



UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING

Memorial Tribute to

JOHN VAN DE VEGTE

Professor Emeritus
Department of Mechanical & Industrial Engineering

October 31, 2019

Be it resolved –

THAT the Council of the Faculty of Applied Science & Engineering record with deep regret the death on August 22, 2019 of Professor Emeritus John Van de Vegte.

John Van de Vegte, a highly respected mechanical engineer and textbook author, passed away, after a short illness, at Trillium Hospital, Ontario, on August 22, 2019. His wife of 58 years, Maria Van de Vegte, was by his side, along with other members of his loving family. John was 88 years of age and fortunate to be active and healthy until shortly before his death. Family and friends were most impressed that John and Maria camped all the way from Toronto to Victoria and back in their Roadtrek camper as recently as the spring of 2019.

John was born in 1931 in Rotterdam harbour on a Rhine River barge owned by his father, and spent his youth in Hasselt and Delft. He remained in the Netherlands to complete his undergraduate and master's degrees at the Technical University Delft, before emigrating to Canada in 1954. John's first job in Canada was with farming equipment manufacturer Massey Ferguson. To do his work on the redesign of a combine harvester – for which he eventually obtained a patent – he followed the harvest from Mexico northward.

John returned to his studies to complete his doctorate at the University of Toronto in 1963. In 1964 he became a professor in the Department of Mechanical Engineering, where he remained for 30 years. During his tenure, John published and presented a great many papers on such topics as: nonparametric analysis and control, manipulator control design, multivariable feedback control systems, vibration control, systems with severe interaction, compensator design for decoupling, rotating systems, multiple input systems with assigned poles, optimization, and metal working. John contributed to the design of the CN Tower with a team that examined how to stabilize the sway of the tower in high winds, work that earned his family a free visit to the tower when it opened to the public in 1976. John spent sabbaticals with his wife and children in the Netherlands and England (Winfrith Atomic Energy Establishment) and later sabbaticals with Maria in Switzerland, Germany, and once again in the Netherlands.

In his teaching, John enjoyed an excellent rapport with his students and inspired many an undergraduate to further study of control systems. Building on his experience with undergraduates, John authored a respected, well-reviewed, and widely-cited text, *Feedback Control Systems*, which was published in three editions: 1986, 1990, and 1993 (as well as international editions). *Feedback Control Systems* continues to be a recommended text in MIT OpenCourseWare, and also at the University of Saskatchewan, Cairo University, Universidade do Porto, and the University of Peshawar; it received its most recent five-star Goodreads rating in 2017.

John is remembered by colleagues for his positive attitude and straightforward humour. One colleague recalls asking John for ten minutes at the beginning of a fourth year Controls lecture, to try to interest students to consider grad school. When he showed up, John introduced him by saying, "I've made two great decisions in life. The first was to marry Maria and the second was to go to graduate school." John must have imparted that second lesson to his children, Joyce, John, David, and Michael, as the four of them earned eight degrees at the University of Toronto, including four at the graduate level.

During his many years in the Department of Mechanical Engineering, John's children became accustomed to seeing him writing with a fountain pen by the living room window, his "desk" a plywood ledge resting on the arms of his chair. The chair did not move after his retirement, the plywood ledge stowed behind the curtain, but by then John was doing Sudoku and Kakuro puzzles and reading French. Many happy hours were spent planting periwinkle on the hill at the back of his yard, where he could be found working, rusty implement in hand, wearing soccer shoes and a straw hat.

John is greatly missed by his wife Maria, his children, Joyce, John and Cathy, David (deceased) and Stacey, Michael and Sheetal, and his grandchildren, Zoë, Kailee and Wes, Joshua, Tess, Jordan, and Jessica.

Be it further resolved –

THAT this tribute to John Van de Vegte be inscribed in the minutes of this Council meeting, and that copies be sent to his family as an expression of the respect and gratitude of the members of this Council.

*Prepared by Joyce van de Vegte (BASc Engineering Science 1985, MASc ECE 1988),
with input from Professor Jim Wallace and Professors Emeriti
Ron Venter and Derek McCammond.*