

HONORARY
DOCTORATE



University of Pretoria honours renowned engineer

One of the most-cited authors in the field of engineering, Prof Adrian Bejan, received an honorary doctorate in Engineering from the University of Pretoria in April 2015. He received the degree in recognition of the enormous scope and tremendous contributions he has made in the fields of thermodynamics, heat transfer and applied physics.

Prof Bejan holds a PhD in mechanical engineering and has pioneered numerous original methods in thermodynamics and applied physics, such as the constructal law of organisation and evolution in nature, entropy generation minimisation, scale analysis of convection, designed porous media, heat lines and mass lines. His research covers a wide range of topics in thermodynamics, heat transfer and fluid mechanics.

He was a lecturer at Massachusetts Institute of Technology, a Miller postdoctoral fellow at the University of California, Berkeley, and an assistant and associate professor at the University of Colorado, Boulder. In 1984, he joined Duke University as a full professor with tenure. In 1989, he was awarded

the chair of JA Jones distinguished professor of mechanical engineering at Duke University.

Prof Bejan is the author of over 600 peer-refereed journal articles and 28 books, including *Design in nature* (Doubleday, 2012), *Shape and structure, from engineering to nature* (Cambridge University Press, 2000), *Design with constructal theory* (Wiley, 2008), *Entropy generation minimization* (CRC Press, 1996) and *Constructal theory of social dynamics* (Springer, 2007). His treatises on *Advanced engineering thermodynamics* (Wiley), *Convection heat transfer* (Wiley) and *Convection in porous media* (Springer) are now in their fourth editions and are used as graduate textbooks at universities around the world. In 2001, the International Statistical Institute (ISI) ranked him

among the 100 most-cited authors in engineering (all fields, all countries, living or deceased). His h-index is 54.

He has been awarded 17 honorary doctorates from universities in 11 countries, including the Swiss Federal Institute of Technology (2003), the University of Rome La Sapienza (2009), Université Henri Poincaré Nancy (2001) and INSA Lyon (2014). He is a member of the Academy of Europe and an honorary member of the American Society of Mechanical Engineers, the Romanian Academy and the Moldova Republic Academy of Sciences. Prof Bejan describes engineering as a field of science that allows creativity, which can result in the creation of things that do not yet exist. He describes science as “a story that evolves to become better”. ➔