

Boris Pregel Award goes to Weisskopf

The Boris Pregel Award for research in physics and/or astronomy was presented to Victor F. Weisskopf at the annual meeting of The New York Academy of Sciences in December. Weisskopf, chairman of the department of physics at the Massachusetts Institute of Technology, was cited for his major contributions to physics.

Clive H. Perry wins Coblentz Memorial Prize

Clive H. Perry, an associate professor of physics at Northeastern University, has received the 1971 Coblentz Memorial Prize of the Coblentz Society. The award, which was established in 1964, is presented annually to a scientist under 36 for "outstanding published research in the field of molecular spectroscopy." The award was presented to Perry earlier this year at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy.

Perry was recognized for his research on far-infrared and Raman spectroscopy of solids, the development of Fourier transform spectroscopic tech-

niques and the description of crystal field effects. Before coming to Northeastern, he was an assistant professor



PERRY

at the Massachusetts Institute of Technology, and was, at different times, associated with the Air Force Cambridge Research Laboratories, the Borders Electronics Research Corp and the Melpar Space Science Laboratories.

Jerome A. Helland to work in the medium-energy physics division.

At Montana State University **William Kinnersley**, formerly of Wright Patterson Air Force Base and the University of Texas, has been appointed assistant professor of physics. Also joining the staff are **Donald Baer**, from Stanford University and **Roger Stettner**, from the University of Chicago, as research associates.

New York University, in connection with its consolidation program at Washington Square under a National Science Foundation Science Development Grant, has appointed **James H. Christenson**, formerly of Columbia University, as associate professor to start a group in experimental particle physics. **Herman Z. Cummins** and **Harry L. Swinney**, both from Johns Hopkins University, have been appointed as professor and assistant professor to organize a light-scattering laboratory for the study of solids, liq-

uids and biological systems. **Samuel J. Williamson**, formerly of the University of California at Santa Barbara, has been appointed associate professor to begin a low-temperature laboratory. Also joining the university are **Robert A. Schwartz**, formerly of Brown University, as associate professor in the astrophysics group and **Olav Redi**, formerly of Princeton University, as assistant professor. At the University Heights campus, **Paul Berman**, formerly of Yale University, has been appointed assistant professor.

The University of Maryland, Baltimore County has promoted **Alfonso Campolattaro** to professor. **Robert L. Rasera** has joined the university as associate professor.

David Okrent has joined the University of California at Los Angeles faculty as professor of engineering and applied science. Formerly a senior physicist at the Argonne National Laboratory, Okrent came to UCLA from the University of Arizona, where he was a visiting professor under the Argonne Universities Association Distinguished Appointment.

The new chairman of the department of materials science and engineering at Washington State University is **Alan A. Johnson**. Johnson was previously chairman of the department of physical and engineering metallurgy at the Polytechnic Institute of Brooklyn and an adviser to Mayor John V. Lindsay.

Dimitri S. Bugnolo, a plasma physicist and engineer formerly associated with Bell Telephone Laboratories, has been named professor at the senior level by the University of Quebec, Institut National de la Recherche Scientifique.

Appointed as assistant professor at Thomas More College is **Joseph E. Lang**. Previously, he was National Science Foundation postdoctoral fellow at the University of California at Berkeley.

Serge A. Korff, professor of physics at New York University and president of the American Geographical Society, has been elected president of The New York Academy of Sciences.

Joining the physics department at Mississippi State University are **Robert L. Cook**, from Duke University, as as-

Joining the Virginia Polytechnic Institute and State University as professor of physics is **George Collins**, who had retired this summer as senior physicist at Brookhaven National Laboratory.

Robert Hofstadter has been appointed to the Max H. Stein Professorship in Physics at Stanford University. He succeeds **Felix Bloch**, now professor emeritus. Appointed as assistant professors at Stanford are **John R. Calarco** and **Roberto D. Pecci** from the University of Washington and **T. William Donnelly** from the University of Toronto.

J. Kenneth Moore has been promoted to general manager of electronic systems for CBS Laboratories.

Recent appointments at Los Alamos Scientific Laboratory include **Robert W. Bussard** as assistant to the director of laser projects; **John N. Wood** to work in the testing division; **Michael M. Minor**, **Barry J. Feldman** and **William C. Feldman** to work in the physics division, and

NEW From The PRAXIS Corporation

The Praxis Model PR-102 Transient NMR Analyzer. Price \$7300



FEATURES

- All Solid State
- Total Weight 29 lbs.
- 10 mm O.D. Sample
- 10.7 Mhz
- 5 Different Pulse Functions
- Signal Averaged Readout
- Digital and Analog Readout

Long and Short Term
Leasing Available
With Purchase Option



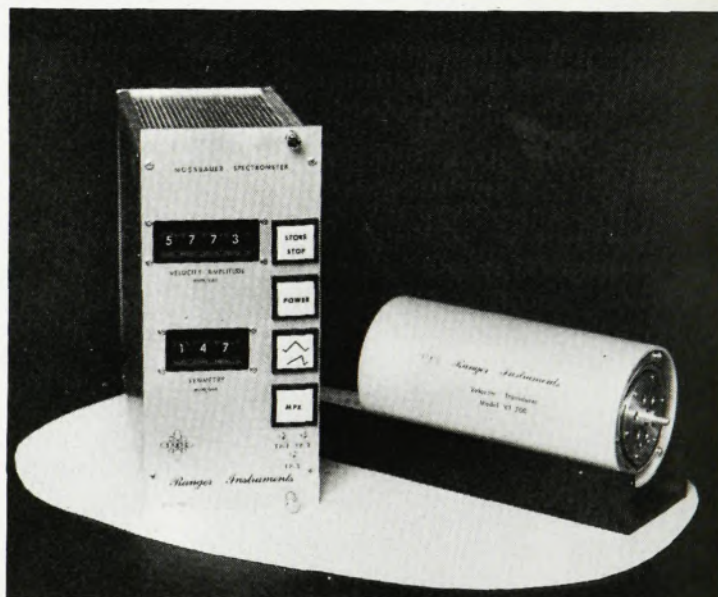
USES

- Proton Signals From BOTH Solids and Liquids
- T_1 & T_2 Measurements
- Free Induction Decay Plots
- Polymer Crystallinity
- Moisture Determination
- Solid/Liquid Fat Measurements

The PRAXIS Corporation 
5420 JACKWOOD, SAN ANTONIO, TEXAS 78238
AC512-684-3231

Circle No. 43 on Reader Service Card

RANGER INSTRUMENTS INTRODUCES FOURTH GENERATION MÖSSBAUER EQUIPMENT



The Ranger Mössbauer Spectrometer features....integrated circuit technology....Digital switching for easy range selection and reproducibility....Constant acceleration motion in either the symmetrical or fly-back mode....a Multiplexing option and a built-in Moire' interferometer. You'll also like our new Conversion Electron Detectors....our 220 KHz Data Acquisition System and our 1.2° K Cryogenic Sources.

BOX 863, ALVA, OKLA. 73717

Circle No. 44 on Reader Service Card



If a pin drops in Timbuktu you'll hear it in Oshkosh

You will, that is, if you subscribe to Current Papers in Physics (CPP) or have your library subscribe to Physics Abstracts (PA). Both publications cover the world's physics literature. Both appear every two weeks.

CPP provides easy and economical access to the world's physics information by classifying titles and bibliographies of physics publications from 47 different nations, thus quickly alerting physicists to the latest international developments in their fields.

In PA the contents of more than 200 world-wide journals are completely abstracted and classified. Another 1600 journals are scanned and, in addition, abstracts are included from conference proceedings, technical reports, books, patents and theses. In 1972 PA entries will total more than 84,000 — all cross referenced, complete with authors, their affiliations, and organized by topic for easy reference.

Keep up with physics research everywhere by subscribing now to the world's most comprehensive coverage provided by CPP and have your library order PA complete with its four indexes. Published by the Institution of Electrical Engineers (London), in association with the American Institute of Physics. Place your order now by using the card inserted between pages 68 and 69.

American Institute of Physics

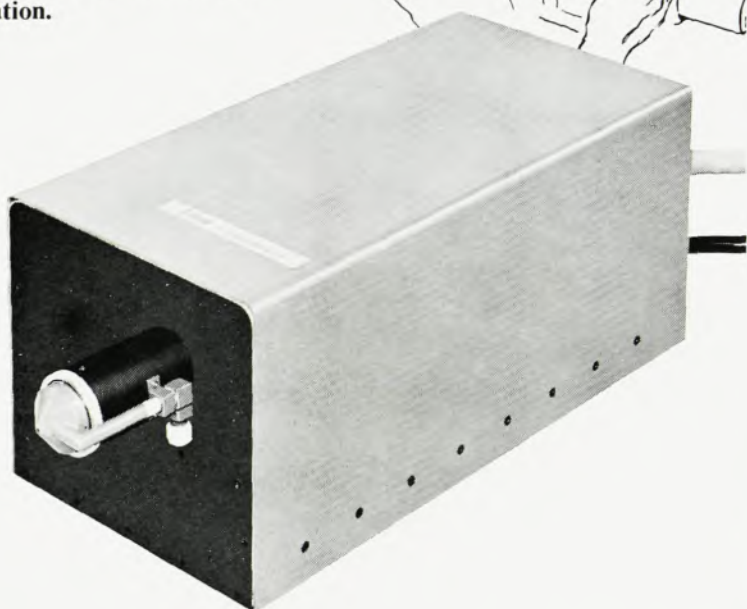


Subscription Dept.
335 East 45 Street
New York, N. Y. 10017
Telephone: (Area Code 212) 685-1940

Circle No. 45 on Reader Service Card

First TEA Lasers for Research and Commercial Use

Transversely Excited Atmospheric Pressure CO₂ (TEA) Lasers manufactured by TRW INSTRUMENTS will precision cut, drill and weld ceramics, glass, plastics, metals and abrasive substances, at roughly half the cost of conventional longitudinal discharge CO₂ lasers, without waste or contamination.



TRW Instruments has lined up a series of "firsts" with a low-cost, high-power transverse discharge laser head measuring a compact 9" high by 8" wide by 17 1/4" long—that's right, INCHES. It delivers the highest power in the infrared currently obtainable in a commercial pulsed laser, with peak power densities in excess of 5 billion watts per square inch. Low cost means under \$10,000.

Principal Specifications:

Peak Power:	100 KW
Average Power:	6 watts
Repetition Rate:	400 pps max
Pulse Energy:	40 millijoules
Pulse Width:	400 nanoseconds
Spot Size:	.0015 inch x .005 inch min

Write or call TRW INSTRUMENTS or their representative in your area for complete specifications or custom instrumentation information.

TRW INSTRUMENTS

139 ILLINOIS STREET, EL SEGUNDO, CALIFORNIA 90245 • (213) 535-0854

TRW®

Circle No. 46 on Reader Service Card

More power to you!

In fact, our model 320L delivers the most power and widest bandwidth of any solid state instrument amplifier available. Easily mated with a wide variety of signal sources, it amplifies AM, FM, SSB, TV, Pulse and other complex modulations with minimum distortion. Constant forward power is continuously available regardless of load match (from an open to a short). The 320L provides over 20 watts of power from 100 KHz to 125 MHz with useful output all the way to 160 MHz... and there's no tuning.

Applications include:

- RFI/EMI testing
- NMR Spectroscopy
- Transmitter applications
- Laser modulation
- Signal distribution
- Test equipment calibration
- Cable isolation

For complete information write or call
Electronic Navigation Industries,
3000 Winton Road South,
Rochester, New York 14623.
(716) 473-6900



EN ELECTRONIC NAVIGATION INDUSTRIES

Circle No. 47 on Reader Service Card

we hear that

sociate professor and **J. Charles Nickerson III**, from Stanford University and **Thomas B. Malloy Jr.**, from the Massachusetts Institute of Technology spectroscopy laboratory, as assistant professors.

Roger Hagengruber has joined Western Michigan University as an assistant professor.

G. T. Croft has been promoted to vice-president and director of graphic research and development for the graphics products group of Addressograph Multigraph Corp. Croft received his

PhD in physics from the University of Pennsylvania in 1953.

At Clark University **Cristoph Hohenemser**, formerly of Brandeis University, and **Harvey Gould**, formerly of the University of Michigan, have been appointed associate professors.

K. Moriyasu, formerly of the Stanford Linear Accelerator Center, has joined the visual techniques laboratory of the department of physics at the University of Washington.

S. I. Rasool has been promoted to deputy director of planetary programs for NASA.

obituaries

James L. Kolopus

James L. Kolopus, 33, physicist in the solid state division of the Oak Ridge National Laboratory, died on 16 October 1971 after a 14-month battle with cancer.

Born on 20 September 1938, in Elyria, Ohio, Kolopus received a BS degree with honors in physics from the University of Notre Dame in 1960, the MS degree in 1962 and the PhD degree in 1965 from the University of Missouri.



KOLOPUS

While at the University of Missouri he was an NSF fellow for four years and later was awarded a Stewart Fellowship.

After a two-year postdoctoral appointment at Argonne National Laboratory, Chicago, Illinois, he joined the

research staff at Oak Ridge in 1967. His research efforts centered around studies of intrinsic defects and impurities in halide and oxide crystals with the use of electron spin resonance and optical absorption spectroscopy. Recently, in addition, Kolopus served as coinvestigator performing magnetic studies on lunar rocks brought back by Apollo missions.

Besides physics, he had varied interests and many talents. He enjoyed woodworking and making furniture as well as refinishing antiques and painting. His premature death will be especially felt by those of us who have had the pleasure of collaborating with him.

A scholarship fund will be established in his name at the University of Missouri, Columbia, Missouri. Memorial contributions may be sent to Louis Holroyd, Department of Physics, and made payable to the University of Missouri.

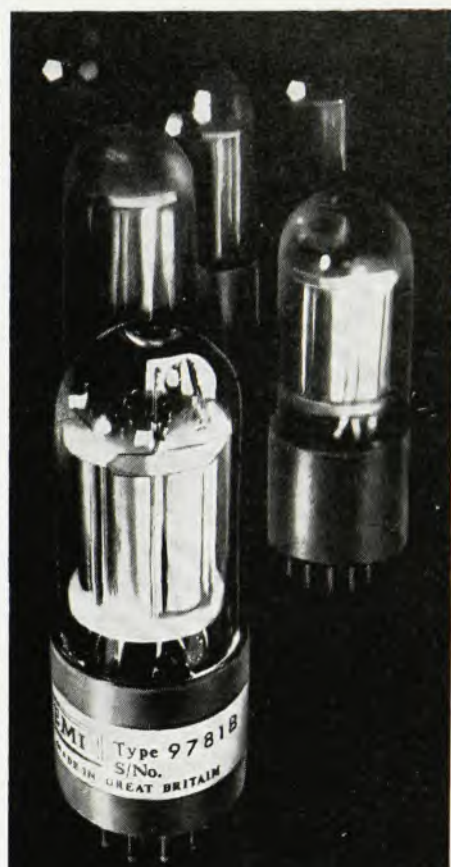
MARVIN M. ABRAHAM
YOK CHEN

Oak Ridge National Laboratory

I. Clyde Cornog

I. Clyde Cornog, of the University of Pennsylvania, died 11 November at the age of 78.

Emeritus associate professor since 1963, Cornog began his career at Pennsylvania as an instructor in 1919. He had received his BA from Swarthmore College in 1917, and in 1928 he received his PhD from Pennsylvania. Cornog's research included the study of the distribution of energy in the helium spectrum, the structure of nuclei and optics. □



What's the difference?

Some typical squirrel cage photomultipliers. All similar in shape. But the one in the foreground, the new EMI Type 9781B, is different. Take a look at these typical performance figures:

- Photocathode sensitivity...55 $\mu\text{A/L}$
- Overall gain at 1000V... 2×10^7
- Overall voltage at gain of 10^6 ...650V
- Dark current at gain of 10^6 ...1.2nA

The 9781B, a 9 stage tube with UV transmitting glass envelope, is designed for use with low level UV and visible radiation in spectrometer and similar applications. The B11A (B11-88) base means the 9781B will replace other tubes of this design to improve system performance.

For details of the complete EMI P.M. tube range contact:

GENCOM DIVISION

80 EXPRESS STREET, PLAINVIEW, N.Y. 11803
TELEPHONE: (516) 433-5900

Circle No. 48 on Reader Service Card