

Mauri Lounasmaa

MAURI VIKTOR LOUNASMAA was born in Turku on 1st October 1933, graduated in chemical engineering from Helsinki University of Technology in 1962, gained a licentiate in technology in 1964 and proceeded to a doctorate in 1968 with a thesis entitled Études chimiques et spectroscopiques sur quelques quinones naturelles et synthétiques, with Professor Gustav Nyman as his supervisor. Lounasmaa had studied at the Institut de Chimie des Substances Naturelles in Gif-Sur-Yvette, France, in 1965–1966 and went on to do postdoctoral research under Professor Ernest Wenkert at the University of Indiana at Bloomington, USA, in 1968-1969.

He then returned to Finland to work as an associate professor at the University of Oulu and as a senior research fellow of the Academy of Finland until his appointment as professor of structural elucidation at the Department of Chemistry, University of Oulu, in 1975. From there he moved to Helsinki University of Technology to take up the position of professor of organic chemistry as of 1st May 1979, which he held until his retirement on 31st October 1998. This is the oldest chair in chemistry at that university, its first occupant having been the distinguished Finnish chemist Gustaf Komppa. Lounasmaa was elected to membership of the Finnish Academy of Science and Letters in 1990.

Natural product chemistry was always close to Lounasmaa's heart, and it was this that led him to study aromatic phloroglucinol derivatives and more widely the chemistry of nitrogen-containing alkaloids. In the early stages this work was concentrated on structural elucidation. and Lounasmaa established close contacts with French researchers, especially those at the Institut de Chimie des Substances Naturelles at Gif-sur-Yvette. He later spent a longer period at Gif-sur-Yvette before returning to Helsinki University of Technology, and the emphasis of his research shifted into the chemical synthesis of natural substances. Thus Lounasmaa was instrumental in introducing research into the synthesis of bioactive nitrogen-containing indole alkaloids into Finland. The joint research that he began with the celebrated alkaloid chemists Pierre Potier and Henri-Philippe Husson led him to undertake active work on the use of the modified Polonovski reaction for synthesizing indole alkaloids, a project that gave rise to no less than ten doctoral theses and generated results that are still to be seen today in the research traditions of the pharmaceuticals industry in Finland.

Chemistry, and science in general, was vitally important to Mauri Lounasmaa, but equally important was a good general education. Discussions in the laboratory's coffee room frequently extended to fields such as history and different cultures. He was particularly fascinated by French history and made an extensive study of the medieval French nobility in his retirement years which he published, in the modern style, on the Internet in 2016 under the title *Des dynasties de France*.

I had the pleasure and honour of being the first of Mauri's doctoral candidates to present his thesis. We all remember him as a perceptive and exacting supervisor. "What's new?" would be his favourite question, asked regularly morning and evening. He always had time to listen to the latest results when he was in the laboratory, no matter whether they were startling or humdrum, and his exactitude was always fair and encouraging. The most important thing for me personally was his custom of chatting with us faceto-face in his room. Whenever you knocked on his door the answer was always, "Yes, come in!" You never needed to turn away, because he always had time for his young research students. The discussion would set out from chemistry, but it was never very long before, almost imperceptibly, it had moved on to more profound philosophical matters or to history. These discussions led me to take up new challenges, to set myself new goals and to follow a path of my own. For this I have Mauri to thank, for it was he who sent me out into the world to learn more and to pursue a career of my own. And having spent fifteen years doing this, I am proud to have the opportunity to share the knowledge that I have acquired with new generations of students from the same chair that he occupied. Mauri passed away on 4th February 2017.

Obituary by Ari Koskinen