gram Committee, there have been arranged three addresses: on Friday on "Mathematical Aspects of the Boundary Layer Theory," by Professor K. O. Friedrichs, of New York University; on Saturday at 11:00 A.M. on "The Structure of Normed Abelian Rings," by Professor E. R. Lorch, of Columbia University, and at 2:00 P.M. on "Modern Algebra and the Riemann Hypothesis," by Professor André Weil, of Lehigh University. Sessions for research papers have been arranged for Saturday afternoon.

At Chicago, at 2:00 p.m. on Friday, two invitation addresses were planned—one by Professor J. L. Synge on "The Problem of Saint Venant for a Cylinder with Free Sides," and one by Professor I. S. Sokolnikoff on "Torsion and Flexure of Compound Prisms."

At the University of California, on Saturday, there will be addresses by Professor D. H. Hyers, of the University of Southern California and the California Institute of Technology, on "Linear Topological Spaces," and by Professor R. M. Robinson, of the University of California, on "Hadamard's Three Circles Theorem." A symposium on applied mathematics will be held in the afternoon. The program will consist of two addresses: "Hydrodynamical Stability," by Dr. C. C. Lin, and "The Intrinsic Theory of Elastic Plates and Shells," by Dr. Wei-Zang Chien, both of the California Institute of Technology.

THE CHARLES L. MAYER AWARDS

THE National Science Fund of the National Academy of Sciences announces two Charles L. Mayer Awards for contributions on the nature of light submitted before January 1, 1946.

A prize of \$2,000 will be awarded for "an outstanding contribution to our basic understanding of the nature of light and other electromagnetic phenomena which provides in terms intelligible to the community of scientists at large a unified understanding of the two aspects of these phenomena which are at present jointly described by wave and by corpuscular theories."

The second prize of \$2,000 will be awarded for an outstanding comprehensive contribution to "a logical, consistent theory of the interaction of charged particles with an electromagnetic field including the interaction of particles moving with relative high speeds."

The first award is intended to encourage for the benefit of the non-specialist the interpretation of facts already known to the specialist. It is hoped that the second award will stimulate attack on one of the most fundamental unsolved problems in physics.

In making these awards the National Science Fund will have the assistance of a special advisory committee, consisting of Dr. E. U. Condon, associate director of the Research Laboratories, Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa.; Dr. Karl K. Darrow, a member of the technical staff of the Bell Telephone Laboratories and secretary of the American Physical Society; Dr. Robert A. Millikan, chairman of the executive council of the California Institute of Technology, and Dr. I. I. Rabi, professor of physics at Columbia University.

Contributions may be submitted to the National Science Fund of the National Academy of Sciences, 2101 Constitution Avenue, Washington 25, D. C.

GRANTS OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

THE Permanent Science Fund is administered by a committee of the American Academy of Arts and Sciences. At a meeting of the council on April 12, the grants listed below were approved.

To Theodor von Brand and W. Gardner Lynn, Catholic University of America, Washington, D. C., for special equipment for use in the investigation of metabolic rates in turtle embryos, \$80.

To Curtis L. Newcombe, associate professor of biology, College of William and Mary, Williamsburg, Va., for assistance in a further study of the larval stages of *Volsellia demissus*, the ribbed mussel, a source of food, \$600.

To Frances A. Schofield, adjunct professor of chemistry, Randolph-Macon Women's College, Lynchburg, Va. To provide assistance and expendable materials in a further study of glycogen forming activity of alanine isomers, \$500.

To Abraham M. Shanes, instructor in physiology, College of Dentistry of New York University, for assistance in extending a study of bioelectric potentials, \$450.

Communications in respect of the fund should be addressed to Professor John W. M. Bunker, Massachusetts Institute of Technology, Cambridge, Massachusetts.

SCIENTIFIC NOTES AND NEWS

Dr. Albert G. Hogan, professor of animal husbandry at the University of Missouri and chairman of the department, has been awarded the Mead Johnson and Company Vitamin B Complex Award for

1944 by the American Institute of Nutrition. The award is "in recognition of his pioneer work on certain aspects of the vitamin B complex, work which has progressed successfully for many years and which