able to convey a strong and accurate sense of the experience and enthusiasm of physicists doing physics. —CHH

Robert R. Wilson of Cornell University has been appointed director of the proposed 200-GeV National Accelerator Laboratory to be built at Weston, Ill. Wilson has a PhD from the University of California, where he studied under Nobel Prize winner Ernest O. Lawrence. The appointment was announced by Norman F. Ramsey, president of Universities Research Association, the organization with which the AEC has contracted for design of the accelerator. An interview with Wilson appears on page 70 of this issue.

Robert H. Dicke, professor of physics at Princeton University, has been appointed chairman of the physics department there. He is known for his work in microwave physics (PHYSICS TODAY, April, page 63) and his work experimentally testing Einstein's theory of general relativity as well as for his work in other problems of cosmology (PHYSICS TODAY, January, page 55). He will succeed Walker Bleakney who has been chairman since 1960. Aaron



named to the new position of associate chairman of

Lemonick, profes-

sor of physics and

associate director

of the Princeton-

celerator, has been

Pennsylvania

Princeton physics department. Lemonick is a specialist in nuclear and particle physics as well as an unusually popular teacher. He holds a PhD from Princeton.

William A. Allen has been promoted to research physicist at the Soil and Water Conservation Research Division, Weslaco, Tex. He will participate in the remote sensing program for the utilization of space physics to problems in the Department of Agriculture.

James J. Brophy has been named academic vice president of Illinois Insti-

tute of Technology. He is presently vice president of IIT Research Institute. He has done research in solid-state physics at IIT since he joined the research institute in 1951. He holds a BS, MS and PhD from IIT; the last two degrees were in physics.

Eastman Kodak Company has appointed Rex B. Pontius senior research associate in its color photography division. Except for four years service in the Manhattan Project, Pontius has been at Kodak since 1937. He graduated from the University of Idaho and went as a Rhodes Scholar to Oxford University where he obtained his doctorate in physics.

Ira L. Morgan has been named president of Texas Nuclear Corporation, Austin, Texas. He was one of the three founders of the company. He holds a PhD from the University of Texas, Austin, and presently serves on its faculty.

Herbert Flicker has joined Electro-Optical Systems, Inc., a subsidiary of Xerox. He will be manager of the solid-state department in the solidstate and imaging technology laboratories division.

AAPT Apparatus Competition Winners Are Awarded Prizes

Robert L. Wild, professor at the University of California at Riverside, received first prize for demonstration lecture apparatus in the apparatus competition sponsored jointly by the American Association of Physics Teachers and the American Institute of Physics. Wild's demonstration visually displayed electron diffusion through a crystal.

Melvin D. Daybell of New Mexico State University won first prize in the laboratory apparatus category with his device for measuring the force on an atomic beam passing through a magnetic field in a vacuum.

Second and third prizes for demonstrations went to Eldred F. Tubbs of Harvey Mudd College and to Alfred Leitner of Michigan State University, respectively. Tubb's demonstration showed the effects of temperature and electric potential variations on the diffusion of mercury vapor and neon in a

discharge tube. Leitner's apparatus demonstrated the resonant responses of a circular rubber membrane driven by a loudspeaker.

Peter Parkinson, University of Pennsylvania, and Decio Pescetti and Carlo Pontiggia, both of the Institute of Physics of the University of Genoa, Italy, received second and third prizes respectively for laboratory equipment. Parkinson developed a monochromator suitable for student use, and Pescetti and Pontiggia developed apparatus for studying plane motion of bodies under the influence of magnetic forces.

Noel de Leon, Columbia University, and Rainer Weiss, MIT Center for Teaching and Learning, received honorable mention for their demonstration equipment. John Harris and the laboratory staff of Harvard Project Physics both received honorable mention.

Pierre Demarque Awarded 1967 Warner Astronomy Prize

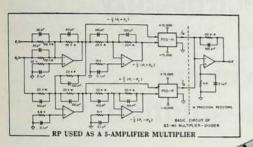
The American Astronomical Society has awarded Pierre Demarque, associate professor of astronomy and astrophysics at The University of Chicago, the 1967 Helen B. Warner Prize. This prize, which includes a cash award of \$500, is normally given each year for a significant contribution to astronomy in the preceding five years. The recipient must reside in North America and be under 35 years of age.

Demarque's main contributions are the calculation of detailed models of late-type stars, suitable for critical comparison with observation. These calculations provide a theoretical basis for reliable age determinations of globular and old galactic clusters.

Western Electric Presents Appreciation Award to MIT

The Western Electric Fund has presented an appreciation award to MIT Physical Science Study Committee headed by Jerrold R. Zacharias, professor at MIT. This work pioneered development of the well known PSSC high-school physics course and led to the establishment of Educational Services Incorporated, which has been responsible for much curriculum reform. This organization recently has been incorporated into the Education Devel-

Breadboarded in just 27 minutes



Philbrick RP Operational Manifolds offer a new, inexpensive technique for breadboarding solid-state analog

circuitry. For example, an RMS computer design can be transformed from schematic to operating circuit in just 10 minutes. RP Operational Manifolds are all-in-one, self-powered analog instruments that contain all the wiring, soldering, shielding and grounding necessary for breadboarding. They make it easy to build a wide variety of stable operational amplifier circuits that are free of "bugs", "strays" and other parasitic happenings. Essentially all of the 125 circuits described in Philbrick's Applications Manual for Operational Amplifiers can be assembled quickly and easily on the manifold.

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The Model RP Operational Manifold has five receptacles for plug-in solid-state Operational Amplifiers of the Philbrick P or

EP type, an integral regulated DC power supply and a jack panel on which circuitry can be assembled conveniently and quickly. In addition, two extra receptacles accommodate Philbrick Operational Circuit Plug-ins — such as a Quadratic Logarithmic or Sinusoidal Transconductor or chopper-stabilized high-gain amplifiers. An electrically "free-floating" receptacle included on the panel accepts an additional 10-pin plug-in module such as an EP or P-size Operational Amplifier, a Booster Amplifier, an Operational Circuit Plug-in or any arbitrarily selected set of circuit elements preassembled on an OP-O Uncommitted Plug-in unit.

Mounted on the front panel of the RP Operational Manifold are 106 tip jacks, spaced 3/4" apart in a pattern of equilateral triangles. They accommodate standard twin-tip plugs and are used for mounting passive components, shorting bars and as terminations for shielded input and output cables. Jacks are color-coded. Functional interconnections are printed on the panel. RP is available either for rack-mounting or (with attractive hardwood ends) for bench use.

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as well as higher-quality data

opment Center. Jerome B. Wiesner, provost of MIT, announced that the \$5000 check accompanying the award will be made available to Zacharias for use at his discretion for special educational purposes.

Meiners, Parker, Resnick and Higgs Are Honored by AAPT

At the January New York meeting the American Association of Physics Teachers cited Harry F. Meiners, Vincent E. Parker, Robert Resnick and Paul M. Higgs for distinguished service in physics teaching.

Meiners, a professor at Rensselaer Polytechnic Institute, was honored for his contributions of new laboratory experiments, new lecture demonstrations and new uses of films. He has devoted much effort to the apparatus committee of the AAPT; he has gathered and assembled material for a two-volume compendium of physics demonstrations.

Parker was cited for his contributions to the advancement of physics education through active membership in many organizations and advisory boards. He is presently deputy director of the Oak Ridge Associated Universities and a member of the governing board and executive committee of the American Institute of Physics.

Resnick, a teacher for 18 years and presently professor at RPI, received his honor for his teaching, which was "characterized by unusual clarity, precision and substance." His best known single contribution is his series of introductory physics texts written jointly with David Halliday.

Higgs is emeritus professor at the University of Washington and has been teaching for more than 40 years. He is known for the imagination and enthusiasm of his laboratory teaching and the ingenuity with which he always kept it up to date.

Albert Victor Hugo Masket Was NRL Research Physicist

Albert V. H. Masket died on 19 Dec. at the age of 52. He was a research physicist and consultant to the division of mechanics of the United States Naval Research Laboratory. The author of numerous scientific papers on such topics as ballistics, isotope separation, nuclear reactors and ultra-centrifuges, Masket also has been credited with six inventions of a classified nature.

Born in New York City in 1914, Masket received his BS from New York University in 1935. He then went to the University of Virginia where he received an MS in 1936 and a PhD in physics in 1938. After several years as an assistant in the physics department at Virginia he joined the Naval Research Laboratory in 1942. From 1946 to 1948 he was employed at Oak Ridge National Laboratory and from 1948 to 1960 he was an associate professor at the University of North Following a period of Carolina. employment with General Atomic Division of General Dynamics Corp. he rejoined the NRL.

Gary A. Pearson Dies in Illinois Auto Accident

Gary A. Pearson, 28, a theoretical physicist at Bell Telephone Laboratories, Murray Hill, N. J., died of injuries received 22 Dec. 1966, when his car collided with a truck near Champaign, Ill. Pearson attended

Oregon State University at Corvallis where he received BS and MS degrees in electrical engineering. Subsequently he went to the University of California at Berkeley where he obtained an MA degree in physics in 1962 and a PhD in physics in 1965.

Pearson's thesis was on theoretical plasma physics and he continued to work on plasma problems after he joined Bell Labs in June 1965. He also became interested in solid-state physics and the application of the ideas and methods of plasma physics to solid-state problems.

H. V. Knorr of Kettering Foundation and Antioch

Harry V. Knorr, consulting physicist for the Charles F. Kettering Foundation and emeritus professor of physics at Antioch College died 13 Nov. 1966. A native of Berwick, Pa., he earned his BA degree at Susquehanna University in 1917 and PhD at Ohio State University in 1931. He taught at Central Weslevan College and Ohio State before joining the physics department at Antioch in 1930. He also began his association with the Kettering Foundation 1930, serving successively as research physicist, acting director and director of its Antioch project, then as assistant director of research and consultant for its research laboratory.

With Vernon M. Albers, he was responsible for the development of the Knorr-Albers microphotometer for the study of chlorophyll and photosynthesis. This instrument represented a highly significant aid to spectrographic analysis. During World War II Knorr was research associate and professor of physics at the underwater sound laboratory of Harvard University and later professor of research engineering at Pennsylvania State University.

Donald E. Guss Dies, NASA Space Physicist at Goddard

Donald E. Guss, project scientist for the solar particle intensity and composition experiment at NASA Goddard Space Flight Center, Greenbelt, Maryland, died of coronary thrombosis on 4 Feb. at the age of 36.

He was codiscoverer of heavy nuclei in solar cosmic rays and was a member of the scientific team that showed that the composition of these particles is similar to the sun's. He was principal investigator of a series of experiments studying the low-energy galactic cosmic rays in the early 1960's and was a coinvestigator in the Gemini XI cosmic-ray, nuclear-emulsion experiment.

Born in Brookings, South Dakota, he received his BS at South Dakota State College in 1952; he was awarded his MA in 1954 and his PhD in 1960 from Washington University. He joined Goddard in November, 1960 and remained there to the present, except for a nine month leave of absence as a member of the physics department faculty of the University of Maryland.