



Fellow of the Operations Research Society of South Africa



Jan Harm van Vuuren

Citation. *By Hans Ittmann, on behalf of the Executive Committee of ORSSA.*

Jan Harm van Vuuren was born on 2 February 1969 in Durban, South Africa. After completing his secondary school training in 1986, he enrolled for a Bachelor of Science degree at Stellenbosch University with Mathematics and Applied Mathematics as majors. He obtained this degree with distinction in 1989, followed by an Honours degree in Applied Mathematics from the same university in 1990, also with distinction. Thereafter he enrolled for an MSc at Stellenbosch, on the modelling of two-dimensional shapes of and tension forces in elastic, torsion-free cables with bending stiffness. He obtained this degree with distinction in 1992 and then enrolled for a DPhil in Mathematics at the University of Oxford in the UK. His doctoral studies involved the analytic determination of simple criteria by which non-mathematicians would be able to verify the permanence (or otherwise) of solutions to existing models of biological competition of a number of cohabiting species in a given geographical region. Upon completion of his D Phil. studies in 1995, he was appointed temporary lecturer in the Department of Applied Mathematics at Stellenbosch University. In 1997 he was promoted to senior lecturer and in 2003 associate professor of Applied Mathematics. He was promoted to full professor and head of Operations Research within the Department of Logistics at Stellenbosch University in 2007.

Jan's research interests and expertise are diverse and include operations research, discrete mathematics, differential equations and cryptography, although graph theory, he confesses, is his true passion! He is a National Research Foundation (NRF) rated researcher and has received various research grants from the NRF as well as from ARMSCOR and Stellenbosch University. He has won the Tom Rozwadowski medal of ORSSA three times, while he has also been runner-up on three occasions, namely in 1999, 2002 and 2008, for the IFORS Development prize. Jan has acted as advisor over the period 1999 to 2007 to student teams that participated annually in the international "Mathematical Contest in Modelling" event.

Jan has made substantial contributions to ORSSA and to the development of OR in South Africa. He has been a very active member of ORSSA in various capacities. His most significant contribution has been in taking the journal *ORiON* to a whole new level. He took over as editor-in-chief in 2004 and almost immediately introduced a total re-launch of the journal, giving it a highly professional look and ensuring a solid stream of top quality papers. Today *ORiON* is on an equal footing with many international OR journals.

He has also made significant contributions to education in OR in South Africa. While it is difficult to make comparisons, he has probably contributed to the supervision of more MSc and PhD students in OR and related areas than anyone else in the country. Furthermore, he has put enormous personal effort into getting these students to ORSSA conferences on a regular basis, thus drawing them into ORSSA. A number of his former students are now playing leading roles in OR and ORSSA.

Jan is a prolific author and co-author of scientific papers and has published 44 papers with more in the pipeline: a truly prodigious output. In addition he has presented numerous papers at national and international conferences. In the background and, in his typical unassuming manner, Jan has contributed significantly to the OR society by being the driving force in introducing many new initiatives into ORSSA - the ORSSA fellowships being one. He has organised a number of ORSSA conferences and taken the responsibility for ensuring that the ORSSA newsletter has an editor through a succession of his students taking on this responsibility.

For his numerous contributions to the profession of OR in general and more specifically to ORSSA, for his invaluable contribution as editor of *ORiON* over the past number of years, Jan van Vuuren was duly and unanimously elected Fellow of ORSSA during a closed electronic ballot of the Executive Committee on the 5th of August 2009.