and commodious club house. There is excellent fishing in the surrounding Chesapeake. Attendants on the conferences may secure rooms in the club house or in adjacent cottages or may come from Baltimore for the day. Meals for all are served at the club house.

The program given below is to be regarded as a tentative outline to be filled in or modified as may seem best.

1. *The Chemistry of the Aliphatic Free Radicals:* Professor Francis O. Rice, June 24–28.

The week's conferences will include a series of lectures and discussion on (1) the preparation and properties of free aliphatic radicals, (2) the mechanism of thermal decompositions from the free radical standpoint, and, (3) the Haber-Willstätter chain mechanism applied to reactions in solution.

2. *Long Chain Molecules:* Dr. Thomas Midgley, Jr., July 1–5.

July 1. Formation of polymers by definite chemical reactions; rings and string molecules, Dr. W. H. Carothers.
July 2. Synthetic rubber, Duprene and Thiokol, Dr. W. H. Carothers and Dr. J. C. Patrick.
July 3. The determination of molecular weights of big molecules, Dr. E. O. Kraemer.
July 4. Cellulose, Dr. E. O. Kraemer.
July 5. Rubber, Dr. T. Midgley, Jr.

3. *Vitamins:* Dr. E. V. McCollum, July 8–12.

These conferences consist of lectures and discussion grouped around work in progress on vitamins.

July 8. Vitamin A, Dr. E. V. McCollum.
July 9. Vitamin B, Dr. R. R. Williams.
July 10. Vitamin C, Dr. C. G. King.
July 11. Vitamin D, Dr. C. E. Bills.
July 12. Vitamin G, Dr. H. C. Sherman.

NEIL E. GORDON
THE JOHNS HOPKINS UNIVERSITY

COLD SPRING HARBOR SYMPOSIA ON QUANTITATIVE BIOLOGY

IF we may judge from the results of two years, the conference-symposia method as developed at the Biological Laboratory at Cold Spring Harbor is a successful experiment in method. The cooperation of outstanding chemists, physicists and mathematicians, as well as biologists, has been most gratifying. The unique bringing together of knowledge from these various sources upon a fundamental aspect of biology each year is already widely appreciated. Thus the annual volume resulting from the symposia and discussion is purchased in over twenty-five countries all over the world, and there is evidence that the distribution of the volumes is becoming extended.

This year the conference-symposia will be centered about photochemistry in biology and medicine. They will take place during five weeks, June 26 to August 1. The general aspects which will be considered are: basic photochemistry (June 26–July 2), photosynthesis (July 3–July 16), photoreceptors and bioluminescence (July 17–July 23), and photochemistry in medicine (July 24–July 30).

While plans are still incomplete, it is already known that the following men will present papers, and, with five exceptions, will be in residence from one to five weeks at least:

Dr. Vernon M. Albers, physicist, Kettering Foundation, Antioch College; Dr. William Arnold, Biological Laboratories, Harvard University; Dr. Charles E. Bills, biochemist, director, Research Laboratories, Mead Johnson and Company; Dr. Harold F. Blum, assistant professor of physiology, University of California Medical School; Dr. F. S. Brackett, physicist, Bureau of Cotton Economics, Department of Agriculture; Dr. Dean Burk, associate physical chemist, Bureau of Chemistry and Soils, Department of Agriculture; Dr. E. S. Castle, assistant professor of physiology, Harvard University; Dr. M. Demerec, investigator, Department of Genetics, Carnegie Institution of Washington; Dr. N. R. Dhar, head of Chemistry Department, University of Allahabad (India); Dr. Robert Emerson, Biological Laboratory, California Institute of Technology; Dr. Henry Eyring, physical chemist, research associate, Princeton University; Dr. Hugo Fricke, in charge of biophysics laboratory, Biological Laboratory; Dr. H. Keffer Hartline, fellow medical physics, Johnson Foundation, University of Pennsylvania School of Medicine; Dr. E. Newton Harvey, professor of physiology, Princeton University; Dr. Selig Hecht, professor of biophysics, Columbia University; Dr. O. L. Inman, director, Kettering Foundation, Antioch College; Dr. H. V. Knorr, physicist, Kettering Foundation, Antioch College; Dr. Henry Laurens, professor of physiology, Tulane University School of Medicine; Dr. H. S. Mayerson, assistant professor of physiology, Tulane University School of Medicine; Dr. Harold Mestre, Department of Bacteriology, Yale University School of Medicine; Dr. Karl Meyer, Department of Ophthalmology, College of Physicians and Surgeons; Dr. W. A. Noyes, Jr., associate professor of chemistry, Brown University; Dr. Gerhard K. Rollefson, associate professor of chemistry, University of California; Dr. Paul Rothemund, biochemist, Kettering Foundation for Study of Chlorophyll and Photosynthesis, Antioch College; Dr. S. E. Sheppard, chemist, assistant director Kodak Research Laboratories; Dr. Hugh S. Taylor, David B. Jones professor of chemistry, Princeton University; Dr. George Wald, Biological Laboratories, Harvard University; Dr. Ernst Wolf, Biological Laboratories, Harvard University; Dr. F. Paul Zscheile, Jr., Department of Chemistry, University of Chicago.

Investigators who wish to attend various symposia and discussion may obtain more definite information, including programs, from the Biological Laboratory at Cold Spring Harbor.—R. G. H.