

Kalevi Pihlaja

* 13.2.1940 † 2.9.2022



Professor Toivo Kalevi Pihlaja died at the age of 82 on 2 September 2022. He was born on 13 February 1940 in Aura and grew up in Mellilä. He graduated in 1958 from the upper secondary school of Elisenvaara in Kyrö, which was then part of the municipality of Karinainen. He completed his military service in the following year at the Turku Naval Station, after which he began his studies at the Faculty of Mathematics and Natural Sciences at the University of Turku. Having obtained a master's degree in chemistry, he pursued postgraduate studies under Professor Pentti Salomaa and, in 1967, defended his doctoral thesis entitled *Kinetic conformational analysis of 1,3-dioxane and its methyl derivatives*.

Following the defence, he went on to focus especially on the structures of heterocyclic compounds in his research. In the beginning of his research career, he applied traditional methods of physical chemistry, reaction kinetics and calorimetry, to quantitatively describe organic reactions. Already back in the 1970s, at the same time as his then colleague Jaakko Paasivirta, he began using modern NMR spectroscopy and mass spectrometry when studying the structures of heterocyclic and environmentally harm-

ful compounds and natural products. Pihlaja earned merit exceptionally fast as an expert in structural chemistry and the conformation analysis of organic molecules and achieved an internationally recognized position in the field. He was appointed Docent in Physical Organic Chemistry at the University of Turku in 1969 and Associate Professor in Organic Chemistry in 1971. In 1973–1974 Pihlaja worked as Visiting Professor at the University of Stirling in Scotland, where he had a chance to study heterocyclic compounds by NMR spectroscopy. In 1977–1978 he spent time at the State University of New York in Potsdam, the United States, where he studied the use of mass spectrometry in the structural studies of organic compounds. Even while he was still at Potsdam, he was appointed Professor of Physical Chemistry at the University of Turku in 1978.

Kalevi Pihlaja's research activities expanded in the 1980s to environmental chemistry and the state of the environment in general. In the 1990s, he also turned his focus on natural products chemistry. These topics are featured in many of his published works. In addition to conducting research, he served as Chairman of the Finnish Peatland Society and as

a long-standing expert member of the Maj and Tor Nessling Foundation and maintained active contact with the peat industry, especially regarding environmental issues.

The scope of Professor Pihlaja's international cooperation included not only the United Kingdom and the United States, but also many research groups in eastern Europe, and their active communication continued for several decades. Especially worth mentioning are his collaborations in the field of synthetic organic chemistry with the Albert Szent-Györgyi Medical University and József Attila University (merged in 2000 to form the University of Szeged), the Comenius University in Bratislava, University of Košice, the Slovak Academy of Sciences, University of Potsdam, Kocaeli University (Turkey), the Medical University of Lublin, University of Gdańsk and University of Tartu. He was awarded an honorary doctorate in Pharmacology by the Albert Szent-Györgyi Medical University in 1989, an honorary doctorate in Physics by the St. Petersburg University in 2000, and an honorary doctorate in Philosophy by the Åbo Akademi University in 2005. He was invited to become a member of the Finnish Academy of Science and Letters in 1982 at only 42 years old.

Professor Pihlaja was a successful teacher and contributed to advancements in science. Perhaps his greatest achievement in teaching was the development of the study programme in Environmental and Natural Products Chemistry at the University of Turku and later at the University of Tartu under an EU cooperation project. As many as 36 postgraduate students completed their doctoral theses under his supervision. His teaching portfolio includes courses in structural chemistry, conformation analysis, mass

spectrometry, environmental chemistry and natural products chemistry. He played a significant role in the University of Turku obtaining its first modern NMR spectrometer, JEOL GX400, in 1984, and in the University of Turku and Åbo Akademi University establishing the joint Chemistry Equipment Centre. The centre obtained expensive analysis equipment with joint funding, specifically NMR and mass spectrometers. It is now known as the Turku Centre for Chemical and Molecular Analytics (CCMA) and is located in the Aurum building, a shared facility of the universities.

Professor Pihlaja helped organize several Finnish and international conferences on structural analysis, synthetic organic chemistry and environmental chemistry. It is worth mentioning his role in the establishment of the NMR section under the Finnish Chemical Society in the 1970s. One of its main activities was organizing an annual national NMR event. These activities have continued to this day. Over his career, Pihlaja delivered lectures in over 20 countries, travelling as far as Japan and New Zealand.

In addition to an outstanding scientific career, Professor Pihlaja occupied numerous positions of trust. He served as Dean of the Faculty of Mathematics and Natural Sciences at the University of Turku (1981–1986) and as a member of the Research Council for Natural Sciences of the Academy of Finland (1980–1985). He was well-known across the research community. Professor Pihlaja was awarded Knight, First Class, of the Order of the White Rose of Finland for his merits by President of the Republic Martti Ahtisaari in 1995.

Even in his retirement, Professor Pihlaja continued to actively participate in research and contributed to almost 20 scientific

publications, despite increasingly focusing on his hobbies. Of these, worth mentioning are his culinary achievements, as he received the master chef title of Chevalier du Bailliage de Finlande (Confrérie de la Chaîne des Rotisseurs) in 2019. As Professor Emeritus, he was happy to give interviews and talk about, for example, the healing power of the forest and the related research. His blended family consisted since 1996 of his wife Anne and her chil-

dren and, over the years, he became a beloved grandfather to nine grandchildren. He enjoyed spending time with children, which can also be seen in his volunteer activities as the so-called “school grandpa” for the first and second graders of Lauste elementary school. During his days in retirement, Pihlaja also found time for fishing whitefish and Baltic herring and enjoying time together with his family and grandchildren.

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