



IN MEMORIAM Dr. HENRY V. KEHIAIAN (1929–2009)

Dr. Henry V. Kehiaian died on December 18, 2009, after a few weeks of medical treatment in a clinic close to Paris. Though his health declined rapidly, he continued working on his last book (for Landolt-Börnstein) almost until his last day: this unswerving devotion to high-quality scientific work was his hallmark throughout his academic career.

Henry Kehiaian was born in Bucharest, Roumania, on August 12, 1929, to parents of Armenian descent. Part of his primary/secondary education he obtained at the German School in Bucharest, whence his excellent command of the German language. After finishing high-school he studied chemistry at the University of Bucharest, though in the late fifties he moved to Warsaw, Poland. Here, he married Krystyna Sosnkowska, a researcher at the Institute of Physical Chemistry of the Polish Academy of Sciences (IChF PAN), completed his PhD dissertation at that Institute under the guidance of Prof. Swietoslowski, and received his Doctor's degree in chemistry in 1967. After having worked more than ten years at the IChF PAN, he and his family left Poland for France in 1970. However, his *first* trip across the Iron Curtain to a western country was to Vienna, Austria, in 1966, when he visited Prof. Kohler's group at the Institute of Physical Chemistry of the University, of which one of his closest friend, Emmerich Wilhelm, was then a member, working on his PhD dissertation.

In France, aided by Prof. Pannetier, Henry joined the CNRS and spent about ten years at the Centre de Recherches de Microcalorimétrie et de Thermodynamique (CRMT) in Marseille, first as Maître de Recherches, then as Directeur de Recherches. This was the place where his long-lasting, fruitful friendship and collaboration with Jean-Pierre Grolier started, which a few years later (since 1975) included Emmerich Wilhelm. In 1977, to his great satisfaction Henry Kehiaian was granted French citizenship, and in 1982, he fulfilled his dream of working and living in Paris by moving to the Institut de Topologie et de Dynamique des Systèmes (CNRS and Université Paris 7), led by Prof. Dubois. He remained associated with ITODYS even after his *formal* retirement in 1994. In fact, he kept his spacious office with its huge collection of reprints, and continued research there on the top floor of the building on Rue Guy de la Brosse, No. 1.

Henry's dedication to science was impressive and multi-leveled. He published more than 150 research papers, and as editor-in-chief (since 2000) of the section on thermodynamic properties of the prestigious *Landolt-Börnstein* series he coauthored four volumes: (1) *Heats of Mixing and Solution; Binary Liquid Systems of Nonelectrolytes* (J.-P. E. Grolier, C. J. Wormald, J.-C. Fontaine, K. Sosnkowska-Kehiaian, H. V. Kehiaian); (2) *Heats of Mixing and Solution; Binary Gaseous, Liquid, Near-Critical and Supercritical Fluid Systems of Nonelectrolytes* (C. J. Wormald, J.-P. E. Grolier, J.-C. Fontaine, K. Sosnkowska-Kehiaian, H. V. Kehiaian); (3) *Vapor-Liquid Equilibrium in Mixtures and Solutions; Binary Liquid Systems of Nonelectrolytes* (I. Wichterle, J. Linek, Z. Wagner, J.-C. Fontaine, K. Sosnkowska-Kehiaian, H. V. Kehiaian); and lastly (to appear in 2010) (4) *Volumetric Properties of Mixtures and Solutions; Binary Liquid Systems of Nonelectrolytes* (I. Cibulka, L. Hnedkovsky, J.-C. Fontaine, K. Sosnkowska-Kehiaian, H. V. Kehiaian). In 1973, he founded the *International Data Series* and served as editor-in-chief until 1994. *IDS* was published by the Thermodynamics Research Center, College Station, Texas, USA, and reported critically selected experimental data only. In 1995, he founded *ELDATA, The International Electronic Journal of Physico-Chemical Data*, which provided not only a *printed* version but also an *electronic carrier* (CD), structured as a data base, for the *direct* retrieval of reported *numerical data*. Starting in 1991, in cooperation with I. Wichterle's group in Prague, Czech Republic, these activities were complemented by establishing a *bibliographical* data base focusing on vapor-liquid equilibria. As editor until 2000, Henry updated annually the *Integrated Electronic Chemical Databases; Vapor-Liquid Equilibrium in Mixtures and Solutions Database, EVLM*.

Dr. Kehiaian's involvement in collecting and publishing critically evaluated thermodynamic data on liquid mixtures of nonelectrolytes and his huge collection of reprints provided the basis for the famed *TOM Project (Thermodynamics of Organic Mixtures Project)* which he initiated in 1977. Combining the chemistry inspired group contribution approach with a statistical-mechanical model theory based on Guggenheim's ideas, the resulting *DISQUAC (Dispersive Quasi-Chemical)* group contribution model has proved to be an eminently successful method for the prediction of thermodynamic excess quantities of mixtures on the one side, and a valuable guide for planning systematic experiments on the other. This was, perhaps, Henry's contribution to molecular thermodynamics he cherished most. The maturation and expansion of the *TOM Project* was brought about through international cooperation, to which Henry contributed his scientific experience, his extensive knowledge of the pertinent literature, his generous personality, his integrity and last but not least his extraordinary gift for languages – he fluently spoke at least nine. In fact, over the years he welcomed collaborators from Algeria, Austria, Canada, the Czech Republic, France, Germany, Iran, Italy, Lebanon, Poland, Roumania, Spain, and the USA.

Henry's scientific achievements made him a highly-esteemed member of the international community of chemical thermodynamicists. This is amply documented by his being a member of the editorial boards of renowned journals, such as *Journal of Chemical and Engineering Data*, *Fluid Phase Equilibria*, and *Journal of Solution Chemistry*, and of the *CRC Handbook of Chemistry and Physics*. He was a member of *CODATA* (since 1971), and in 1985 he was elected Titular Member of the *IUPAC Commission I.2/Chemical Thermodynamics* for which he also served as Commission Secretary. Quite recently, his scientific outstanding was honored by his country-of-birth, when he was elected an honorary member of the Roumanian Academy of Sciences. In addition to all these activities, Dr. Henry Kehiaian was organizer/co-organizer or member of scientific committees, respectively, of numerous conferences. Three of these conferences have been of particular importance for him: (1) the *1st International Conference on Chemical Thermodynamics (1st ICCT)* in Warsaw, Poland, 1969, under the auspices of IUPAC, with which he initialized the most important conference series in chemical thermodynamics; (2) the international conference he called the *Thermo Festival* in Paris, France, 1985, which attracted most of the leading thermodynamicists, thereby providing a critical discussion platform for work so far carried out within the *TOM Project*; (3) the *20th ICCT*, again in Warsaw, Poland, 2008, this time under the auspices of the newly formed *International Association for Chemical Thermodynamics*, which paid homage to Dr. Henry Kehiaian for his life contribution to chemical thermodynamics.

When preparing a paper or a book contribution, or commission reports or recommendations, Henry meticulously strove for clarity and succinct presentation, and throughout he emphasized an appropriate and comprehensive citation practice, something which is often amiss, in particular in work where computerized literature search is limited to cover, say, only the last ten or twenty years. His collaborators appreciated his direct way of criticizing, which was occasionally quite tough, yet always honest and in most cases constructive. And once committed to some course of action, you could trust Henry to carry it through. In addition to his reputation as a leading scientist in mixture thermodynamics, he was known for his hospitality, his *esprit* and *joie de vivre*, and his famous knack for gourmet experiences. In fact, he used to describe himself jokingly as a *refugié gastronomique*. He often used to invite collaborators and friends to restaurants of repute, not only in France, but also in Italy, Spain, Austria, Germany, Czech Republic, Portugal, Romania, Poland, etc.

While Henry's scientific achievements provided the foundation of his international reputation, his personality was the basis of lasting friendships, and he will be fondly remembered. The guild of chemical thermodynamicists has lost an esteemed colleague and a valued friend.

The Editorial Board