



Operations Research Society of South Africa



Category I Recognition Award

(To a retired member of ORSSA
for outstanding contributions
over a long period of time)

John Francis Dean

Citation. *By Brahm Bothma, on behalf of the Executive Committee of ORSSA.*

John Francis Dean was born in Liverpool, in the United Kingdom on January 25th, 1946. He obtained a bachelor's degree in physics from the University of Cape Town in 1966 and followed this up with an honours degree in physics from Rhodes University in 1968. John started his working career as Radio Astronomer at Jodrell Bank Observatory in Cheshire in September 1969, after leaving Rhodes University. He studied there under Sir Bernard Lovell, completing his master's thesis in March 1973 on a topic involving neutral hydrogen emission from a group of twenty nearby large spiral galaxies. Thereafter, he enrolled for a PhD in radio astronomy at the University of Manchester, in the United Kingdom, obtaining his doctorate in 1973.

In April 1973 John started working at the South African Astronomical Observatory under Sir Richard Wooley, the ex-Astronomer Royal who had just retired from the Greenwich Observatory in England. The Council for Scientific and Industrial Research had recently taken over the Royal Observatory in Cape Town and renamed it the South African Astronomical Observatory. This remained John's professional home until the early 1980s.

John made a significant career shift in 1981 when he started working as Systems Analyst at Eskom's head office, a position he held until 1986. Thereafter, he joined the Systems Operations Division of Eskom's Production Planning Department at Simmerpan where he was employed as Production Cost Modelling Specialist, taking responsibility for power station production plans and fuel delivery schedules using the Powersym and Promod software suites.

He also decided to further his studies during this period, obtaining a second honours degree — this time in operations research — from the University of South Africa in 1986, and successfully completing the Management Development Programme of the University of South Africa's Graduate School of Business in 1987.

In 1996 John joined Eskom's System Operations Department where he assisted in developing the Eskom Power Pool, a bidding system by which power stations can sell power to the Transmission Department. A reserve market was set up, initially with generating units offering governing and automatic response services and subsequently also incorporating demand market participants in the form of large industrial customers who are prepared to reduce their electricity demand loads for an agreed payment. He also assisted Eskom's Hydro Engineering Division in the design of the Ingula Pumped Storage Projects by simulating the effects of inclusion of the projects on national energy generation costs. As a result the number of sites at Ingula was increased from three to four.

John is a regular contributor at ORSSA conferences, often also making his expertise available to ORiON, and has served on the Executive Committee of the Johannesburg Chapter of ORSSA. For his high-quality operational research and analytical work within the energy sector over a period of more than thirty years, John Francis Dean is, on this 16th day of September 2014, duly awarded a Category I ORSSA Recognition Award. I call on the president to confer the award.