

## Preface

At the end of the 2006/07 academic year, a few months after celebrating his 70<sup>th</sup> birthday, Professor Jean-Pierre E. Grolier will retire as Professor of Physical Chemistry at Blaise Pascal University (BPU), *Laboratoire de Thermodynamique des Solutions et des Polymères*, in Clermont-Ferrand, France. Undoubtedly, the 70<sup>th</sup> birthday is a milestone in every university professor's career and constitutes a central event in the perception of the academic community with regard to both research and teaching. As friends, collaborators and colleagues, we, the undersigned, felt that the best way of marking these two occasions would be (I) to organize a symposium dedicated to chemical thermodynamics, the central scientific theme in his life, and (II) to ask former collaborators, students and his many professional friends to honor him through publishing their contribution(s) in a Special Chapter of the *Journal of Thermal Analysis and Calorimetry (JTAC)*.

The symposium, entitled *Symposium International de Thermodynamique des Fluides Complexes et des Polymères*, was held at the University of Pau, France, in conjunction with the 37<sup>èmes</sup> *Journées de Calorimétrie et d'Analyse Thermique*, on 2 June 2006. The authors of the manuscripts included in this Special Chapter represent only a fraction of those who – over decades – have collaborated with him and/or came to work with him in Clermont-Ferrand. They come from different countries in Europe and overseas, and are testimony for his lifetime efforts in chemical thermodynamics and physical-property research as well as for his continuous international scientific influence. It is our hope that this small tribute to Professor Grolier will stimulate future research work, in particular among younger colleagues, in these exciting and important areas of physical chemistry.

Jean-Pierre E. Grolier was born in Constantine, Algeria (then part of France), on 22 December, 1936. Here he received his primary and secondary education. His *Licence-ès-Sciences Physiques* (MS) and *Doctorat-ès-Sciences Physiques* (PhD) were both received at the University of Clermont-Ferrand (BPU) in 1961 and 1970, respectively. His PhD dissertation (supervisor was Professor A. Viillard) dealt with thermodynamics of, and molecular interactions in, liquid mixtures containing esters and alcohols, a topic which has accompanied him for many years. In due course he then became Assistant Professor (1971) and Professor (1983) at BPU. He was chairman of the Chemistry Department 1977-1978 and 1986-1989, head of the Laboratory of Thermodynamics and Chemical Engineering 1986-1995, head of the CNRS Research Group *Thermodynamique des Solutions et des Polymères* 1995-2000, and he became head of the Chemistry Center (*Pôle de Chimie*) in 2000.

It was during the early formative years, that is between 1972-1977, that Jean-Pierre E. Grolier took two extended research leaves which greatly influenced his future scientific activities: 1972-1973 he worked for more than one year with G. C. Benson in the Thermochemistry Laboratory of the National Research Council of Canada in Ottawa, and 1974-1977 he was Research Associate at the *Centre de Recherches de Microcalorimétrie et de Thermochimie du CNRS (CRMT)* in Marseille, France, the famed institution of the fathers of heat-flux calorimetry, Professors Calvet and Tian. There he collaborated with Henry V. Kehiaian on a truly long-term project, the *TOM*-project (Thermodynamics of Organic Mixtures) [1, 2]. Other shorter research leaves, of only a few months duration each, followed and helped to establish lasting connections with the University of Sherbrooke, Quebec, Canada, the University of Delaware, Newark, Delaware, USA, and the University of Edmonton, Alberta, Canada. As representative scientists working in these institutions we list P. Picker, R. H. Wood and L. Hepler, respectively.

Throughout his career, Professor Jean-Pierre E. Grolier has always cultivated national as well as international scientific collaborations, and the oldest one which is still continuing is the collaboration with Professor Emmerich Wilhelm from the Institute of Physical Chemistry at the University of Wien (Vienna), Austria [3]. In fact, after some preparatory discussions (they had already met at the 2<sup>nd</sup> *International Conference on Calorimetry and Thermodynamics*, Orono, Maine, USA, 12-14 July 1971), it started at the *CRMT* in 1975, where Emmerich Wilhelm also spent several research leaves (with a duration of about three to four months each year) in 1975, 1976 and 1977. These were the times of excess heat capacity measurements (with a Picker flow calorimeter) of unprecedented precision and accuracy, of memorable gastronomic excursions in downtown Marseille, say, near the *Vieux Port*, and stimulating late evening discussions between Henry V. Kehiaian, J.-P. E. Grolier and Emmerich Wilhelm in the congenial surroundings of the terrace of *Le Tahitien*. Over the years, many other successful cooperations were established with researchers, for instance, from Italy, Spain, Germany, Japan, USA, Poland and Rumania. In particular, during the last decade, Stanislaw L. Randzio from Warsaw, Poland, and Florin Dan from Iasi, Rumania, were the collaborators most closely associated with Jean-Pierre E. Grolier's gradual shift of interest towards polymeric systems [4]. In summary, the above historic/nostalgic sketch clearly reflects his lifelong conviction that international cooperation is the heart of scientific advance!

Professor Grolier's interest in chemical thermodynamics and physical-property research now spans about four decades and is amply documented by his more than 230 published scientific papers in refereed journals. The majority of these papers is devoted to pure liquid nonelectrolytes and liquid nonelectrolyte mixtures, though as pointed out above, work on thermodynamical and thermophysical properties of polymers has recently become his main area of interest. Besides his research papers, he has authored/co-authored a number of influential reviews and cutting-edge book contributions, such as those contained [3, 7-9] in the short list of selected references given below. He is also a well-known lecturer and has presented more than 100 plenary or invited lectures. In addition, he organized/co-organized numerous scientific congresses and symposia, of which the 3<sup>rd</sup> *International Conference on Thermodynamics of Solutions of Nonelectrolytes*, Clermont-Ferrand, France, 2-6 July 1984, the *H. V. Kehiaian Symposium on Thermodynamics of Organic Mixtures (TOM)*, Clermont-Ferrand, France, 17-18 May 1990, and the the 13<sup>th</sup> *IUPAC Conference on*

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*Chemical Thermodynamics*, Clermont-Ferrand, France, 17-22 July 1994, rank highest in nostalgic value. His ability to provide an atmosphere of scientific curiosity and excitement, together with his friendly and modest attitude towards his fellow scientists, have always made his endeavors a complete success.

Professor Grolier has been/is active in a number of professional societies, including the *Association Française de Calorimétrie et d'Analyse Thermique (AFCAT)* (President 1993-1997), the *European Society for Applied Physical Chemistry* (Vice President since 1999), the *American Calorimetry Conference* (Member of the Board of Directors since 2000), the *IUPAC Commission I.2 on Thermodynamics* (Associate/Titular Member 1985-2001), and the *International Association of Chemical Thermodynamics (IACT)* (President since 2002). His honors and awards include the Calvet Prize from the *AFCAT*, 1985, the Swietoslowski Medal from the *Polish Association for Calorimetry and Thermal Analysis*, 1994, the Kurnakow Medal from the *Russian Academy of Sciences*, 1994, the H. M. Huffman Memorial Award from the *American Calorimetry Conference*, 1997, and the F. D. Rossini Award from the *International Union of Pure and Applied Chemistry (IUPAC)*, 2004. In 1994 he received the Medal of the City of Clermont-Ferrand, and in 1995 the Order of Merit Commander Cross from the Republic of Poland.

While Professor Grolier's retirement certainly is a significant transition point in his professional life, nobody who knows him personally believes that he will not continue actively to pursue research in the years to come. He will do it now with new boundary conditions, essentially freed from teaching, administrative chores and the like. It is a pleasure and an honor to dedicate this Chapter of the *Journal of Thermal Analysis and Calorimetry* to Professor Jean-Pierre E. Grolier and we wish him all the best in all his future activities.

**Ad multos annos!**

*Emmerich Wilhelm*  
*Stanislaw L. Randzio*

*Henri Saint-Guirons*  
*David Bessières*



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**On behalf of the Editors and the members of the Board of the Journal of Thermal Analysis and Calorimetry, we wish Prof. J.-P. E. Grolier good health and many additional fruitful years in science. We also would like to take this opportunity to thank him for his valuable work as an Associate Editor of JTAC for his high-level scientific papers he has published and for his efforts as a reviewer. His activities have contributed significantly to the Journal's success. Many happy returns!**

**Editors**

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