

THE USE OF RADIOACTIVE ISOTOPES AS TRACERS AND THERAPEUTIC
AGENTS

COURSE OF LECTURES AND DEMONSTRATIONS

TO BE GIVEN AT

Vanderbilt University

Nashville, Tennessee

in cooperation with the

Clinton Laboratories of the Monsanto Chemical Company

Operating for the

Atomic Energy Commission

and the

Oak Ridge Institute of Nuclear Studies

April 21-25, 1947



MONDAY MORNING

- 9:00-10:00 Registration—Room 5308
 Dr. W. G. Pollard, Presiding—Room 5122
- 10:00-10:30 Introductory Remarks—Chancellor Branscomb; Dr. Goodpasture
- 10:30-12:00 Lecture C-1 "General Aspects of the Use of Isotopes as Tracers"—Dr. W. F. Bale (University of Rochester)
- 12:00- 2:30 Luncheon—Kissam Hall

MONDAY AFTERNOON—Dr. Nathan Woodruff, Presiding—Room 5122

- 2:30- 3:30 Lecture C-2—"The Nuclear Structure of Matter"—Dr. L. W. Nordheim (Clinton Laboratories)
- 3:30- 4:30 Lecture C-3—"Principles of Radioactivity"—Dr. F. G. Slack (Vanderbilt University)
- 5:30 Cocktails—Hermitage Hotel

TUESDAY MORNING—Dr. F. G. Slack, Presiding—Room 5122

- 10:00-11:00 Lecture C-4—"The Cyclotron and the Chain Reacting Uranium Pile"—Dr. P. C. Aebersold (Clinton Laboratories)
- 11:00-12:00 Lecture C-5—"The Precise Measurement of Radiations"—Dr. W. C. Peacock (Massachusetts Institute of Technology)
- 12:00- 2:00 Luncheon—Kissam Hall

TUESDAY AFTERNOON—Dr. W. G. Pollard, Presiding—Room 5122

- 2:00- 3:00 Lecture C-6—"Health Physics: Problems in Protection from Radiation"—Dr. K. Z. Morgan (Clinton Laboratories)
- 3:00- 4:00 Lecture C-7—"Studies on Blood Volume and Shock Using Tagged Red Blood Cells"—Dr. J. G. Gibson, 2nd (Harvard Medical School)
- 4:00- 5:00 Lecture C-8—"Availability of Isotopes from the Cyclotron and Pile"—Dr. W. E. Cohn (Clinton Laboratories)

TUESDAY EVENING—Rooms 6100, 6108, 6114, 5308

Vanderbilt Isotope Project will be open for inspection.

WEDNESDAY MORNING—Dr. G. R. Meneely, Presiding—Room 9204

- 10:00-11:00 Lecture C-9—"Monitoring Equipment in the Use of Isotopes"—Dr. K. Z. Morgan (Clinton Laboratories)
11:00-12:00 Lecture C-10—"Use of Radioactive Phosphorus in Therapy"—Dr. E. H. Reinhard (Washington University, St. Louis)
12:00- 2:00 Luncheon—Kissam Hall

WEDNESDAY AFTERNOON—Room 9204

- 2:00- 4:00 Demonstration of Typical Tracer Experiment—Open Discussion Period—
Drs. P. F. Hahn, C. W. Sheppard, J. P. B. Goodell, and Leon Oettinger

WEDNESDAY EVENING—Dr. J. G. Gibson, 2nd., Presiding—Room 9204

- 8:00- Lecture S-1—Round Table Discussion on "Scientific Cooperation in the Use of Isotopes in Biology and Medicine"

THURSDAY MORNING—Dr. Nathan Woodruff, Presiding—Room 5122

- 9:00-10:00 Lecture C-11—"The Interaction of Radiation with Matter: Chemical and Biological Effects"—Dr. Alexander Hollaender (Clinton Laboratories)
10:00-11:00 Lecture C-12—"Handling Radioactive Isotopes in the Hospital and Small Laboratory"—Dr. J. P. B. Goodell (Vanderbilt University)
11:00-12:00 Lecture C-13—"Criteria for Use of Radioactive Isotopes in Therapy"—Dr. C. W. Sheppard (Vanderbilt University)
12:00- 2:00 Luncheon—Kissam Hall

THURSDAY AFTERNOON—Dr. C. W. Sheppard, Presiding—Room 5122

- 2:00- 3:00 Lecture C-14—"Use of Isotopes in Metabolic Studies"—Dr. J. F. Ross (Boston University School of Medicine)
3:00- 4:00 Lecture C-15—"The Measurement of Radiations by Various Methods"—Dr. C. J. Borkowski (Clinton Laboratories)
4:00- 5:00 Lecture C-16—"Problems of Radioactive Standards"—Dr. W. C. Peacock leading open discussion

THURSDAY EVENING—Furman Hall

- 8:00 Lecture S-2—"The Leukemias"—Dr. Russell L. Haden (Cleveland Clinic)

FRIDAY MORNING—Dr. F. G. Slack, Presiding—Room 5122

- 10:00-11:00 Lecture C-17—"Red Cell Preservatives as Studied with Tagged Cells"—Dr. J. F. Ross (Boston University School of Medicine)
11:00-12:00 Lecture C-18—"Recent and Future Developments in Isotope Tracer Studies"
12:00- 2:00 Luncheon—Kissam Hall

FRIDAY AFTERNOON—Dr. G. R. Meneely, Presiding—Room 9204

- 2:00- 3:00 Lecture C-19—"Use of Radioactive Manganese and Gold in the Therapy of Malignant Disease"—Drs. P. F. Hahn and C. W. Sheppard (Vanderbilt University)
3:00- 4:00 Lecture C-20—"Demonstration of Clinical Subjects Under Isotope Therapy"
4:00- 5:00 Lecture C-21—"Avenues of Investigation in Isotope Therapy"

FRIDAY EVENING—Hermitage Hotel

- 7:00 Dinner for Registrants and Speakers