

Posted on Sat, Nov. 22, 2003

Anton Burg, expert on boron and father of chemistry at USC, dead at 99

Associated Press

LOS ANGELES - Anton Burg, hailed as the father of the chemistry department at the University of Southern California and a leading expert on the study of boron, has died at age 99.

Burg died Wednesday at his home near the USC campus.

He came to the university as an assistant professor in 1939, joining what was then an undistinguished department that had not performed any research in years. Within a year he was promoted to chairman, and he used his position to turn the department into one of the nation's best, hiring top faculty, acquiring funding and launching research projects.

"By the early 1950s, we were third in the United States in funding per faculty member and fifth in publications," said chemist Sidney Benson, one of Burg's hires.

Although hailed for turning the department around, Burg's true professional passion was studying boron. It was sparked, he remarked recently, when he attended a 1927 lecture by chemist Gilbert Newton who said nobody understood the chemistry of boron hydrides.

He went on to synthesize several boron compounds that eventually found wide use in organic chemistry as tools for creating more complex molecules. None of his creations became household names but he was among the first people to see polyethylene and Teflon, both of which appeared as byproducts of his boron reactions. After recording them in his notebooks as interesting molecules, he went on to other studies.

He also pressed one of his students, Herbert C. Brown, to follow up on his work, and Brown went on to win a Nobel Prize.

"Burg never published his initial results," Benson said. "Brown always said that if he had published, they would have shared the Nobel."

An avid bicyclist who never drove a car, Burg was both a scholar and a nationally ranked track star as a student at the University of Chicago.

He would put his athletic ability to good use in 1946, Benson recalled, when he persuaded fire marshals not to condemn an old Army barracks that USC was using as a chemistry lab because it only had one exit from the second floor.

After he demonstrated he could easily exit the building by jumping out a window, the marshals relented and the building remained in use another 20 years.