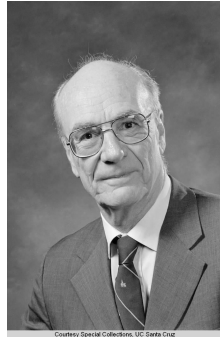


# Donald Edward Osterbrock

From Wikipedia, the free encyclopedia



**Donald Edward Osterbrock** (July 13, 1924 – January 11, 2007) was an American astronomer, best known for his work on star formation and on the history of astronomy.<sup>[1]</sup>

Osterbrock was born in Cincinnati. His father was an electrical engineer. He served with the US Army in the Second World War, making weather observations in the Pacific.

He was educated at the University of Chicago, where he received bachelor's and master's degrees in physics and a PhD in astronomy in 1952. He was a student of Subrahmanyan Chandrasekhar while working at University of Chicago's Yerkes Observatory. His work there with William Wilson Morgan and Stewart Sharpless showed the existence of the Milky Way's spiral arms.

He became a post-doctoral researcher, instructor and Assistant Professor at the California Institute of Technology until 1958. He was then appointed Assistant Professor at the University of Wisconsin–Madison, received tenure there in 1959, and was promoted to full professor in 1961. He was a Guggenheim Fellow for the academic year 1960–1961.<sup>[2]</sup> In 1973 he moved from Madison to the University of California at Santa Cruz, as Professor of Astronomy and Astrophysics, and Director of Lick Observatory, a position he held until 1981. He remained on the faculty at UC Santa Cruz until his retirement in 1993. Thereafter, Emeritus Professor Osterbrock continued to make daily trips to his office on campus, to work on his research, to keep publishing, and to maintain an active role in the astronomical community.

At the time of his death he had authored 12 monographs on astronomy and the history of astronomy, including, in 1989 the influential textbook *Astrophysics of Gaseous Nebulae and Active Galactic Nuclei*, and the recently updated and revised 2nd edition (2006) written along with Gary Ferland of the University of Kentucky. Alongside his more than 150 articles on astronomy and astrophysics, he published 70 historical studies, biographical memoirs, and obituaries of major figures in nineteenth and twentieth century astronomy, and numerous book reviews.

Osterbrock's research included work on the nature of ionized gases around hot stars and studying active galactic nuclei powered by black holes.

Osterbrock received lifetime achievement awards from the American Astronomical Society and the Astronomical Society of the Pacific. He was President of the American Astronomical Society from 1988 to 1990.

He died following a heart attack. He was survived by his wife of 54 years, Irene Hansen, and

their son and two daughters.

### **Honors**

- Associate, Royal Astronomical Society (1976)
- Henry Norris Russell Lectureship, American Astronomical Society (1991)
- Corresponding Member, Academia Mexicana de Ciencias (1998)

### **Awards**

- University of Chicago Alumni Association Professional Achievement Award (1982)
- University Center Distinguished Scholar in Physics and Astronomy, Atlanta, Georgia (1990)
- Catherine Wolfe Bruce Gold Medal, Astronomical Society of the Pacific (1991)
- Gold Medal, Royal Astronomical Society (1997)
- Antoinette de Vancouleurs Memorial Lectureship and Medal, University of Texas (1994)
- Hans Lippershey Medal, Antique Telescope Society (1998)
- University of Chicago Alumni Medal (2000)
- Leroy E. Doggett Prize for Historical Astronomy, Historical Astronomy Division, American Astronomical Society (2002)

### **Named after him**

- Asteroid 6107 Osterbrock

### **Honorary degrees**

- D.Sc., Ohio State University (1986)
- D.Sc., University of Chicago (1992)
- D.Sc., University of Wisconsin, Madison (1997)
- D.Sc., Ohio University (2003)
- D.Sc., University of Cincinnati (2004)

### **References**

- 1 O'Dell, Robert C.; Sheehan, William P. (April 2007). "Obituary: Donald Edward Osterbrock". *Physics Today*. **60** (4): 79–80. doi:10.1063/1.2731990.
- 2 Donald E. Osterbrock – John Simon Guggenheim Memorial Foundation
  - Obituary, *New York Times*, 27 January 2007
  - Obituary, *The Times*, 14 March 2007
  - Bruce Medal page
  - Press release, UC Santa Cruz, January 12, 2007

### **External links**

- Lick Observatory page
  - University of California Observatories page
  - "Lessons from Don" by S. Waldee  
Photographs of Donald Osterbrock from the UC Santa Cruz Library's Digital Collections
- 
- Obituary, *New York Times*, 27 January 2007

# Donald E. Osterbrock, 82, Who Studied the Cores of Galaxies, Dies

By JEREMY PEARCE

JAN. 27, 2007

Donald E. Osterbrock, an astronomer and historian of science who studied the birth of stars and luminous clouds of gas at the core of galaxies outside the Milky Way and wrote an influential textbook about the subject, died on Jan. 11 in Santa Cruz, Calif. He was 82.

The cause was a heart attack, his family said.

Dr. Osterbrock, a former director of Lick Observatory on Mount Hamilton in California, was interested in clusters of stars and dust within clouds of gas that emit a telltale glow and are collectively known as gaseous nebulae.

In his textbook for graduate students, "Astrophysics of Gaseous Nebulae and Active Galactic Nuclei" (1989), he explained the phenomenon and also described events going on at the center of external galaxies. The book includes descriptions of quasars, the distant and massive black holes whose brightness can sometimes be detected through optical telescopes from Earth. In 2006, the text was published in a revised edition with another astronomer, Gary J. Ferland.

In the early 1950s, while still a graduate student at the University of Chicago, Dr. Osterbrock helped determine the spiral shape of the Milky Way in observations at the Yerkes Observatory in Wisconsin. Working with William W. Morgan and others, he used a wide-angle camera to detect clouds of glowing hydrogen gas and trace the spiraling arms of the galaxy. The landmark discovery was announced at a meeting of the American Astronomical Society in 1951.

Late in his career, Dr. Osterbrock augmented his research with historical studies and intellectual biographies of prominent astronomers of the 19th and 20th centuries. He wrote profiles of James E. Keeler and Walter Baade as well as a book-length study, "Pauper and Prince: Ritchey, Hale and Big American Telescopes" (1993).

Donald Edward Osterbrock was born in Cincinnati on July 13, 1924. He earned his doctorate in astronomy from the University of Chicago in 1952.

After teaching briefly at Princeton and the California Institute of Technology, he joined the University of Wisconsin as an assistant professor of astronomy in 1958. Dr. Osterbrock was named a professor of astronomy at Wisconsin in 1961 and remained until 1973.

He was director of Lick Observatory from 1973 to 1981, and a professor of astronomy and astrophysics at the University of California, Santa Cruz, from 1973 to 1992. He became a professor emeritus there in 1993.

He served as president of the American Astronomical Society from 1988 to 1990. The Royal Astronomical Society awarded him a gold medal in 1997.

Dr. Osterbrock is survived by his wife of 54 years, the former Irene Hansen. The couple lived in Santa Cruz.

He is also survived by a son, William, of Santa Cruz; two daughters, Laura of Seattle and Carol LePage of Santa Cruz; and three grandchildren.