

JERZY BAŁDYGA – IN MEMORY

Joël Bertrand

Directeur de Recherche CNRS, Laboratory of Chemical Engineering, INP – ENSIACET,
4, allée Emile Monsoi, CS 84234, 31432 TOULOUSE CEDEX 4, France

Jerzy was the Chairman of our European Working on Mixing. He was the European leader of mixing and we owe him so much. He was our colleague and our friend, a witness and an actor of our scientific advances, both technical and industrial.

Jerzy started his extraordinary scientific career in Zurich, working with John Bourne. His initial work focused on the fundamentals of chemical reaction and fluid mechanics, oriented towards mixing processes. This was very novel in the science of mixing, bringing nobility to the discipline and placing it highly within the EFCE. During the 1980s, the European mixing community was represented by several schools of knowledge, with strong groups in England (Birmingham, London), in the Netherlands with John Smith (Delft), in Western Europe (Toulouse, Zurich, Munich) and in Eastern Europe (Prague, Sofia, Budapest and Warsaw). However, with his in-depth works, Jerzy was able to efface these arbitrary differences.

Bringing nobility means that for the first time, one of the researchers involved in Mixing was able to introduce physics (experimental, numerical and theoretical), applied mathematics at a high level in order to explain micromixing phenomena. His position was very original and obviously, thanks to Jerzy, significant advances were made. I think also that he was a pioneer in the most general field of Chemical Engineering in Europe, bringing the approach to the best international level.

His major contribution was his book written with John Bourne, on Turbulent Mixing and Chemical Reactions, Wiley, 1999. This book was a revolution and I can add, because I had known him very well, that Jacques Villiermaux, one of the two or three leaders in European chemical engineering between 1970 and 1997, would have liked to publish this book.

When Jerzy was giving a lecture, I remember the great intellectual pleasure that we obtained from his precise and comprehensive conferences, which were always contextualized. He was a speaker that the community was always awaiting in our European conferences – Würzburg 1985, Pavia 1988, Brugge 1991, etc. . . , and more recently in Bologna 2006 chaired by Franco Magelli, London 2009, Warsaw 2012. When Jerzy left Zurich to return to Poland, he created an outstanding research group at the Faculty of Chemical and Process Engineering at Warsaw University of Technology. It is saddening to recall that Wioletta Podgorska who was his first PhD student also passed away. During his career, he affirmed how proud he

* Corresponding author, e-mail: joel.bertrand@toulouse-inp.fr

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was of her and without doubt, brilliant Wioletta was a beholder of Jerzy's exceptional scientific quality. At the last European Conference on Mixing in 2018 in Toulouse, both Jerzy and Wioletta were present, they both delivered extremely high quality lectures, providing numerous scientific and industrial insights.

Jerzy was elected the Chairman of the EFCE Working Party on Mixing in Warsaw in 2012. It was a natural choice since he was an internationally renowned scientist, and it was without doubt that he would honor the mixing community within the EFCE.

From this moment onwards, I was sure that he would be a future awardee of the Nienow for Lifetime Recognition Award in Mixing and he certainly would have received this prestigious award in 2021, at least at the same time together with Alberto Brucato and Mathias Kraume. Unfortunately, destiny decided otherwise.

However, perhaps one of the Working Party on Mixing awards will be named after him, and we will be honored. Young European researchers have recognized themselves in him at our various conferences. I particularly remember a conference in Poznan in 2005 where Jerzy invited me to give a presentation to his Polish colleagues and I had realized at that moment, the immense respect he instigated amongst his colleagues and their pride to have him as their leader. He was deeply respected, he was a model for many generations of scientists or PhD students. I also remember the message he sent to me on 18th November, 2019, the day before he left us, describing his grief following the death of Wioletta, showing he was able to promote future leaders in Mixing and Chemical Engineering.

Jerzy was an exceptional scientist and professor, a fair man, our friend.

Joël Bertrand

Chairman of the EFCE
Working Party on Mixing, 2004–2012
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