# The Operations Research Society of South Africa

**Category II Recognition Award**

(To a current member of ORSSA for a single, outstanding achievement with respect to the practice of OR on a national level)

# *Daniel Frederik Payne*

***Citation.*** *By Hennie Kruger, on behalf of the Executive Committee of ORSSA.*

Daniel Frederik Payne was born on 31 May 1954. After matriculating in 1972, he enrolled for a Higher Electrical Diploma (Heavy Current) at the Pretoria Technikon. He obtained this diploma in 1979 and, after further studies, also obtained an MSc degree in operations research, followed by a PhD in operations research from the then Rand Afrikaans University (now the University of Johannesburg) in 2004, based on a thesis titled *Modelling of different long-term electrical forecasts and its practical applications for transmission network flow studies*. Since 2012, Danie has also been a *Certified Professional Demand Forecasting Training Master* (CPDF).

Danie is currently working for Eskom where he is responsible for long-term transmission demand forecasts. He has developed a seven-step demand forecast process for predicting future expected demand growths which was implemented by Eskom and which is continuously improved by him through ongoing research. He also has extensive experience in other industry-related operations research projects, including lay-out solutions for coal-fired power stations, the use of qualitative techniques in forecasting, and the implementation of neural network solutions in forecasting environments.

Danie still contributes to the academic development of operations research and is a regular external examiner for post graduate theses and dissertations. He has also published in the field of forecasting and was the author of the *Energy Yearbook of the Free State Region* of Eskom's Distribution Group in 1989. He is a regular contributor and speaker at operations research and other conferences. His academic contributions are also visible in industry where he has developed a forecast training programme at Eskom for network demand forecasters. Danie is a registered mathematical scientist at the South African Council for Natural Scientific Professions and has been a member of ORSSA since the early 1980s. He is an active member of the Society who has presented papers at a large number of the ORSSA annual conferences and he plays a considerable role in the area of forecasting in operations research.

Danie has served the operations research community and the energy sector in a variety of ways, and he continues to play a key role in the well-being and development of operations research, particularly in industry within the realm of forecasting. For his long and significant role and service to the profession of operations research, Daniel Frederik Payne is, on this 13th day of September 2016, duly awarded a Category II ORSSA Recognition Award. I call on the President to confer the award.