

Caltech's New President



The Goldbergers meet the faculty at an Athenaeum reception on May 8.

Marvin L. Goldberger, a theoretical physicist, is now Joseph Henry Professor of Physics at Princeton. On July 1 he becomes President of Caltech.

Goldberger's Caltech appointment came after a faculty committee had searched for more than a year and considered more than 200 possible presidential candidates. During the search period, Goldberger visited the Caltech campus for three crowded days in January to meet with groups of students, faculty, and trustees. After his appointment was announced, he returned to the campus for two or three days of briefing sessions in March, and he was back on campus again for three days in May to meet with trustees and attend a faculty reception honoring him and Mrs. Goldberger. They will move into the President's house on Hill Avenue on July 1. His inauguration is set for October 27.

Born in Chicago in 1922, Goldberger received his BS in physics at the Carnegie Institute of Technology (now Carnegie-Mellon University) in 1943. He served in the United States Army from 1943 to 1946, mostly in the theoretical physics division of the Metallurgical Laboratory at Chicago, a part of the Manhattan Project, working on neutron diffraction and on nuclear reactor design. He got his PhD in physics from the University of Chicago in 1948, working under Enrico Fermi.

After a year at the Radiation Laboratory at Berkeley and a year as a research associate at MIT, Goldberger joined the faculty of the University of Chicago as assistant professor of physics in 1950. He became an associate professor in 1952 and a full professor in 1955. He was Higgins visiting associate professor at Princeton in 1953-54, and in 1957 he became Higgins Professor of Mathematical Physics at Princeton—a position he held until 1977 when he became Joseph Henry Professor of Physics. He was chairman of the physics department at Princeton from 1970 to 1976.

Goldberger is the author of about 150 scientific papers, and his research has included work on neutron diffraction, nuclear physics, plasma physics, collision theory, methods to determine properties of scattering systems by intensity correlations, dispersion theory, multi-peripheral models of high-energy phenomena, the relation between Regge poles and elementary particles, and quantum field theory. He is probably best known for his work on the application of dispersion methods to a wide variety of problems in the weak and strong interactions among elementary particles and for his monograph, with K. M. Watson, *Collision Theory*.

Since 1955 he has been an adviser to a number of government agencies on national security and arms control affairs. He was one of the founders of the JASON group in 1959. Originally associated with the Institute for Defense Analyses and now with SRI International, this group of about 35 prominent scientists (mainly physicists) works for the Department of Defense and other agencies on problems involving advanced technological concepts. From 1965 to 1969 he was a member of the President's Science Advisory Committee, and in 1972 and 1973 he served as chairman of the Federation of American Scientists. He was a member of the recent Ford Foundation-Mitre corporation study, *Nuclear Power—Issues and Choices*.

Goldberger has been active in international scientific affairs for many years. From 1963 to 1969 he was chairman of the high-energy physics commission of the International Union of Pure and Applied Physics. In May 1972 he was head of the first scientific delegation to the People's Republic of China and arranged for the first delegation of Chinese scientists to visit the United States in the fall of 1972.

He is a Fellow and was chosen to be vice-president elect (a position he has now resigned) of the American Physical Society, having been a member of its Council from 1973 to 1977. He is also a Fellow of the American Academy of Arts and Sciences and of the American Association for the Advancement of Sciences. He is a member of the National Academy of Sciences and of its Council on Foreign Relations. He was awarded the Dannie Heineman Prize for Mathematical Physics in 1961.

Though he is no longer chairman, Goldberger is still active in a variety of affairs in the physics department at Princeton. He is also currently chairman of the university's committee on research that deals with potentially biohazardous materials. Despite his administrative duties, Goldberger has managed to keep some research going at Princeton—"not what I would like to have, but I am still working on some things in elementary particle physics." He also has some undergraduate thesis students, and he teaches the undergraduate course in quantum mechanics—55 students in all. He hopes to be able to teach undergraduates at Caltech too, "but everybody says it's unlikely I'll have time. The first year I wouldn't even try it, but I haven't given up the idea if it's technically possible. Whether I can meet a class regularly, or whether it will have to be something rather specialized, I still want to do it."

He is also interested in the possibility of establishing something like a senior thesis program, and junior independent work, at Caltech. "Of course, I have to learn a great deal more about what exists before I propose modifications," says Goldberger. "But I come from this deep tradition of devotion to and involvement with undergraduates. I just saw a survey that evaluated some 68 colleges and universities on their undergraduate programs, and Princeton rated number 1. I would like to see them become number 2."

A soft-spoken man, with the pleasant expression and reassuring manner of a trusted family doctor, Goldberger is known to his close friends, and most of his acquaintances, as "Murph."

Aside from his academic interests, he plays tennis, runs, and cooks. His cooking is eclectic—Chinese, Italian, French, and Basic, but "I cook from cookbooks; I don't invent."

Mildred Goldberger is a professional economist who has worked for the New Jersey State Department of Labor and Industry. She is now with the Princeton Center for Environmental Studies. She is also working with a Princeton group writing a cooperative novel. And for many years she has been involved with the improvisational theater. This is an interest that goes back to the Goldbergers' Chicago days, when Mildred wrote scripts for the Compass Players, a group that included Mike Nichols, Elaine May, and Shelley Berman.

The Goldbergers have two sons—Joel, 25, working toward a master's degree in computer science at the State University of New York at Stony Brook, and Samuel, 29, who has a PhD in physiological psychology from Stony Brook and is currently working as a psychologist at a hospital in San Francisco.

In their brief visits to Caltech this year the Goldbergers have been "impressed with the general enthusiasm for the institution that the faculty had," and with "their concerns and involvement in Caltech affairs."

"People seemed to like each other," Goldberger says. "We both noticed it—that people were very warm and friendly. We felt we were guests at interesting parties rather than that we were being looked over. It was a nice feeling."

And what's even nicer—it's mutual. \Box