

PROFESSOR STANISŁAW SZPIKOWSKI:
A MAN, A SCHOLAR, A TEACHER

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On a scorching July afternoon during the summer holidays of 2014 a sudden death in a car accident took Professor Stanisław Szpikowski by surprise; a scholar full of creativity, active in the life of the Department of Theoretical Physics at the Maria Curie-Skłodowska University, a person always present in the Polish community of nuclear physicists. Writing this text makes me recall an image of a certain June evening at my house, when after marching through the meadows of the Ciemięga Valley at the end of the traditional trekking trip of the whole department that concluded the academic year, we sat in the rays of the setting golden-red sun, and we talked, and we sang, enjoying Professor's presence among us. The man who used to reminisce, with a certain level of conviction, about the older and the newer scientific fascinations, sharing anecdotes about his interesting yet troubled life. In this memoir, as well as the testimony to his memory, I wish to remind you of a man who played an invaluable role in the lives of many pupils and students, but who has also influenced the shaping of our academic community: a respected researcher of an unquestionable scientific reputation, a mentor to generations of Lublin's physicists, an academic lecturer who demanded from himself as well as from the academic community staying true to the values which determine that being part of the community becomes a fruitful service, strongly outlined by the founder and the first chairman of the Polish Physical Society, Władysław Natanson, in his speech during the constituting assembly of the Society in 1920: '[...] to eagerly and faithfully serve our Nation [...], to contribute to the progress and, God willing, to the Nation's prosperity, [...] to fulfil our duty towards its future generations'.

Stanisław Szpikowski's life path began nearly ninety years ago in Lublin. From the very beginning it was not an easy one, although equally unremarkable among the generation born during the dawn of the Second Independence of Poland. Bereaved prematurely due to the death of his father – a legionary, he grew up in difficult material circumstances, in a family deprived of a place to live after the German blitzing of Lublin. The opportunity of an education was also denied to him, following the closedown of Commander Jan Zamoyski's secondary school and college by the German occupant. After the war, as an eighteen-year-old he went through a traumatic experience of being imprisoned in NKVD's (Soviet secret police) underground and in the Lublin Castle with a three-year sentence. Pardoned thanks to his family's efforts, he could catch up with his college education while working at the same time: he passed his school-leaving (matura) exam in 1947 and began his studies in the Department of Mathematics and Biology, in Mathematics and Physics section. He received his postgraduate diploma in differential geometry, mentored by Prof. Mieczysław Biernacki. Studying and working at the same time as a deputy assistant in the Department of Experimental Physics he provided for his family, which he started in 1947 with Maria Radecka; a family blessed in the following years with two daughters: Barbara and Ewa.

Professor Szpikowski bound his whole life as a researcher and a teacher with his true *Alma Mater*, the Maria Curie-Skłodowska University. Here, supervised by Prof. Armin Teske, he defended his doctoral thesis on the subject of thermal diffusion in 1960, and here in 1965, in the Department of Mathematics, Physics and Chemistry, he received a post-doctoral degree in Theoretical Nuclear Physics, a specialisation new to Lublin. Subsequently accrued academic titles of an associate professor (in 1972) and of a full professor (in 1983) formally confirmed his academic position in Polish nuclear physics.

Professor Stanisław Szpikowski created the Department of Theoretical Physics at the Maria Curie-Skłodowska University virtually from scratch, formally taking over its directorship in 1964 with only one faculty member possessing a doctoral degree. He continued to manage the Department until his retirement in 1997, when its faculty at the moment he handed over his legacy to his successors consisted of seven titular professors, four post-doctors and nine doctors, the majority of whom used to be his pupils and students. He performed numerous responsibilities and duties at the University: he was the first and longstanding (1970-1978) chief of the Physics Institute, having organised this entity from scratch and introduced high standards of research and didactics. Owing to his efforts, the process of achieving academic degrees and titles by the members of the Institute was significantly accelerated during his tenure. He managed the Department of Mathematics, Physics and Chemistry as its dean during a difficult and turbulent period between 1980 and 1981. He shared his didactic talents with all of Lublin's Universities by lecturing and conducting Physics classes at the Medical University (1954-1956), the University of Life Sciences (1956-1960), the John Paul II Catholic University of Lublin (1960-1963), and Lublin University of Technology (1984-1989). Professor Szpikowski engaged in school didactics by teaching Physics at Lublin's St. Stanisław Kostka Secondary School and College, the popular 'Biskupiak', from

1957 until its shutdown by the authorities of the Polish People's Republic in 1962. Over one hundred postgraduate dissertations in Physics were written under Prof. Szpikowski's guidance, and two out of ten doctors received the academic title of a professor. He also supported the education of the academic faculties of the Polish nuclear physics by reviewing thirty-four doctoral theses, eleven post-doctoral dissertations, and by lending his pen to writing the recommendations for twenty applications for the title or the position of a professor.

Stanisław Szpikowski spent a total of over ten years abroad as a scholarship holder and a visiting professor, giving lectures and carrying out academic research at British, American, Italian and German universities, such as the University of Manchester, the University of Michigan in Ann Arbor, the Technical University of Munich, the Heidelberg University, and the University of Tubingen. He published over ninety original academic papers, the majority of which are dedicated to the field of theoretical nuclear physics. His most notable academic research achievements are linked to introducing the notions of quasi-spin and the group theory method of analysing nuclear excitation into the description of the nuclear structures. He accomplished this together with an excellent British physicist Brian Hilton Flowers, who was to become the dean of Imperial College and the vice chancellor of the University of London, a key figure in the development of nuclear energy in Great Britain, the latter Lord Flowers. Intensive research in this subject area resulted in the introduction to the nuclear physics of a new classification chart of the nuclear states (with Karl T. Hecht from the University of Michigan in Ann Arbor), as well as the expansion of the model of the affective bosons to his innovative form with nuclear supersymmetry. After Professor Szpikowski had laid out the foundations for the symmetry of the atomic nucleus research, his students continued his work, which affirmed the recognition and appreciation of this specialisation in the Lublin's physics centre.

The kaleidoscopic personality of the Professor was complemented by his involvement with philosophy and methodology of sciences, as well as the history of sciences and physics, which resulted in over fifty articles, written with a highly sophisticated linguistic capacity, that went far beyond the subject interests of the physicist. In this way, he continued the great traditions and ideals implemented in Lublin by Professor Armin Teske. What added to Prof. Szpikowski's versatile personality was his engagement with the Polish Physical Society: he was the chairman of its Department in Lublin and the organiser of the 1980 Physicists Rally in Lublin, as well as a regular member of the Lublin's Learned Society. He was very involved in the didactics of physics in schools by working, among others, on a special coursebook board that operated under the guidance of the Minister of National Education.

As a natural consequence of Stanisław Szpikowski's researching, organising, teaching and educating activities, he received various honours and merits awarded by the dean of the Maria Curie-Skłodowska University, and the ministries of: Science and Higher Education, Education, as well as Energy and Nuclear Energy, and the Polish Physical Society. He was also awarded the Crosses of the Order of Polonia Restituta: Knight's, Officer's, Commander's, and – what he highly treasured

– the Medal of National Education Commission and the title of the Honoured Teacher. His *Alma Mater* awarded him the ‘Honoured at the Maria Curie-Skłodowska University’ Medal.

In my laudation at Prof. Szpikowski’s fiftieth anniversary of doctorate renewal ceremony, I had the privilege of reminding that the demanding obligation of a doctoral oath to experience the truth, and reveal new horizons of knowledge for one’s successors, requires people driven by the cognitive passion, dedicated to discovering the laws of Nature, persistent in striving towards their goal despite being aware that such a road is fraught with daunting challenges in the contemporary world full of contradictions. I also emphasised that the long-lasting presence of Professor Stanisław Szpikowski at the Maria Curie-Skłodowska University, as well as in the lives of our academic community, is the evident testimony of how to fulfil doctoral obligations with an unflinching sense of duty, ‘so that we nurture the truth and its light shines brighter.’

Death forever bereaves the living of the physical presence of the deceased. Professor Armin Teske said at the funeral of Stanisław Ziemecki, one of the ‘founding fathers’ of Lublin’s physics: ‘We got used to the thought that nobody is irreplaceable. Indeed, life fills every gap. However, we cannot replace a person’s personal charisma. Noble humanity is admittedly always possible and still achievable anew, yet its each and every particular embodiment is one of a kind’. It’s the privilege and the honorary obligation of a student to carry a testimony of this noble humanity to the next generations. ‘Non omnis moriar’, when the endeavours and the work of a man are surrounded by the grateful memory and the sincere remembrance of one’s good deeds.