sounds when the meter needle comes in contact with a high or low level setting. Each setting is variable over a range of zero to 20,000 cpm. Each setting has its own signal light—red for high and amber for low. Write for complete specifications.



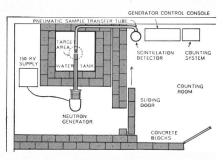
THE COMPLETE NEUTRON LABORATORY

The pooling of resources by Texas Nuclear Corporation and Nuclear-Chicago Corporation brings to the scientific community an expanded, improved source for advanced nuclear systems. An outstanding example is the laboratory shown here which consists of a neutron generator, sample-transfer control, scintillation detector, and counting instrumentation.

The Texas Nuclear neutron generator is a compact, inexpensive system for generating controllable, intense yields of fast and slow neutrons. The instrument produces a fast neutron yield of 4×10^{10} neutrons per second and a thermal flux of $5 \ge 10^8$ neutrons per second with an appropriate moderator. The standard Model 9500 accelerator can deliver over 1.0 milliamperes of beam current. The Model 9501 is offered for those applications in which it is desired to pulse the ion beam to obtain neutron bursts of known width, amplitude, and frequency. Both models are equipped with an ion vacuum pump. High voltage, vacuum, focus, gas flow, and solenoid supply are controlled from the operator console which is connected to the accelerator by a 33-foot armored cable.

With the neutron generator, Nuclear-Chicago offers (1) a sample-transfer system, (2) a variety of precision scintillation detectors, and (3) a wide choice of counting equipment.

The sample-transfer system is a pneumatically operated device which rapidly moves an irradiated sample from the target area of the generator to the sample-counting position in the scintillation detector. It can also be used to return a sample from the detector to the target area or to introduce a new sample into the neutron flux. Sample irradiation times, sample counting times, transfer times, and delay times are controlled by the operator and are variable over wide ranges. The system allows completely unattended operation when used with the scintillation detector and counting instrumentation shown.



Typical neutron generator/counting installation. For fast-neutron activation, a "dry well" (dotted line) is immersed in the water tank, and the sample contained in the pneumatic transfer tube is suspended in air. For thermal-neutron activation, the water surrounds the pneumatic tube containing the sample.

Comprehensive specifications on the Texas Nuclear neutron generator and on Nuclear-Chicago instrumentation for use with the generator, together with descriptions of typical applications, are available upon request. In addition, if you have specific questions relating to your own need for neutron generating equipment, please refer your problem to Nuclear-Chicago. We will promptly forward complete information.

