

Obituary

**IN MEMORIAM PROFESSOR JÁNOS ZSAKÓ
1926–2001**



János Zsakó was born in a well-known Unitarian family in Kolozsvár (Cluj) on January 26, 1926. He finished his secondary school studies at the Unitarian College in Cluj. He started his university studies at the Technical University of Budapest but - due to the war - he shortly continued them at Bolyai University in Cluj where he graduated as a chemical engineer in 1948. Remaining at the Hungarian-speaking Bolyai University he was appointed assistant. He obtained his Ph.D. degree in 1956. Between 1953 and 1963 he was working as an appointed lecturer. From 1963, after merging with the Romanian university he acted as associated professor, later as full professor of the Babes-Bolyai University. In 1991 he retired but he still assisted candidates for M.Sc. degree until his death, August 7, 2001.

During his teaching activity he was first engaged in giving lectures on general chemistry, then on different areas of physical chemistry (electrochemistry, reaction kinetics, thermodynamics, materials science) in the Hungarian and Romanian languages. Between 1972 and 1976 he was invited professor at the University of Constantine, Algeria, where he held lectures on material structure, quantum chemistry and quantum mechanical chemistry in French. In 1992 he taught in Hungarian and English as an invited professor at the Technical University of Budapest.

His successful education activity is shown by the fact that his book entitled 'Structures of atoms and molecules' published in Romanian was used at all universities of Romania for more than two decades. In addition to it, three more of his text-books written with co-writers are still taught even today ('Chemical thermodynamics', 'Physical chemistry', 'Symmetry and molecule structure'). He issued three scientific educational books in Hungarian, 'The history of elements' (1959 and 1963), 'The world of atoms and molecules' (1963), 'Small encyclopedia of chemistry' (1980 with co-authors). These books were published by Kriterion, Cluj.

Beyond his wide educational activity he also achieved significant results on the area of research under adverse circumstances. He had a wide field of investigations. He published more than 270 papers, to which 1200 references were made. This is highly outstanding as he had a period in his life when he was not allowed to publish in acknowledged journals only in Romanian in Romania.

His research areas include

1. Non-isothermal kinetics in homogeneous and heterogeneous systems
2. Ligand-exchange kinetics of cobalt(III) and chromium(III) derivatives of complex compounds, elucidation of spectra (IR, visible, UV) of complex compounds, mathematical description of protolithic equilibria, potentiometric and spectrophotometric determination of acid constants, dependence of acid constants on solvents.
3. Physical chemistry of border surfaces, phase equilibria of binary molecular films, protolithic equilibria, molecule associations, complex formation in monomolecular layers.
4. Different kinetic problems of thermogravimetry. He was dealing with different problems of thermal analysis for almost 30 years. During the thermal investigation of the dehydration and amine-cleavage of aqua- and amine complexes of different mixed cobalt(III), chromium(III) and other transitional metals he developed the evaluation of thermogravimetric studies, especially from a kinetic point of view. He worked out new calculation methods for determining apparent kinetic parameters (e.g. 'nomogram method', kinetic compensational effect, etc.). Several hundreds of cobalt(III)-complexes were produced and investigated by several research workers in the framework of the three-decade co-operation between the Technical University of Budapest and the University of Cluj.

In spite of his successful research career János Zsakó received little acknowledgement, which can be explained by the fact that he could only take part in few international conferences. He became the member of the Editorial Board of JTA in 1971. In 1980 he was awarded 'Gheorghe Spacu' reward. In 1991 he became the Editor-in-Chief of one of the technical publications of the Hungarian Technical Society in Transylvania, the journal 'Firka' focusing on physics, chemistry and computer technics for secondary school students.

In 1993 he was appointed Vice Chairman of the Committee of Thermal Analysis and Calorimetry of the Romanian Academy of Sciences. His 75th birthday was celebrated at a scientific meeting of the Chemical Division of the Hungarian Academy of Sciences.

János Zsakó lived a full private life, too. He brought up 8 children under difficult circumstances. His wife, Magdolna was always a serious help for him, she ensured a peaceful family background.

Dear János! Among many friends and co-workers, your colleague and friend who was with you through the ups and downs of life in Cluj for 50 years is saying good bye now. Your colleague in Hungary, who is one of the members of the Editorial Board of JTAC, is also saying good bye, who you worked with for more than 30 years and the country borders and difficulties could not throw any obstacles in the way of the co-operation.

We will remember your kind, modest, helpful and family-loving personality for ever.

Csaba Várhelyi
Cluj

György Liptay
Budapest