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Jurg Waser (California Institute of Technology); last past president, Dan McLachlan (Stanford Research Institute); treasurer through 1961, Thomas C. Furnas, Jr. (Picker X-Ray Corp.); secretary through 1960, Leroy E. Alexander (Mellon Institute, Pittsburgh, Pa.).

Physics Club of Lehigh Valley: president, L. J. Reimert (New Jersey Zinc Co. of Pa); vice president, J. P. Copes (General Aniline & Film Corp.); secretary-treasurer, A. E. Blakeslee (Bell Telephone Laboratories, 555 Union Blvd., Allentown, Pa.).

Summer Programs

The National Science Foundation has awarded grants totalling approximately \$800 000 to 54 educational institutions for the purpose of conducting programs in research participation for teacher training during the summer of 1959. The programs will be open to science and mathematics teachers from secondary schools and from junior colleges and small colleges lacking appropriate research facilities. The purpose of the programs, which will vary in length from six to twelve weeks, is to acquaint the teachers with the nature and methods of research by direct participation in the laboratories or in field research programs and through special seminars and lectures. Participating teachers will be selected by the individual institutions and will receive stipends (up to \$75 per week) plus allowances for travel and dependents. Twenty-six of these programs are open to physics teachers and inquiries and applications should be addressed to the program directors listed below. Early inquiry is advised, as many teachers will be appointed in the latter part of this month.

For both High-School and College Teachers:

Southern California, University of, Los Angeles, Calif. (Norman Kharasch, Dept. of Chemistry)

Colorado, University of, Boulder, Colo. (Bert M. Tolbert, Dept. of Chemistry)

Denver, University of, Denver, Colo. (Clarence M. Knudson, College of Engineering)

Florida State University, Tallahassee, Fla. (Leland Shanor, Dept. of Biological Sciences)

Indiana University, Bloomington, Ind. (Paul Klinge, Coordinator for School Science)

Kansas State College, Manhattan, Kan. (Thomas D. O'Brien, Director of Academic Research)

Louisiana State University, Baton Rouge, La. (John F. Christman, Dept. of Biochemistry)

Rochester, University of, Rochester, N. Y. (W. A. Fullagar, College of Education)

North Carolina State College, Raleigh, N. C. (Homer C. Folks, Dept. of Agronomy)

Oklahoma, University of, Norman, Okla. (Horace H. Bliss, Oklahoma Science Service)

South Carolina, University of, Columbia, S. C. (H. W. Davis, Dept. of Chemistry)

South Dakota, State University of, Vermillion, S. D. (George P. Scott, Dept. of Chemistry)

Texas, University of, Austin, Tex. (Addison E. Lee, Dept. of Botany)

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 MICRO-WAVE PHYSICISTS

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For further information please contact Mr. Robert Mitchell, Barbizon-Plaza Hotel, New York City, March 20, 21 and 23 through 27.

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For High-School Teachers only:

Arizona, University of, Tucson, Ariz. (A. B. Weaver, Dept. of Physics)

California, University of, Berkeley, Calif. (Earl R. Parker, Inst. of Engineering Research)

Delaware, University of, Newark, Del. (J. C. Kakavas, School of Graduate Studies)

Howard University, Washington, D. C. (Lloyd N. Ferguson, Dept. of Chemistry)

Maryland, University of, College Park, Md. (Howard Laster, Dept. of Physics)

St. Louis University, St. Louis, Mo. (Arthur G. Rouse, Dept. of Physics)

Newark College of Engineering, Newark, N. J. (James A. Bradley, Dept. of Chemical Engineering)

New Mexico Inst. of Mining, Socorro, N. M. (Burrell L. Wood, Dept. of Chemistry)

Clarkson College of Technology, Potsdam, N. Y. (F. Gordon Lindsey, Director of Summer Programs)

Brigham Young University, Provo, Utah (K. LeRoi Nelson, Dept. of Chemistry)

For College Teachers only:

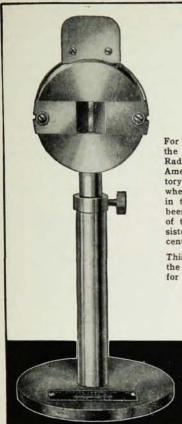
Michigan, University of, Ann Arbor, Mich. (M. L. Wiedenbeck, Dept. of Physics)

Pennsylvania State University, University Park, Pa. (W. C. Fernelius, Dept. of Chemistry)

West Virginia University, Morgantown, W. Va. (Earl L. Core, Dept. of Biology)

The Department of Physics of the University of Cambridge will hold an international summer school on solid-state physics from July 15 to August 13 under the sponsorship of the Ford Foundation. The school will be similar to the one held in Paris in 1958. This year's sessions will stress defects in crystalline solids with particular reference to methods of observation including electron microscopy and x-ray techniques. dislocations and point defects, radiation damage by neutrons and fast particle bombardment, and plastic deformation, creep, and fatigue. The level of the course will be suitable for students beginning research for a doctorate. Sessions will be held in the Cavendish Laboratory and will consist of about three lectures and discussions a day by members of the Cambridge Departments of Physics and Metallurgy and by visitors from abroad. There will also be demonstrations of appropriate equipment. About 60 students will be admitted and will receive traveling and living expenses at the rate of £2 per day (about \$5.60). Applications should contain the following details: full name, age, address, nationality, marital status (Married students should indicate whether their wives will accompany them), details of academic career, and names and addresses of two referees who are acquainted with the applicant's work. Letters of application should reach Mr. E. H. K. Dibden, Department of Physics, Cavendish Laboratory, Free School Lane, Cambridge, England, not later than April 1.

Polytechnic Institute of Brooklyn will offer during June a series of intensive one- and two-week courses for industrial scientists in the use of specialized physical tools in chemistry and physics. Courses will include: Applied Infrared Spectroscopy (June 8-12): Methods



EPLAB

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For many years the thermopile has been the accepted instrument for measuring Radiant Heat from Radiant Heaters at the American Gas Association Testing Laboratory in Cleveland, Ohio. Since 1930, when Vandaveer first described his work in this field,* an Eppley thermopile has been used for this purpose in hundreds of tests and the results have been consistent and accurate to within 1 per cent.

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If you have a problem involving the measurement of radiant energy we invite you to write us, describing your problem in as much detail as possible. We will be glad to make recommendations and there will be no obligation.

*Vandaveer, Industrial & Engineering Chemistry, Vol. 22, page 596, June 1930.

BULLETIN NO. 3 ON REQUEST ADDRESS: 10 SHEFFIELD AVE., NEWPORT, R. I.

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PHYSICISTS

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1718-B Irving Park Road • Chicago 13, Illinois Bronches and Warehouses — Mountainside, N. J. Boston • Birmingham • Santa Clara • Los Angeles • Tulsa Houston • Toronto • Montreal • Vancouver • Ottawa of Polymer Chemistry (June 1-5 and June 8-12); Polarography and Related Techniques (June 1-5); and Industrial Application of X-Ray Diffraction (June 1-12). Further details are available from Mrs. Doris Cattell, Polytechnic Institute of Brooklyn, 333 Jay Street, Brooklyn 1, N. Y.

Cornell University's annual Summer Laboratory Course in Techniques and Applications of the Electron Microscope will be given this year from June 15 to July 3. The course is planned to meet the needs of senior research workers in the field of electron microscopy and will include lectures by authorities in the various fields of application. Designed to offer participants an intensive survey of basic theory, it will also deal with the interpretation of results and the application of electron microscopy to research problems. To insure ample laboratory facilities for those taking the course, registration will be limited to a small group. Request for information and application forms should be addressed to Prof. Benjamin M. Siegel, Rockefeller Hall, Cornell University, Ithaca, N. Y.

Brandeis University has announced that it will hold its second Summer Institute in Theoretical Physics from June 22 to July 31. The courses include: Topics in Field Theory, Topics in High-Energy Phenomena, Theory of Multiparticle Systems, and Topics in Nuclear Theory, as well as postdoctoral seminars in two fields still to be determined. Predoctoral and postdoctoral fellowships and grants-in-aid are available. Inquiries should be addressed to the Summer School Office, Kalman, Brandeis University, Waltham 54, Mass.

International Units

The directors of the standards laboratories of Canada, New Zealand, the United Kingdom, South Africa, Australia, and the United States have agreed to adopt an international yard equal to 0.9144 meter and an international pound equal to 0.453 592 37 kilogram for all nonmetric calibrations carried out in the five laboratories after July 1, 1959. The international inch, derived from the international yard, is exactly equal to 25.4 millimeters and is two parts per million shorter than the inch presently used by the US National Bureau of Standards. The US pound currently in use is about one and one-half parts in ten million larger than the new international pound.

To avoid possible confusion during the transition period, National Bureau of Standards calibrations of length or mass expressed in English units will embody a statement indicating clearly the unit which has been used if the choice introduces a significant difference in the calibration values.

Laboratories

Two new research groups have been established at the Boulder (Colorado) Laboratories of the National Bureau of Standards. The recently created Radio Communication and Systems Division, headed by R. C. Kirby, formerly assistant chief of the Bureau's Radio Physics Division, will be chiefly concerned with research in radio communication and navigation techniques and with the application of radio propagation studies in the designing and improving of radio systems. The second new group at Boulder, the Lower Atmospheric Physics Section, is headed by Moody C. Thompson, Jr., a former member of the Bureau's Mechanics Division staff. The section will conduct basic studies necessary to the development of improved radio guidance systems for ballistic missiles and space vehicles.

The University of Denver will begin construction early next year of a \$5 million research center designed to integrate teaching and basic research in the physical and engineering sciences with the applied research functions of the University's Research Institute, which is currently conducting a \$2.5 million program in sponsored research for industry and the government. The complex of buildings will provide approximately 200 000 square feet of space for laboratories, classrooms, offices, and facilities for meetings and seminars. It will be named the Boettcher Center for Science, Engineering, and Research in recognition of support given the project by the Boettcher Foundation, which has granted \$1.25 million to the University to finance the initial stages of the proposed development.

Manhattan College in New York City has announced plans for constructing a new \$5 million engineering center in the Riverdale area of the Bronx, which has been the site of the College for more than thirty years. Nearly one thousand undergraduates in engineering now attend the College, and an approximate doubling of that enrollment is anticipated within the next decade. The six-story engineering center will contain facilities for nuclear studies and will house the Departments of Physics and Chemistry as well as the Departments of Chemical, Civil, Electrical, and Mechanical Engineering.

Martin S. Maier, head of the Physics Section of Raybestos-Manhattan, Inc.'s US Asbestos Division in Manheim, Pa., died on December 23rd at the age of forty-eight. Born in Eagleport, Ohio, Dr. Maier received his AB from Muskingum College, his MS from Purdue University, and his PhD in physics (1940) from the Ohio State University. He was professor of physics at Sterling College from 1933 to 1939; research physicist at Battelle Memorial Institute from 1940 to 1944; and a senior physicist on the proximity fuse project at Eastman Kodak Co. from 1944 to 1949, at which time he was named to head the Physics Section at the Manheim plant.

A nuclear physicist, Dr. Maier was engaged at the time of his death in a study of radiation effects on asbestos and asbestos products. He was a member of the American Physical Society.