

Obituary Professor Jerzy Robert Baldyga (1950 – 2019)

The European Federation of Chemical Engineering (EFCE) was very sad to learn that Professor Jerzy Baldyga (*1950), Warsaw University of Technology, passed away on 18 November 2019 at the age of 69.

Born in 1950, he received his Master's degree in Chemical Engineering in 1974, his PhD in Chemical Engineering in 1981, and his DSc (habilitation) in Chemical Engineering in 1989 from Warsaw University of Technology. In 1997 he was appointed full professor at Warsaw University of Technology and Chair of Mechanical Engineering and Process Dynamics (at present the Chair of Engineering and Dynamics of Chemical Reactors) at the Faculty of Chemical Engineering. He was visiting professor at ETH Zürich and the University of Saskatchewan. In Zürich, he worked with Prof. J.R. Bourne on effects of turbulent flow and turbulent mixing on the course of complex chemical reactions. A good example of this cooperation is the Engulfment model of micromixing introduced between 1983 and 1988 which, nowadays, is applied by many research groups. A book by J. Baldyga, J.R. Bourne, "Turbulent Mixing and Chemical Reactions" John Wiley & Sons, (1999) and related papers have been awarded by NAMF AIChE (North American Mixing Forum affiliated with AIChE) in October 2011 as one of 21 most influential contributions in mixing research in 20th and 21st century.



Professor Jerzy Baldyga's research areas included: Effects of flow (turbulent and laminar) and mixing on the course of complex chemical reactions i.e. micromixing problem; effects of hydrodynamics and mixing on particle size and morphology in the process of precipitation; drop breakup and coalescence in turbulent flow; shear problem in biotechnology; relations between secondary processes (aggregation, breakage), structure of suspension, rheology of suspension, hydrodynamics and mixing; liquid-liquid microreactors; and high-shear mixers.

He promoted 16 Doctors, 13 at Warsaw University of Technology, 3 at ETH Zürich (as co-referee) and is the author of 3 books, several book chapters and 248 papers.

Professor Baldyga had contributed greatly to the development of Chemical Engineering in Europe and of the Federation, especially in the field of mixing. Since 2001, he served as a Polish delegate to the EFCE Working Party on Mixing, which he chaired since September 2012.

Since 2016, he contributed to the EFCE as a member of its Executive Board and he represented the Polish Association of Chemical Engineers (PACE) in the EFCE General Assembly. In these positions he fostered the liaison and scientific exchange and cooperation with Eastern European countries.

The EFCE extends its deepest sympathy to Jerzy's family, friends and colleagues.