

Professor Josef Barthel: *Laudatio* for an 80th Birthday Collection of Papers



Josef Barthel has had a long and still active scientific career spanning over five decades. Rightfully he is to be heralded as a world leader in solution chemistry. There are many in the world of science and education who have known Josef for longer than the 35 years I have been privileged to know him and in which he and I have collaborated and established a close friendship, a friendship not only between ourselves but also one between our wives. So I am greatly honoured to introduce this collection of papers in *Acta Chimica Slovenica* in which so many authors who through their contributions express their individual appreciations of Josef's own contribution to the chemistry and physics of the solution phase. In this way we all thereby celebrate with Josef, and Marga his wife, his 80th birthday.

Josef studied at the University of Saarbrücken from which he graduated as Ph.D. in 1956. Already by 1959 he had acquired his Habilitation and received the *venia legendi* for Physical Chemistry to gain early recognition as an academic lecturer. In 1971, invited by the University of Regensburg, he accepted the Lehrstuhl and the Directorship of the Institut für Physikalische und Theoretische Chemie. So it was in this capacity that he came to this newly founded and expanding University to establish a new Institute. Now, 37 years later, it is an internationally renowned vibrant Institute dedicated to both research and teaching. Before formal retirement in 1997 Josef undertook many other responsibilities in the University of Regensburg including service as Dean and Vice-Dean of the Faculty of Chemistry and Pharmacy and, not least, Vice-President of the University. Since retirement Josef has, of course, been a Professor Emeritus and as such he continued working until 2 years ago as Editor in Chief of the *Journal of Molecular Liquids*. After retirement from that editorship he recently told me that he is interested in writing articles and books on a number of aspects of the history of science. Of course, it goes without saying, that this inveterate worker still remains on the Editorial Advisory Board of *Acta Chimica Slovenica*.

Interest in the liquid phase began for Josef during his early research and Habilitation work when he realised the pressing need to improve our understanding of both static and dynamic behaviour in the solution phase. Together with his coworkers he set out on a course of designing and building equipment to gain data of the utmost possible precision for measurement of transport properties, thermodynamic data, dielectric relaxation, *etc.*; apparatus now regarded among the best available world-wide. Throughout his research career experimental determinations of dynamic properties of solu-

tions, mainly non-aqueous, were paralleled where possible with theoretical approaches to solution structure and behaviour. In connection with this dual approach he compiled ELDAR the powerful data bank still used widely with the series “Electrolyte Data Collection” of the “Chemistry Data Series” of DECHEMA.

Josef’s research team at Regensburg, using equipment much of which was designed and built in his laboratories, studied an extremely wide range of solution properties: electrochemistry, spectroscopy, chemical kinetics, molecular dynamics, dielectric properties and relaxation processes, thermodynamics, *etc.* These have led to over 290 primary publications in the leading scientific journals authored, and co-authored, by Josef. Always an ardent Conference-goer Josef has also enjoyed hosting several Conferences in Solution Chemistry. Conferences have led to a further 200⁺ scientific presentations many of which have been as invited Plenary and/or Keynote lectures.

In support of this huge output he has supervised many diploma and more than 70 Ph.D. dissertations.

Also on the international stage Josef has been a tireless supporter and worker for the International Union of Pure and Applied Chemistry. Now an IUPAC Fellow he was for many years an associate and titular member of the IUPAC Commission on Thermodynamics and of its sub-Committee on Thermodynamic Data. Since its

inception Josef has been a member of the International Steering Committee of the International Conferences on Solution Chemistry (ICSC was formed in 1980 through the amalgamation of the former ICNAS and I.S.I. organisations). Now, with me, he is an Honorary Life Member of the International Committee of ICSC.

One could write much more to praise Josef. I ought to say something about his associations with colleagues and friends in other countries, his numerous connections with workers in Japan, North America, Australia, USA, and many other countries the world over – his Honorary Degree in France, and his annual teaching work in Paris over many years, *etc., etc.* However the main purpose here is for us to celebrate his first 80 years of life on his 80th birthday. What is written above has only partly defined the great stature of this man of science. He is also a man with wide interests in literature and art both as a collector and as a gallery-goer. Socially he is great fun to be with and can always tell a good joke in German, English, or French depending on the ear and origin of the listener. So it is with very great pleasure that I wish him from myself, and on behalf of the large scientific community of colleagues and friends, many congratulations on his 80th birthday, and our wishes for many more years of enjoying science.

Bernard Gill
