

**Charles Mioskowski (1946–2007)**

Charles Mioskowski, or Miko as he was affectionately known, died on June 2, 2007, at the age of 60 from cancer. He was born in December 1946 in the industrial town of Falck (France). He graduated as a technician in chemistry in 1967 prior to joining the Doctoral School of Engineering of Strasbourg, where he completed his undergraduate studies with top honors in 1972. He remained in Strasbourg to study for a PhD on the “Asymmetric Synthesis of  $\beta$ -Hydroxyacids” which he completed in 1978 under the guidance of Guy Solladié at the Université Louis Pasteur. Charles then went to Harvard University (USA) as a postdoctoral fellow in E. J. Corey’s laboratory, where he contributed to the structural identification and synthesis of various leukotrienes. In 1979, he returned to Strasbourg to join the CNRS. In 1984 he was appointed Research Director, and shortly later he became the leader of the bioorganic synthetic group at the pharmacy faculty at Illkirch. In 1991, he joined also the Commissariat à l’Energie Atomique (CEA), where he was Head of the Department of Molecular Labeling and Bioorganic Chemistry at Saclay near Paris.

With this dual affiliation, Charles contributed considerably to very diverse areas of modern organic and bioorganic chemistry and beyond. He made major breakthroughs in synthetic methodology working on the reactivity of epoxides<sup>[1]</sup> as well as sulfonium and arsenium ylides.<sup>[2]</sup> He also developed original organophosphorus and boron chemistry<sup>[3]</sup> and, in collaboration with his close friend J. R. Falck, unraveled novel chromium chemistry,<sup>[4]</sup> including very recently the use of chromium-carbyne complexes as versatile intermediates for organic synthesis. This activity was complemented with contributions to the total synthesis of biologically relevant targets<sup>[5]</sup> including epicorynoline, styplodione, halomon, and solamine.

His insatiable curiosity led him to explore many other aspects of modern chemistry and technology. Having created

a platform dedicated to the synthesis and screening of small-molecule libraries, he identified compounds able to interfere with iodine-transport mediators—a discovery that addressed the problem of radio-iodine decontamination in the event of a nuclear accident. Aware of the need to develop rapid screening methodologies in the context of high-throughput-screening techniques, he demonstrated the value of immunoassays for the development of highly efficient methods to screen enantioselective catalysts,<sup>[6]</sup> linking effortlessly the field of immunology and catalysis.<sup>[7]</sup> More recently, he extended his interest to nanosciences with a significant contribution to the understanding of supramolecular self-assembly of lipid derivatives and proteins on carbon nanotubes.<sup>[8]</sup> This work could be further exploited for the development of new biosensors or bioelectronic materials. He was convinced that organic chemistry is a unique tool to elucidate fundamental problems in biology. He brilliantly designed and prepared non-natural lipids for the two-dimensional crystallization of soluble and membrane proteins.<sup>[9]</sup>

Charles had a tremendous passion for chemistry, the ability to identify important problems, and the capacity to solve them using the cleverest and most original approach. Author of more than 350 publications and 25 patents, Charles was honored many times during his career. He received the Bronze Medal of the CNRS, the Jungfleisch Prize of the French Academy of Sciences, the Grignard–Wittig Award of the German Chemical Society, the Prize Le Bel of the French Chemical Society, and the Charles Mentzer Prize of the Society of Therapeutic Chemistry. Alongside an internationally recognized research career, Charles was also a dedicated and inspirational teacher (Strasbourg and Orsay). He trained about 100 PhD students and many postdoctoral fellows, and countless others benefited from his suggestions and mentoring. He has also been an important spokesman for chemistry, especially in terms of protecting research and education.

In addition to sciences, Charles was keen to travel the world, to meet people, and learn about their life and customs. He was equally happy at home walking in the Vosges near Strasbourg, observing

nature, or picking up mushrooms. Regularly, he would bring to us all freshly cut scented flowers from his garden. He loved to spend his weekends in Neuret, the village where his wife comes from and where he now rests in peace. Those who had the great privilege of working with Charles Mioskowski will remember the outstanding scientist and the wonderful human being whose enthusiasm and drive made us believe that everything is possible. The scientific community will miss him deeply, and he will remain a role model all through our careers.

We are most grateful to his beloved wife and two children who let him develop his passions fully.

Alain Wagner, Bernard Rousseau,  
Véronique Gouverneur,  
and “Les anciens des labos Miko”

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