Books

OPPENHEIMER

By Robert Serber, Victor F. Weisskopf, Abraham Pais, and Glenn T. Seaborg. Introduction by I. I. Rabi

Scribner's $5.95

reviewed by Robert F. Christy, professor of theoretical physics and executive officer for physics.

This thin volume consists of speeches delivered at the Oppenheimer memorial session of the American Physical Society held in April 1967 and published in *Physics Today,* October 1967. To this has been added an introduction by I. I. Rabi, who was unable to speak at the original APS session; a number of photographs, many contributed by Mrs. J. Robert Oppenheimer; and a selected bibliography, chronology, and biographical and reference notes.

The introduction by Rabi and the collection of photographs are very welcome additions to the original, and indeed tend to complete the picture of Oppenheimer. The photographs provide an excellent character study of Oppenheimer and also provide a collection of familiar faces, many now famous, which is replete with nostalgia for one who has grown up in the field of theoretical and nuclear physics. The introduction gives a brief account of Oppenheimer's early years, and attempts an overall appraisal of his place and contribution in physics. This is an interesting speculation on the correlation or lack of it between originality and creativity on the one hand and intellectual stature on the other.

Robert Serber's contribution covers Oppenheimer's prewar professional life. Serber is eminently qualified because of his own lengthy association with Oppenheimer, and he provides an excellent account of Oppenheimer's contributions to several basic areas of physics—the proton and antiproton, field theory and cosmic rays, and nuclear physics. This account even served to remind the reviewer of a forgotten paper contributed jointly with Oppenheimer at a Physical Society meeting in 1941. It also serves to remind us of the strange twists actually taken by science in the course of its development: Developments do not follow a simple, logical course. Serber also gives an account of Oppenheimer's teaching and his relationship with the growing band of students and "postdocs" in prewar Berkeley, whom he taught, led, and inspired.

Victor Weisskopf's contribution on the Los Alamos years is less specialized, dealing in broad terms with the general character of work at Los Alamos. He gives a good impression of the basic science, but even more, a feeling for Oppenheimer's remarkable ability to handle the group and lead their efforts to the atomic bomb.

Abraham Pais' "The Princeton Period" starts with a brief account of the theoretical physics conferences in 1947-49 which saw the birth of the new quantum electrodynamics — a most remarkable period in physics. Pais weaves Oppenheimer's interest into the general fabric of postwar physics but also discusses Oppenheimer's deep interest in the relation of science to our general culture.

Glenn Seaborg emphasizes Oppenheimer's public service and human contributions. He had known Oppenheimer in prewar Berkeley but concentrates on Oppenheimer's role as first chairman of the General Advisory Committee of the Atomic Energy Commission. During this period much of the course of our national policy in atomic energy was charted under his guidance. His leading role in formulating the Acheson-Lilienthal Report, aimed at international control of atomic energy for peaceful purposes, exemplifies his far-seeing humanitarian outlook. This approach, in the H-bomb debate, led him to recommend against a crash development program which would have stepped up the arms race. It led to his famous security hearing.

It is appropriate now to reflect on this period, for we are now in the middle of another major debate—on the ABM question. Perhaps this time we can turn aside from the road to escalated destruction and follow the path that Oppenheimer tried to lead us in—and failed. Seaborg closes by quoting a number of memorable passages from Oppenheimer's writings, which serve to remind us more than anything else of the "singular combination of talents of this extraordinary man."

THE GOLDEN GUIDE TO SCUBA DIVING

by Wheeler J. North

Golden Press, Paperback $1.00

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