

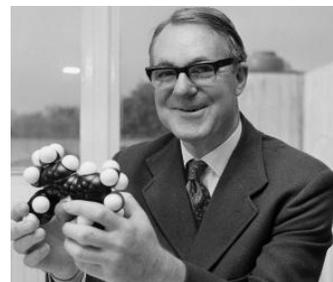
## John Cornforth

Bachelor of Science from University of Sydney, First-Class Honors and the University Medal, 1937

University of Oxford, D. Phil. in Organic Chemistry, 1941

Professor at Warwick University 1965-1971

Professor at Sussex University 1971-1982



### **Biography**

John Cornforth was born in 1917 in Sydney, New South Wales. His father was a schoolmaster and teacher and graduated from Oxford. His mother was a maternity nurse before getting married. When Cornforth was 10 years old, it was believed that he may be deaf and was diagnosed with Otosclerosis. This is a disease of the inner ear that causes progressive hearing loss. As a result, Cornforth was completely deaf by the age of 20. Cornforth liked to communicate using writing. He was able to read lips, but struggled to read the lips of strangers.

Cornforth decided to pursue chemistry due to the influence of his teacher, Leonard Bassler, at Sydney Boy's High School and he felt his deafness would not impact his success within the field. He graduated from Sydney Boy's High School in 1933. Following his graduation, he enrolled at the University of Sydney when he was 16 years old. His area of study was organic chemistry. He graduated with a Bachelor of Science with First Class Honors and the University medal in 1937. In 1939, he was selected, along with Rita Harradence for the Royal Commission for the Exhibition of 1851 scholarship. In 1941, Robert married Rita who also was an organic chemist. She helped him communicate with others and was his big supporter throughout his life. Cornforth died in 2013 in Sussex, England.

### **Research**

While working on his doctorate, World War II began and Cornforth began researching penicillin with Sir Robert Robinson. One of the areas of Cornforth's research was the study of penicillin. His focus was on purifying and concentrating it and identifying the structure of the central molecule. He also helped write *The Chemistry of Penicillin*. After WWII, Cornforth joined the Medical Research Council and researched cholesterol. He won the Nobel Prize in Chemistry in 1975 for his research involving stereochemistry of enzyme-catalyzed reactions. Cornforth investigated enzymes that catalyze change in substrates by taking the place of hydrogen atoms within the substrate's chains and rings. Cornforth's research led him to detail the biosynthesis of cholesterol.

### **Awards, Honors, & Special Recognitions**

- Corday-Morgan Medal (1949)
- Fellow of the Royal Society (1953)
- Davy Medal (1968)
- Nobel Prize in Chemistry (1975)
- Australian of the Year (1975)
- Royal Medal (1976)
- Knight of the British Empire (1977)
- Copley Medal (1982)

Information on this biography was taken from <http://www.twu.edu/dsc/warcup-cornforth1.htm>, [https://www.nobelprize.org/nobel\\_prizes/chemistry/laureates/1975/cornforth-bio.html](https://www.nobelprize.org/nobel_prizes/chemistry/laureates/1975/cornforth-bio.html), <http://www.thefamouspeople.com/profiles/john-cornforth-5411.php> and Wikipedia.