Journal of Thermal Analysis and Calorimetry, Vol. 83 (2006) 3, 523–524

Quinquagenary of the Scientific Work of Prof. W. Zielenkiewicz

Prof. Wojciech Zielenkiewicz was born in Warsaw on 6 June 1933. He studied chemistry at the Warsaw University and graduated in 1955. His master thesis in the field of nuclear chemistry dealt with the enrichment of bromobenzene by the Szilard-Chalmers method. Since 1955 his professional career has mostly been related to the Institute of Physical Chemistry of the Polish Academy of Sciences (PAS) founded in the same year.

Initially, Wojciech Zielenkiewicz worked under the supervision of Prof. Wojciech Świętosławski. This cooperation had a powerful influence on Zielenkiewicz both as a researcher and as a person. His strong interest in thermochemistry at that time resulted partly from his research interest and partly from his attraction to one of the students doing her diploma who later became his wife. Zielenkiewicz's PhD thesis carried out under Świętosławski's supervision concerned the thermochemistry of cement hydration. For the purposes of this work, Zielenkiewicz constructed his first calorimeter – a labyrinth flow calorimeter which was a modified version of the first such calorimeter constructed by Świętosławski and Malawski in 1935. The calorimeter was applied for the determination of the heat of cement hardening.

After his PhD, Zielenkiewicz worked on several other calorimeters for the study of heat of cement hydration with the quasi-adiabatic method as well as on 'conduction' calorimeters for the examination of the first phase of cement hydration. This activity resulted in a monograph Calorimetry and Thermochemistry of Cement written in collaboration with T. Krupa and published in 1975.

In the following years, his scientific interests were focused mostly on various aspects of the transfer of heat energy in time, i.e. thermokinetics. He constructed a number of calorimeters for this type of measurements and, together with his co-workers, elaborated new numerical methods of determination of thermokinetics. Those methods were assessed at international symposia on thermokinetics organised by Zielenkiewicz in cooperation with the French Association of Calorimetry and Thermal Analysis (AFCAT). In this period, he established regular cooperation with scientists from France, Spain, and the USA. Research on thermokinetics includes not only theoretical studies but also experimental works. Most of the experiments conducted at the Department of Calorimetry headed by Prof. Zielenkiewicz were connected with inclusion compounds, particularly Werner complexes as well as porfyrine derivatives.

In the last twenty years, Zielenkiewicz conducted research in the scope of biomolecules. The study resulted in the determination of thermodynamic properties of over 60 derivatives of nucleic acid bases and the establishment of new correlations between enthalpic, volume, and structural properties of the compounds examined. His most recent interests concerned the study of enthalpic processes of protein salting.

Zielenkiewicz's long and intensive work in the field of calorimetry and thermokinetics has appeared in numerous books and publications presenting his research results. He is the author of 7 monographs, a number of chapters in a monograph and about 200 scientific publications. They include, among others, Analysis of Course of Heat Effect in n-n Calorimeters, Signal Processing of Calorimetric System, Dynamic Theory (later translated into Russian and published in Russia), Advances in Calorimetry and Thermochemistry, Theory of Calorimetry written together with E. Margas and published in 2002 by Kluwer and the most recent book, Calorimetry, published in 2005.

Prof. Zielenkiewicz has also been active as a supervisor. He assisted and supported the realisation of 14 completed PhD theses of the employees at the Institute of Physical Chemistry and is supervising 3 more students of the Institute. Moreover, he has been involved in the realization of several more PhD theses both in Poland and abroad.

1388–6150/$20.00

Akadémiai Kiadó, Budapest, Hungary
Springer, Dordrecht, The Netherlands

For many years Prof. Zielenkiewicz combined his activity on research with research coordination. He managed the organizational units of the Polish Academy of Sciences as the Director General of the PAS and as a Deputy Scientific Secretary. For 6 years he was a Scientific Secretary of the Division of Mathematical, Physical and Chemical Sciences of PAS. In the years 1968–2003 he headed the Laboratory and Department of Calorimetry and he was a director of the Institute of Physical Chemistry for 19 years. His directorship in the Institute happened in a very difficult period for Poland, i.e. when the Marshall Law was introduced in 1981. As numerous employees of the Institute were involved in the illegal Solidarity movement at that time, the position of a director of such an institution was extremely uncomfortable and required great abilities in dealing with the communist authorities in such a way as to protect those employees. It must be said that Prof. Zielenkiewicz faced this challenge with success.

Prof. Zielenkiewicz was also an initiator of the Polish conferences on calorimetry and thermal analysis. The first one was held over 30 years ago. These conferences created an opportunity for Polish researchers to exchange their opinions and learn about the world research trends. Numerous outstanding scientists were guests at these conferences. Many of them are members of the Polish Society of Calorimetry and Thermal Analysis.

Prof. Zielenkiewicz has been awarded many state and foreign medals and distinctions, among others, Wojciech Świętosławski's Medal and the Calvet Award given by the French Association of Calorimetry and Thermal Analysis (AFCAT) as well as the most prominent Polish state orders including the Order of Polonia Restituta (the Knight's Cross) and the Order of Labour Banner. He is a corresponding member of the Polish Academy of Sciences and the Royal Academy of Sciences in Barcelona.

Dr. Paweł Gierycz
Institute of Physical Chemistry
of the Polish Academy of Sciences
gierycz@ichf.edu.pl

DOI: 10.1007/s10973-006-3024-8