

## EDITOR'S NOTES

### IN MEMORIAM OF PROFESSOR JERZY BAŁDYGA

Professor Jerzy Bałdyga passed away suddenly on November 19, 2019.

We have lost a world-famous scientist, an eminent scholar in the field of chemical engineering, who established a scientific school of micromixing and greatly developed chemical reactor engineering and multiphase process subjects.

Jerzy Bałdyga was born in Lublin on April 28, 1950. In 1969, he graduated from the Technical Secondary School of Chemistry in Lublin, and in 1974 he graduated from the Warsaw University of Technology Faculty of Chemical and Process Engineering with a Master's degree in engineering. In 1981 he completed his PhD diploma with distinction under the supervision of prof. Ryszard Pohorecki. The doctoral thesis was entitled "Micromixing and segregation in chemical reactors". In 1989 he obtained a habilitation degree based on the dissertation entitled "Mechanisms and models of micromixing in turbulent flow systems".



In 1997 he was awarded the title of professor in technical sciences in the chemical engineering discipline.

Since 1977 Professor Bałdyga worked at the Warsaw University of Technology, Faculty of Chemical and Process Engineering, where he held several functions – a head of the Division of Chemical Reactor Engineering and Dynamics, a deputy dean for general and scientific affairs, and then 2005–2012 the dean of the Faculty. From 2005 he held a position in the Senate of the Warsaw University of Technology. From 2012 he was a member of the Central Commission for Degrees and Titles. He was recently elected for the first term of office of the Council of Scientific Excellence (Rada Doskonałości Naukowej) in the chemical engineering discipline. Professor Bałdyga was a long-term Vice-Chairman of the Committee of Chemical and Process Engineering of the Polish Academy of Sciences and chairman of the Mixing Section in this Committee. Furthermore, he was a member of the Diamond Grant and Iuventus Plus councils in the Ministry of Science and Higher Education, a member of scientific panels of the Foundation for Polish Science, an expert of the National Center for Research and Development. He was also the subject editor of the scientific journals: *Chemical Engineering and Processing: Process Intensification*, *International Journal of Chemical Engineering*, *Chemical and Process Engineering* and special editor of *Chemical Engineering Research and Design*. He took part in many other scientific committees and institutions both at home and abroad.

The research area of Professor Bałdyga focused on the influence of flow and micromixing on selectivity and efficiency of complex chemical reactions, production of micro- and nano-particles, processes in

supercritical fluids, multiphase processes, industrial biotechnology, process intensification and many other problems. He managed many national and European research projects. Professor Bałdyga promoted 17 doctors. He was a reviewer of many doctoral and habilitation theses in Poland and abroad. His scientific publications are widely known, cited and appreciated.

Professor Bałdyga received numerous awards and honors for his scientific, teaching and organizational achievements. He was awarded the following Polish state decorations: the Knight's Cross of the Order of Polonia Restituta, the Golden Cross of Merit and the Medal of the National Education Commission. He was awarded many times by the ministers of science and education, the Polish Academy of Sciences and by the Rector of Warsaw University of Technology.

Professor Bałdyga was very active in the international field. His activity included multiple scientific internships, invited lectures, joint doctorates, publications and research projects with many universities. His cooperation with the ETH Zürich was especially intensive and fruitful. He worked there as a visiting professor, participated in the promotion of three doctors and lectured as part of the prestigious Leonhard Euler Center Visitors Program. He also cooperated with the University of Saskatoon, University of Birmingham, Karlsruhe Institute for Technology, EPFL Lausanne, and other academic institutions.

In addition to university activities, since the 1980s Professor Bałdyga continuously cooperated with industry represented by the largest concerns and the most significant engineering companies around the world such as DSM (the Netherlands), BASF, Merck and Bayer (Germany) DuPont, Scientific Design and Procter & Gamble (USA), BHR and Unilever (UK), Solvay (France), PKN Orlen and Grupa Azoty (Poland).

In 2001 he received the DU PONT award for international scientific and educational achievements. In 2011, the North American Mixing Forum affiliated at the American Institute of Chemical Engineers AIChE appreciated prof. Bałdyga. This distinction was justified as follows: "A book by J. Bałdyga, J. R. Bourne, "Turbulent Mixing and Chemical Reactions" and related papers have been awarded in October 2011 as one of 21 most influential contributions in mixing research in 20<sup>th</sup> and 21<sup>st</sup> centuries by NAMF AIChE based on votes from award winners and leading researchers in mixing around the world."

Professor Bałdyga was one of the most famous and respected figures of European chemical engineering. He organized countless scientific conferences, for many years he led the Working Group Mixing at the European Federation of Chemical Engineering (EFCE), and from 2016 he was a member of the EFCE Executive Board.

Professor Jerzy Bałdyga was a man of great merit to the Faculty of Chemical and Process Engineering and the Warsaw University of Technology. He was an authority respected and highly appreciated by the national and international chemical engineering community, a mentor and a teacher of many generations of scientists, doctoral students, and students of chemical engineering.

He loved mountains, and he was an alpinist. He was passionate about art, literature, history, nature and sport. Interlocutors were amazed by his vast knowledge and thoughtful views. He was a philanthropist and he willingly supported people in need.

Professor Jerzy Bałdyga's recent death is an irreparable loss for us.

Prof. dr hab. inż. Eugeniusz Molga,

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