

**CRISTOFOR I. SIMIONESCU ON THE CENTENARY OF HIS BIRTH –
GLIMPSES OF MEMORY OF A FORMER STUDENT**

VALERIA HARABAGIU

“Petru Poni” Institute of Macromolecular Chemistry of Iași, Romania

Cristofor I. Simionescu was born under a lucky star. He had the chance of a native intelligence, over which his family – his parents were country teachers – planted essential human values: exquisite morality, modesty, love of justice and truth, appreciation for his neighbor... He had also the chance of a wife who was always close to him. Accumulations in book science, culture and results published by an inquisitive mind quickly built up a well-defined scientific personality and gave him the chance to join the highest forum of scientific consecration, the Romanian Academy (at the age of 35, in 1955, he was probably the youngest member of the Academy).

We, those who have had the rare chance to learn and develop our career around the Professor, benefited from his visionary spirit, from the model of his scientific personality, that of a demanding but equally a generous man and master, thinker with great ability to generalize but also rigorous in analysis of details, serious in attitude but with an accentuated sense of humor, connoisseur of people, of places and of life experience like no other. Even with the bread and knife in his hand, as a result of the high positions he held in the university environment (Rector of the Polytechnic Institute of Iasi for 26 years, interim President of the Romanian Academy, and several times president of the Iasi Branch), and in the Romanian Government, I have never seen him and I have not heard anyone commenting on a situation in which he would have opposed those less powerful than him, obviously with unequal weapons. On the contrary, he skillfully used the influence of his exceptional organizational capacity for the development of Romanian education and research, and not only in the field of chemistry.

As a student, I first met Professor Simionescu during his teaching course on macromolecular chemistry. I knew that he is our rector, head of the Polymer Department and that he goes to Bucharest every week. Despite his multiple tasks, he never missed the weekly course he taught us for a year. He came to class often accompanied by two or three of his assistants and always by the “infernal machine” – an overhead projector on which schemes and reaction mechanisms were displayed.

He spoke without a break for three hours, introducing us to the world of polymers, for whose understanding one needed not only scientific knowledge, but also awake attention and intuition. He used the blackboard only to write sound names in the field (Staudinger, Carothers, Mark, Flory, Ziegler, Natta) and their discoveries. Thus, we, the students, could hardly write in our textbooks all the information, all chemical formulas, sometimes kilometers long, which scrolled across the screen as the Professor delivered his lecture. Besides the extremely clear, from simple to complex explanations he offered us, we were told stories about the great discoveries and personalities of the field. Thus, I will never forget an aspect that only Professor Simionescu's students know, namely that the first catalyst (amyl sodium) for stereospecific polymerization of olefins was proposed by Professor Nenitescu but, as he published his results only in Romanian, in the country, the Nobel Prize for this discovery went to Ziegler and Natta, based on later results. In this way, our Professor taught us something about the policy of publishing research results and instilled in us the feeling of appreciation for everything related to our nation. The exam, in which the Professor was present together with some of the members of the department, was not only a way of assessing knowledge but also a last step towards understanding misunderstandings. "Wait a minute", said Mr. Bulacovschi, Professor's assistant, when I left the exam room, after confessing that the reactivity of the corresponding monomers and radicals in polymerization processes were still unclear to me. He left the room and soon returned with a book, we read and commented the indicated passage together, and I banished the mystery – I can say after years, forever – hidden in my learning mind. Maybe these are minor aspects, important only in nostalgic memories, although I do believe that even such small steps, the atmosphere of trust and mutual respect, the human and professional quality of our teachers have decisively contributed to the creation of a school recognized equally in the country and in the whole world.

I met again Professor Simionescu when some of my colleagues were preparing their diploma works at the "Petru Poni" Institute of Macromolecular Chemistry, under the coordination of institute's researchers, another part of us opting for topics elaborated in productive units (Synthetic Fiber Plant, Factory Plastics, Borzesti Petrochemical Plant). An effective collaboration system among the research, higher education and economic units was already functional by that time; our professors (Dorel Feldman, Cleopatra Oprea, Svetlana Dumitrescu) led research groups in the Institute and some of the courses of the last two years were delivered by engineers, who enriched our theoretical knowledge with their experience in industrial practice.

After graduating from college and a three-year internship in an industrial unit, according to the legislation that came into force that year (by the way, the period was beneficial for my training as an engineer, despite the smoldering revolt with which I accepted the new legislation according to which graduates could hold

coveted positions in higher education or research only after a three-year internship in industrial units), I became a researcher in the "Petru Poni" Institute (1977) and later on (1987) a doctoral student of the Professor, who also held the position of its director. At that time, practically the entire Romanian research had been financed on the basis of direct contracts with industrial units. Technologies for synthetic paper, synthetic leather, ion exchange resins, silicones... were developed in the institute and implemented up to industrial phase... in Savinesti, Victoria, Borzesti, Giurgiu. A semi-industrial pilots unit was created in the Institute, playing a triple role, namely: up-scaling of the new technologies developed in the Institute at laboratory level, production of low tonnage of polymeric materials (more than half of institute's revenues resulted from marketing of these products) and practical training of engineering students. In all these achievements, the creative thinking, the active presence, the master organization of the Professor were visible. Unfortunately, the 80's-90's, the well-known socio-economic policies of the Romanian state had immense negative effects upon the institute, which not even the Professor managed to eliminate completely. Even in these difficult years for the entire Romanian research community, the perception of "publish or perish" that the Professor promoted as a profession of faith, made the institute remain present in the national and international scientific literature, although it had decreased in visibility.

Immediately after the change of regime in 1989, the institute faced a state of acute underfunding, with outdated and dysfunctional research equipment, with the once active rich connections with similar units outside the country practically interrupted. In such moments, a major contribution of the Professor to the development of the institute was its re-establishment as a research unit under the coordination of the Romanian Academy, despite the extremely vocal positions of some of institute's frustrations that wanted it transformed into a privatized research system (!?). Even today, after all these years, I wonder in horror what old curiosity shop would have existed today instead of the institute, if Professor's clairvoyant option had not won the case.

Today absent among us, the Professor lives in each of us by the ideas he promoted, by the professional and life experiences we lived together, by the fully entitled pride with which we say "we are disciples of the great MAN".

A pious thought directed at our great teacher, acad. CRISTOFOR I. SIMIONESCU, who led the Iasi school of organic and macromolecular chemistry with an organizational mastery and visionary conception hard to match, leaving an indisputable mark upon the entire Romanian educational and research system.