

Editorial

Curriculum vitae of Wolfgang Hemminger



special power compensated Differential Scanning Calorimeter (DSC) for measuring heat capacities precisely between 100 and 900 K. More than thirty years ago from now, this was the key-instrument to study energies stored in metals during deformation. On this subject, Wolfgang developed his doctoral degree under supervision of Prof. F. Haeßner. The famous and unique DSC “CPC 600” mentioned above was constructed at Nuclear Research Centre at Grenoble, France, to apply especially to investigations on stored energy in metals. Only few instruments of this type were sold in Europe, just two in Germany, one to Max-Planck Institute in Stuttgart, the other one to University of Ulm. It was the sales representative to bring both these German customers together for the first time. Again, they met in Grenoble where the engineers of Nuclear Research Centre taught them how to properly handle a DSC. These two customers were Wolfgang Hemminger and me. From this very beginning in the early seventies up to now, we enjoy a narrow and fruitful cooperation as well as a deep friendship.

Once more in 1974, it was the sales representative mentioned, Michael Vonier, who invited us to attend a meeting of the French Calorimetric Society (AFCAT) in Rennes, France. Here, for the first time, the “calorimetry greenhorns” encountered the famous French calorimetrists and internationally renowned expert R.C. Mackenzie from Aberdeen, United Kingdom. Unforgettable, the scientific spirit of this meeting and the excellent conference dinner (which was followed by Celtic music and dance, meanwhile, a large barrel of excellent French wine was served). On our way back home, Wolfgang and I decided to establish a conference like that one in Germany as well. In Ulm in 1975, we ‘gave birth’ to what is now called the “Ulm-Freiburger Kalorimetrietage”. Thanks to Wolfgang’s skill in organizing scientific meetings, this bi-annual conference started a continuous growth beyond all national bounds to become an international renowned conference. Since 1975, the scientific community was invited ten times to Ulm and, since 1993, another six times to Freiberg, Saxonia.

Back to 1974, after having got his PhD, Wolfgang left Stuttgart for the Institute for Materials Engineering and Development of Technical University Braunschweig. Here, he continued his research on caloric properties of plastic deformation of metals. He was also involved in a space-lab experiment to determine enthalpies of samples floating in weightless environment.

Wolfgang’s profound experiences in calorimetry along with the outstanding success of “Ulmer Kalorimetrietage” let him toy with the notion of composing a textbook on calorimetry.

This special issue of *Thermochemica Acta* is dedicated to Dr. Wolfgang Hemminger who, on occasion of his 65th birthday, retires from active duty at Physikalisch-Technische Bundesanstalt (PTB), Braunschweig and Berlin, Germany. He also resigns from the German Society of Thermal Analysis (GEFTA), the Ulm-Freiburger Calorimetry Conference and other professional activities.

Wolfgang Hemminger was born at Rottweil in South–West Germany on June 1st, 1941. After attending the Gymnasium (grammar school) at Freudenstadt, he began his studies of physics at the Technical University of Stuttgart. In 1967, he obtained his “Diplom” (master’s degree) with a thesis in metal physics entitled “Walztexturen in Metallen” (Rolling Textures of Metals).

Wolfgang started to work as a physicist at the renowned Max-Planck Institute for Metal Research in Stuttgart. He joined a group involved in metallic materials for biomedical applications like body implants. At that time, he formulated a theoretical model of characteristic properties of metals in terms of appropriate thermodynamic functions. On this occasion, he first became acquainted with calorimetry, a field to which he devoted the major part of his scientific life. He started with a

The idea behind was to fill a gap since, at that time, there was no adequate literature available. In 1979, our first edition of this book was published in Germany and what was at that time the German Democratic Republic (GDR). Soon after, in 1984, we were requested to edit an English translation which was followed by a Russian version only five years later. In particular, the English textbook, entitled “Calorimetry, Fundamentals and Practice”, considerably contributed to make him an internationally renowned expert in calorimetry. In the following decades, Wolfgang published further monographs entitled “Methoden der Thermischen Analyse” (1989), “Differential Scanning Calorimetry” (1996) and “Differential Scanning Calorimetry” 2nd enlarged edition (2003).

In 1981, Wolfgang Hemminger was given the Netzsch-GEFTA award for his “distinguished performance in the field of Thermal Analysis”. That year, he became leader of a laboratory of Physikalisch-Technische Bundesanstalt at Braunschweig. Only eight years later, he promoted to head of the department “Wärme” (Thermodynamics) of this national metrology institute. Soon after the start of his directorship, in 1990, the German reunification bears one of his first challenges: the metrology division of the GDR agency for standardization, metrology and commodities testing (ASMW) had to be integrated into PTB. He efficiently helped to restructure the internal distribution of the PTB division’s tasks and to incorporate into his division former members of ASMW as well as new fields of activity. In 2002, he was challenged a second time by the judgement of an international expert commission charged with the evaluation of the PTB: they appreciated the scientific-technical competence and the excellent work of PTB’s staff. Nevertheless, some of PTB tasks had systematically to be rechecked as well as parts of its organizational structure. To adapt to actual needs, Wolfgang strategically reorganised his division. He established the new section “Metrology in Chemistry” and expanded the section “Explosion Protection”. Accordingly, the actual name of this division is “Chemical Physics and Explosion Protection”. It is now committed to an appointed successor.

Working successfully on his job, Wolfgang developed a parallel career as a member of the international scientific community of Thermal Analysis and Calorimetry. As early as 1975, just one year after its foundation, he became a member of the German Society of Thermal Analysis (GEFTA). Two years later, he was elected member of the executive board being responsible for public relations until 1980. Between 1989 and 1999, he took an active part in the GEFTA calibration committee. The years from

1989 to 1995 saw him as chairman of the board. At that period of reunification, he essentially supported the integration of the Thermal Society of the GDR into the GEFTA.

From 1992 until 2001, Wolfgang was member of the ICTAC nomenclature committees. Here, he had a stiff and, in the end, fruitless job in convincing the international scientific community of Thermal Analysis to accept an obligatory nomenclature for relevant physical quantities. As a member of the organizing committee, already in 1980, he effectively contributed to the VI. International Conference on Thermal Analysis, ICTA’80, at Bayreuth. He also edited volume II of the conference proceedings. Last but not least, in 1992, Wolfgang Hemminger became the editor of *Thermochimica Acta*. This stressful and tedious job, he carried out very conscientiously for more than 10 years and 190 (!) issues.

But, there was and still is much more than a scientific life: Wolfgang is happily married to Dagmar, proud father of two daughters and, meanwhile, beloved grandfather too. He is a skilled musician, playing the trumpet not only in concerts but released some LP’s and CD’s. Even more, he supports church music for brass instruments as a member of “Verein zur Förderung der Posaunenchorarbeit” (society to promote trombone music). As a dedicated member of the Protestant Church in Braunschweig, he is involved in the synod of his church. In addition to his authorship of textbooks, he (together with his brother) is a committed writer of articles and books of a more religious character discussing natural sciences, evolution and creation from a scientific viewpoint.

To summarize, Wolfgang Hemminger is a multitasking and dynamic personality contributing a lot of valuable thoughts and knowledge not only to the scientific community. I have enjoyed very much the opportunity to work with him. My personal attitude given above is greatly confirmed by all these well-known scientists who have contributed to this special issue of *Thermochimica Acta*.

Editors and authors congratulate Wolfgang Hemminger to his 65th birthday. We wish him all the best for his retirement. He may be retired - but for sure not inactive.

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Dedicated to Professor Wolfgang Hemminger
on the occasion of his 65th anniversary.
Available online 26 May 2006