

CONFERENCE ON APPLIED NUCLEAR PHYSICS

October 28–November 2, 1940

A general Conference on Applied Nuclear Physics, sponsored by the American Institute of Physics in cooperation with the Massachusetts Institute of Technology, will be held during the week of October 28–November 2, 1940, at the Massachusetts Institute of Technology, Cambridge, Massachusetts. The rapidly increasing number of applications of methods and apparatus characteristic of nuclear physics in the fields of biology, radiology, chemistry, geology, and industrial physics has long emphasized the usefulness of a joint conference between physicists and their colleagues in other fields of science.

The purposes of the Conference are to bring together investigators who may be widely separated geographically, and to provide a forum for assembling and correlating present knowledge and difficulties, and for directing attention toward fundamental lines of research which should be the subject of future investigations.

The week's activities will be divided into separate sessions on applications to biology, chemistry, radiology, metallurgy, geology, and to general sessions relating to the production and use of radioactive and stable isotopes, and the protection of workers from radiation. An outline of the general program is given in the following table:

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Digest of Program

Monday A.M., October 28, 1940 (two parallel sessions)

Geology I: "Techniques and Standards in Terrestrial Radioactivity Measurements."

Metallurgy I: "Tracer Studies of Metal Diffusion and Corrosion."

Monday P.M., October 28, 1940 (two parallel sessions)

Geology II: "Geochemical Applications of Radioactivity."

Metallurgy II: "Radiography with Gamma-Rays, X-Rays, and Neutrons."

Tuesday A.M., October 29, 1940 (three parallel sessions)

Geology III: "Radioactive Methods of Geologic Age Determinations."

Chemistry I: "Tracer Techniques in General Chemistry."

Radiology I: "General Aspects of Cancer Therapy."

Tuesday P.M., October 29, 1940 (three parallel sessions)

Geology IV: "Geophysical Applications of Nuclear Physics."

Chemistry II: "Tracer Techniques in Analytical Chemistry."

Radiology II: "Radium and Roentgen Therapy."

Wednesday A.M., October 30, 1940

General I: "Production of Radioactive and Stable Isotopes and of Penetrating Radiations."

Wednesday P.M., October 30, 1940

General II: "Measurement of Radioactive and Stable Isotopes and of Penetrating Radiations."

Thursday A.M., October 31, 1940

General III: "Protection of Workers from Biological Effects of Radiation."

Thursday P.M., October 31, 1940 (three parallel sessions)

Chemistry III: "Synthesis of Organic Substances Containing Tracers."

Radiology III: "Neutron and Artificial Radioactivity Therapy."

Biology I: "Tracer Techniques in Biology."

Friday A.M., November 1, 1940 (two parallel sessions)

Radiology IV: "Dosage Measurements."

Biology II: "Tracer Studies of Plant and Animal Metabolism."

Friday P.M., November 1, 1940 (two parallel sessions)

Radiology V: "Radiobiology."

Biology III: "Tracer Studies" (continued).

Saturday A.M., November 2, 1940 (two parallel sessions)

Biology IV: "Tracer Studies" (concluded).

General IV: "Contributed Papers."

COMMITTEE IN CHARGE OF PROGRAM

Robley D. Evans, *Chairman*

Massachusetts Institute of Technology

ELMER HUTCHISSON, *Secretary*

University of Pittsburgh

HENRY A. BARTON

American Institute of Physics

EDW. U. CONDON

Westinghouse Electric & Manufacturing

Company

LEE A. DuBRIDGE

University of Rochester

G. FALLIA

Memorial Hospital, New York

CLARK GOODMAN

Massachusetts Institute of Technology

ERNEST O. LAWRENCE

University of California

HAROLD C. UREY

Columbia University

The daily sessions will consist of short invited papers by leading investigators followed by vigorous and searching discussion by the conferees. Ample time will be allowed between and after regular sessions for personal and informal conferences. While the emphasis will be on the program of invited papers and the discussion of these, provision has also been made for a limited number of ten-minute contributed papers. Five one-hour evening sessions will be held, in each of which an outstanding investigator will summarize the status of the several fields which are joined together by the Conference. The evening lectures will be open to the general public.

Anyone who can actively participate in or profit by the Conference is eligible and cordially invited to become a member. Advance registration (no fee) will be required to permit suitable arrangements to be made. Those wishing to attend should register by letter as soon as possible and not later than October 1. Letters and inquiries should be addressed to Professor Robley D. Evans, General Chairman, Conference on Applied Nuclear Physics, Massachusetts Institute of Technology.