

EDITOR'S NOTES

IN HONOUR OF PROFESSOR ANDRZEJ BURGHARDT ON THE OCCASION OF HIS 90TH BIRTHDAY

Professor Andrzej Burghardt graduated from the Silesian University of Technology in 1954, specializing in chemical engineering. He started his professional career in the Kokso-projekt Design Office (where he stayed until 1964), but almost simultaneously (in 1955) joined the Silesian University of Technology as a research worker in the Chair of Chemical Engineering and Apparatus Construction. Upon completing, in 1962, his PhD under the supervision of Professor Tadeusz Hobler he obtained a one-year scholarship at Imperial College of Science and Technology. During his stay in London he worked with Professor K.G. Denbigh, focusing on mathematical modeling of longitudinal dispersion in chemical reactors. In 1964, based on this research, Professor Burghardt presented the higher doctorate thesis and was awarded the title of habilitated doctor.



In 1966 Professor Burghardt moves to the Centre for Chemical Engineering and Apparatus Construction, Polish Academy of Sciences, whose head at the time was Professor Tadeusz Hobler. He continues, though, his association with the Silesian University of Technology, lecturing on chemical reactor engineering at undergraduate and graduate levels from 1966 until 1980. Upon the retirement of Professor Hobler in 1970 Professor Andrzej Burghardt takes over as head of the Centre (which, in 1984, becomes the Institute of Chemical Engineering, Polish Academy of Sciences); he holds this post until his retirement in 2003.

In 1971 Professor Burghardt becomes associate professor, and in 1979 full professor. In 1983 he was elected as a corresponding member of the Polish Academy of Sciences, and in 1991 – a full member. Professor Burghardt was honored by several distinctions, including the Orders of Polonia Restituta: Knight's Cross (1985), Officer's Cross (1994) and Commander's Cross (1998). He is also a recipient of a number of prizes awarded by the Ministry of Learning and Higher Education (1964, 1967) and the Ministry of Industry (1989).

Professor Andrzej Burghardt held or is currently holding numerous posts as a member of academic and professional bodies and various editorial boards, including Chemical Engineering and Processing, Chemical and Process Engineering (chairman of the editorial board) and Canadian Journal of Chemical Engineering.

Throughout his career Professor Burghardt was invited by several universities to share his expertise. These stays included academic centres in the USA (Caltech 1978), Great Britain (Cambridge 1976, 1984; London 1977; Birmingham 1984), Italy (Padua 1971; Genoa and Milan 1976), Japan (Yokohama and Tokyo

1986) and Germany (Erlangen 1979, 1988; Munich 1982; Münster 1982; Stuttgart 1988 and Karlsruhe 1979, 1982, 1988, 1991). While at Karlsruhe University he gave lectures on the generalized method for calculating mass transfer in multicomponent systems; these lectures were then published as a chapter in the VDI Wärmeatlas in three subsequent editions, and later, as an English translation.

Professor Burghardt's main research area is focused on the theory of chemical reactors. His monographs on the subject have been the principal textbooks for both students and researchers dealing with complex processes occurring in reactor systems. Parametric sensitivity, dynamics and optimization of reactors, dynamics of processes taking place in porous bodies and multiplicity of steady states were extensively studied. Professor Burghardt developed a generalized theory of the generation of oscillatory states in a porous catalyst pellet in which simultaneous mass and energy transport occurs.

Professor Burghardt's scientific output includes 7 monographs and over 160 research papers. He supervised 8 PhD theses; 2 of his PhD students then obtained their higher doctorates, and 3 became full professors. In recognition of his tremendous role in the advancement of chemical engineering he was awarded two doctorates honoris causa (Silesian University of Technology, 2000, and Wrocław University of Technology, 2002).

Apart from his research accomplishments, Professor Andrzej Burghardt has always been a paragon of integrity, regarding quality as the only viable measure of truly scientific progress. He has created a strong research centre focused on chemical reactor engineering, offering his advice, help and expertise whenever his younger colleagues may have needed them.

We wish Professor Burghardt all the best and strongly believe that, in the coming years, we will see more of his contributions combining complex issues with the unusual clarity of presentation.

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