

## Resume

Thokozani Majozzi is the Executive Dean of Engineering and the Built Environment and a full professor in the School of Chemical and Metallurgical Engineering, Wits University, where he held an NRF/DST Chair in Sustainable Process Engineering from 2013 to 2022. His major contributions to research to date are the development of a continuous-time framework for the synthesis of batch plants, a novel technique for near zero-effluent batch chemical facilities, and a process integration technique for integrated water and membrane network systems. He has developed advanced models for prediction of performance in reverse osmosis and electrodialysis membranes. All these contributions have been adopted by industry.

He was appointed as an associate professor at University of Pretoria in 2004 and promoted to a full professor at the end of 2008. He was also an associate professor in computer science at the University of Pannonia in Hungary from 2005 to 2009. Majozzi completed his BScEng (Chemical) degree in 1994 and his MScEng (Chemical) degree in 1998 at the University of Natal in Durban (UND). In 1999 he received a Commonwealth Scholarship to pursue his PhD studies in the United Kingdom (UK) where he completed his PhD in Process Integration at the University of Manchester Institute of Science and Technology. He is a member of various international scientific committees and a Fellow for the Academy of Engineering of SA, Fellow of the Institute of Chemical Engineers, UK, Fellow for African Academy of Sciences (AAS) and Fellow for South African Academy of Engineers. He is both a registered Professional Engineer with ECSA and Chartered Engineer with the Engineering Council (UK).

He has received numerous awards for his research including the Zdenek Burianec Memorial Award (Italy, 2005). He is three times a recipient of the National Science and Technology Forum Award (2006, 2011 and 2016) and twice a recipient of the National Research Foundation President's Award (2007 and 2008). In 2009, he won the prestigious S2A3 British Association Medal (Silver) and in 2010 was awarded the South African Institution of Chemical Engineers Bill Neal-May Gold Medal. He also received the AU-TWAS Award in Basic Sciences, Technology and Innovation (2012) and ORSSA Category III Award. Recently (2019), Majozzi was awarded the National Order of Mapungubwe in Bronze by President Cyril Ramaphosa. The **Order of Mapungubwe** is the country's highest honour and is granted by the President of South Africa for achievements in the international area which have served South Africa's interests.

Prof Majozzi has held several leadership positions nationally and internationally. He is currently the President and Chairperson of the Academy of Science of South Africa and was the Chairperson of the Council for Scientific and Industrial Research (CSIR) from January 2015 to December 2022. From 2009 to 2012, he served as Vice-President of the Engineering Council of South Africa (ECSA) and Deputy Chairperson for Council for the Built Environment (CBE). He was the only African representative in the selection panel for Royal Society/DFID Programme from 2012 to 2017.

Majozi is author and co-author of more than 300 scientific publications, including the following books: Batch Chemical Process Integration published by Springer in January 2010, Synthesis, Design and Resources Optimization, Understanding Batch Chemical Processes and Water Management, which were published by CRC Press/Taylor and Francis in 2015, 2017 and 2018 respectively. He is the former Chairman of the CSIR, the largest public sector research institution in Africa.