

EDITOR'S NOTES

IN HONOUR OF PROFESSOR RYSZARD POHORECKI ON THE OCCASION OF HIS 80TH BIRTHDAY

Professor Ryszard Pohorecki is a distinguished personality in the world's chemical engineering community. Ryszard Pohorecki studied chemical engineering at Warsaw University of Technology. He started his research work in 1957 under Professor Ciborowski, one of the founders of the chemical engineering discipline in Poland. He received his PhD degree in 1964 on the basis of the thesis entitled *Influence of electrical discharges on the homogenous desublimation*. During 1965/1966 he worked in the Chemical Engineering Department of the University of Cambridge, UK, under Professor Danckwerts. Upon return to Warsaw in 1966 he continued the research started in Cambridge on gas absorption accompanied by chemical reaction. This was also the subject of his second degree ('habilitation'), which he received in Warsaw in 1970 with the thesis entitled *Absorption with chemical reaction on a sieve plate*. In 1980 he became Professor of chemical engineering at Warsaw University of Technology, now he is Professor Emeritus at this University. During the years of his work at WUT he significantly contributed to the development of new areas of research and teaching. He was one of the creators of the Faculty of Chemical and Process Engineering, creator of the Division of Chemical Reactor and Bioprocess Engineering (of which he was the Head for many years), and creator of the Biotechnology Centre (of which he was the Director). Professor Pohorecki is a member of the Polish Academy of Sciences, and held the position of Deputy Head, Technical Sciences Division, of the Academy. During his scientific career Professor Pohorecki spent long periods abroad: at the University of Cambridge, UK; Institute Polytechnique de Toulouse, France; Laboratoire du Genie Chimique CNRS in Nancy, France; University of Connecticut, USA; and University of Minnesota, USA. Professor Pohorecki has (co-) authored over 250 scientific papers, 8 books, 18 patents, and has been supervisor of 15 PhD Theses. His main research results include, among others:



- In the field of condensation of vapours – the determination of the influence of electrical discharges on the rate and mechanism of homogenous desublimation.
- In the field of absorption with chemical reaction – first determination of the interfacial area and mass transfer coefficient on sieve plates by the Danckwerts method; development of a new physicochemical system for the chemical determination of interfacial area; determination of the influence of liquid properties and of Marangoni effects on interfacial area; investigation of the kinetics of absorption of carbon dioxide and hydrogen sulphide in solutions of hydroxides, carbonates and amines; development of design methods for absorption with chemical reaction processes.

- In the field of chemical reactors – first determination of the influence of micromixing on precipitation processes; development of a new model of cyclohexane oxidation and modernization of the Polish CYCLOPOL process; development of a new activator (INS 13) for the BENFIELD process and its implementation in industrial plants; investigation of the hydrodynamics and mass transfer in gas – liquid flow in microreactors.
- In the field of bioreactors – determination of the influence of hydrodynamic stresses on living cells; development of a process and a reactor for enzymatic hydrolysis of tannase.

Professor Pohorecki has also been active in the international area. He was Scientific Vice-President of European Federation of Chemical Engineering (EFCE), a member of the Working Party on Education and Working Party on Distillation, Absorption and Extraction. Now he is one of the editors of the official journals of the EFCE, *Chemical Engineering Research and Design* and *Education for Chemical Engineers*, and editorial board member of a number of other international scientific journals (*International Journal of Heat and Mass Transfer*, *International Communications in Heat and Mass Transfer*, *Theoretical Foundations of Chemical Engineering*, *Journal of Chemical Engineering and Technology*, *Multidiscipline Modeling in Materials and Structures*, *Chemical and Process Engineering* and *International Journal of Occupational Safety and Ergonomics*). He is honorary member of the Czech Association of Chemical Engineering, member of the International Advisory Panel of the CHISA congresses, holder of the Purkyně Medal of the Czech Academy of Sciences and the Villiermaux Medal of the European Federation of Chemical Engineering.

All the contributors to this issue wish Professor Pohorecki good luck and health in the coming years.

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