

Editorial: In memoriam István Mayer



István Mayer.

Those who knew him in person, perhaps would all agree that he was an exceptional human being. Exceptional both as an individual and as a scientist. These two facets were strongly entangled in István's personality.

As an individual, he was definitely one of the most widely learned person we have ever met. Literature, history, economy are subjects he would willingly discourse on, dropping in his personal views or elaborated ideas backed by his encyclopedic knowledge, while not being a professional. In addition, he always had great sympathy to all bona fide individuals. Many, who were open to extensive discussions with him did not remain simple colleagues, but became good friends of István.

Still, to his fellows in academia, the most important characteristic of István Mayer was his devotion to science. Science in general determined his view on reality and on the universe. Also, science was his passion. This manifested in him tracking down any small or great questions he became actually interested in. Once his mind got set on a problem, he would pursue it till clearing it up to minuscule details. Many of us cherish memories of him consuming an enormous amount of coffee or engaging in prompt email exchange of several rounds till a question was settled to his satisfaction. Yet, he never missed to formulate and convey the broad angle aspect of both problem and solution.

István was far from being a formal person and never went by scientific fashion. His sails were always stretched against scientific reality or importance, never to actual fashionable tendencies. This attitude made István a great scholar for many of us, both in particular scientific questions and in philosophical problems in science. He collaborated with many colleagues but he made his most valuable achievements as a single person. An appropriate answer to the question "how to become a good scientist" is certainly: just the way István Mayer did.

István was educated as physicist but worked mostly among chemists on problems in theoretical chemistry. While he kept his physics-oriented view complemented with a respectable level of rigor and interest in deductive treatments, he acknowledged that chemistry is an independent discipline, not to be regarded simply as a branch of physics. This attitude guided his research in quantum chemistry to contribute to bridging physics and chemistry. This standpoint is well reflected in the books he authored on quantum chemistry, providing excellent grounds for educating future generations at the graduate and postgraduate level. Among the keywords highlighting the scientific achievements of István, one finds derivation and solution of the spin-projected extended Hartree-Fock equations, the Chemical Hamiltonian Approach, as well as development and use of tools to interpret the results of quantum chemical calculations in a chemical spirit. Many of these results were published in this Journal, the founding Editor of which, Per-Olov Löwdin, was a good friend and collaborator of István. The guest editors of the present special issue are, therefore, indebted to the International Journal of Quantum Chemistry for the possibility of publishing this memorial issue in István's honor, and they are especially indebted to all authors who have contributed to the commemoration. The guest editors are also convinced that all authors of this issue appreciate István Mayer's contributions to Science and the World, and share our sentiment of sadly missing him and his contributions to our field.

Budapest, November 2021.

Péter R. Surján¹
Ágnes Szabados¹
György Lendvai²

¹Laboratory of Theoretical Chemistry, Institute of Chemistry, Faculty of Science, ELTE Eötvös Loránd University

²Institute of Materials and Engineering Chemistry, Research Centre for Natural Sciences, Magyar tudósok krt. 2., Budapest 1117, Hungary

Correspondence

Email: peter.surjan@ttk.elte.hu