# Lawrence Radiation Laboratory

# RESEARCH SCIENTISTS

We have some excellent opportunities for research scientists at Lawrence Radiation Laboratory. You would be involved with long-term studies in rock deformation, mineralogical associations with radionuclides, or wave propagation in solids. As a member of a newly established research team, you would be working with scientists from theoretical and field operation areas.

Scientists to study mechanical properties of rocks and rock-forming minerals. Training in solid-state physics or various aspects of different material sciences is desirable. Degree requirements: M.S. or Ph.D.

Microscopist for research in petrography, metallography, or electron microscopy to conduct studies related to basic understanding of rock behavior. Areas of study include strain analysis, fractography, microstructure of glasses and deformed minerals and rocks, fracture kinetics and mechanisms, defect structure distributions, and high temperature nucleation and crystal growth. Degree requirements: M.S. or Ph.D.

Seismologist to perform experiments and study wave propagation data from solids in homogeneous and layered media. Degree requirements: M.S. or Ph.D.

We invite you to write in confidence to Dean Wise, Personnel Dept.,



Lawrence Radiation Laboratory

UNIVERSITY of CALIFORNIA P. O. Box 808 3-27 Livermore, California 94550

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contributions to elementary particle theory; in particular he introduced the important ideas of strangeness, the eight-fold way and the quark model.

Jerome B. Wiesner, Massachusetts Institute of Technology, has been appointed to a new advisory committee on program and policy matters of the National Institutes of Health.

Victor H. Rumsey from Berkeley and Henry D. Block from Cornell are visiting professors at the University of California, San Diego this year.

Edwin L. Goldwasser, professor of physics at the University of Illinois, has been named chairman of the division of physical sciences of the National Research Council.

Oak Ridge National Laboratory has appointed Kenneth Ray Efferson, formerly a graduate student at Louisiana State University, Baton Rouge, to its staff.

The physics department of the twoyear-old University of South Alabama has named Richard F. Sweet as assistant professor. He joins Ferdinand H. Mitchell, department chairman, Jack Copeland, professor, and Stanley T. Noland, associate professor.

Monroe S. Wechsler of the solid state division of Oak Ridge National Laboratory is spending the year with the metal-physics group of Battelle Institute in Geneva, Switzerland.

Paul A. Silberg has joined the precision products department of Northrup Nortronics as a consulting scientist in research and development.

Alexander J. Glass, previously director of the laser program at the Institute for Defense Analysis, has joined the staff of the Naval Research Laboratory's plasma physics division.

The University of South Carolina has named LeConte Cathey, formerly head of the solid state physics group at the Savannah River Laboratory, professor in the department of physics and astronomy. Charles P. Poole Jr has been promoted to full professor

and Richard L. Childers has been promoted to associate professor.

Daniel I. Fivel, assistant professor of physics at the University of Maryland, has received a \$1000 board of regents award for excellence in teaching.

New Mexico State University has awarded Ralph W. Dressel, professor of physics, the \$500 Westhafer prize for excellence in teaching.

### Edward M. Purcell, 1967 Oersted Medallist

Edward M. Purcell, Gerhard Gade university professor of physics at Harvard University, has been awarded the 1967 Oersted Medal by the American Association of Physics Teachers for notable contributions to teaching. Purcell is well known for his work with nuclear magnetic resonance for which he received a Nobel Prize, along with Felix Bloch of Stanford University. In 1951, along with Harold I. Ewen, Purcell detected the 21 centimeter radiation from interstellar hydrogen clouds. More recently he has been involved in the development of the Berkeley Physics Course and has written volume 2 "Electricity and Magnetism" of the series.

## Townes, Fletcher and Mason Will Receive IEEE Awards

Charles H. Townes, professor at Massachusetts Institute of Technology and president of the American Physical Society, will receive the Institute of



TOWNES

Electrical and Electronics Engineers' medal of honor for his contributions in the fields of quantum electronics that have led to the maser and laser.

The IEEE founders award will be given to Harvey Fletcher for contributions to physical acoustics, electrical

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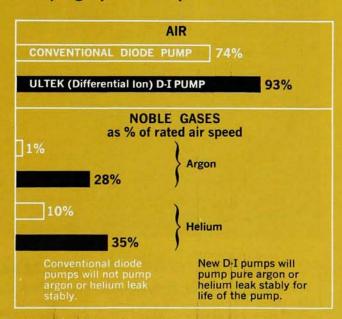
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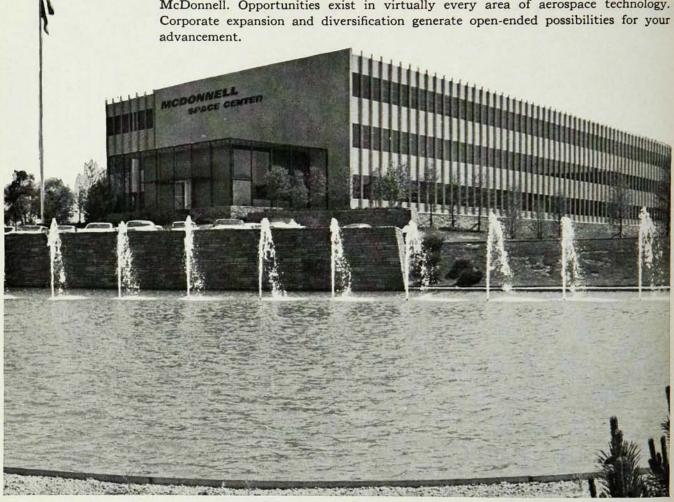
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| Education: BS      | MS   | -    | PhD_ |      | _Major Field: |                   |     |
| Primary Experience | Date | Date |      | Date |               | Present Position: |     |

engineering and for his management skills as director of physical research at Bell Telephone Laboratories. Fletcher is presently an emeritus dean of the physics and engineering sciences department at Brigham Young University, Provo, Utah.

Warren P. Mason, retired head of mechanics research at Bell Labs and visiting professor at Columbia University, will receive the Lamme medal award for his work in developing electrical and electronic apparatus in the fields of sonics and ultrasonics and for his original work in designs of and applications for electro-mechanical transducers.



The above certificate was awarded to W. James Lyons of the Textile Research Institute, Princeton at the December meeting of the APS in Tennessee.

# Peter A. Franken Given This Years' APS Prize

The 1967 American Physical Society Prize, sponsored by the Hughes Aircraft Company, has been awarded to Peter Alden Franken. Franken is professor of physics at the University of Michigan. Active in experimental atomic and electron physics, he has received the prize in recognition of his contributions to spectroscopy, especially to optical harmonic generation and rectification, level-crossover spec-

troscopy and optical pumping. The \$2500 prize is given for significant contributions to physics published before the recipient's thirty-third birthday.

#### 1967 Buckley Solid-State Prize Goes to Drickamer

Harry G. Drickamer will receive the 1967 Oliver E. Buckley solid-state physics prize at the March meeting of the American Physical Society in Chicago. Drickamer is professor of chemistry and chemical engineering at the University of Illinois, Urbana. The award is in recognition of his work on the effects of extreme pressures on the electronic and molecular structures of solids.

# Gibbs and Di Marzio to Get High-Polymer Physics Prize

At the Chicago, March meeting of the APS, Julian H. Gibbs and Edmund A. Di Marzio will be given the 1967 American Physical Society high-polymer physics prize for their theory of the glass transition and their contribution to the theory of the helix-coil transition in biological macromolecules. Gibbs is professor of physical chemistry at Brown University while Di Marzio is with the National Bureau of Standards in Washington.

#### Branscomb, Jensen Get Stratton and Rosa Awards

Lewis M. Branscomb has received the National Bureau of Standards' 1966 Samuel Wesley Stratton award for his contributions and leadership in the field of atomic and molecular physics. Branscomb is chief of the National Bureau of Standards' astrophysics division in Boulder, Colorado as well as professor of physics at the University of Colorado. The award is a plaque plus \$1500.

NBS has also given Malcolm W. Jensen, manager of engineering standards and chief of the NBS office of weights and measures, the 1966 Edward B. Rosa award. This award is also a plaque and \$1500 and is in recognition of leadership in weights and measures administration and in the development of improved techniques for product standardization.

#### 1967 Tom W. Bonner Prize Awarded to C. C. Lauritsen

The 1967 Tom W. Bonner Prize was given to Charles C. Lauritsen at the February meeting of the American Physical Society in Austin, Texas.



LAURITSEN

Lauritsen has been associated most of his life with California Institute of Technology, where, after receiving his PhD in 1929, he pursued his research interests in electron emission, high-potential x-rays and nuclear physics. The prize was awarded in recognition of his contributions to the study of light nuclei and nuclear instrumentation, for his discovery of mirror nuclei and for his scientific leadership, which led to the establishment of a center of nuclear research with the highest standards at Cal Tech.

### Robert J. Van de Graaff Dies; Was Noted Nuclear Physicist

Robert J. Van de Graaff died 16 Jan. 1967. He was well known for his role in developing the electrostatic accelerator as an important tool for nuclear structure research. Most recently he was investigating the acceleration of heavy ions with Tandem Van de Graaff accelerators. Van de Graaff's life and accomplishments were reviewed in a feature article in the February issue of Physics today.

#### Fitz-Hugh B. Marshall Dies; Was Westinghouse Physicist

Fitz-Hugh B. Marshall, advisory physicist of the management of the Westinghouse Defense and Space Center's aerospace division, died in an automobile accident on 2 Dec. 1966. Marshall was born in Carlsbad, New Mexico, in 1912. He received a BS in