



Honorary Doctor in Science

Levitt, Michael (Hon PhD)

Michael Levitt was born in Pretoria, South Africa; his father was from Lithuania and his mother from the Czech Republic. He attended Sunnyside Primary School and then Pretoria Boys High School between 1960 and 1962. Levitt spent 1963 studying applied mathematics at the University of Pretoria and then attended King's College London, graduating with a first-class honours degree in Physics in 1967.

Michael Levitt was a PhD student in Computational biology at Peterhouse, Cambridge, and was based at the Laboratory of Molecular Biology from 1968 to 1972, where he developed a computer program for studying the conformations of molecules which underpinned much of his later work.

From 1980 to 1987, he was Professor of Chemical Physics at the

Weizmann Institute of Science. Thereafter, he served as Professor of Structural biology, at Stanford University, California.

Levitt was one of the first researchers to conduct molecular dynamics simulations of DNA and proteins and developed the first software for this purpose. He is well known for developing approaches to predict macromolecular structures. He has also worked on simplified representations of protein structures for analysing folding and packing, as well as developing scoring systems for large-scale sequence-structure comparisons.

Michael Levitt was elected an EMBO Member in 1983, a Fellow of the Royal Society (FRS) in 2001, and a member of the US National Academy of Sciences in 2002. He was elected member of the American Academy of Arts & Sciences in 2010. He received the DeLano Award for Computational Biosciences in 2014 and was elected an ISCB Fellow by the International Society for Computational Biology in 2015. Professor Levitt is a Distinguished Visiting Scholar of the Academy of Science of South Africa.

In 2013, Professor Levitt received the Nobel Prize in Chemistry, together with Martin Karplus and Arieh Warshel, "for the development of multiscale models for complex chemical systems". Professor Levitt is currently the only South African born Nobel laureate in the sciences.