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Carles Miravitlles (1942–2023)

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Spain



Figure 1
Carles Miravitlles at ICMAB.

We are deeply saddened to announce the death of our dear friend and colleague Professor Carles Miravitlles, founder of ICMAB in 1986 and director of the center for 21 years, from 1986 to 2008. Carles passed away on 16 April 2023, at the age of 80.

The legacy and memory left by Carles Miravitlles, who was born in Barcelona on 9 September 1942, is extraordinary, for both his human and his professional qualities. He was a key figure in the creation of the Institute of Materials Science of Barcelona of the Spanish National Research Council (ICMAB–CSIC) and in the promotion of research in Catalonia.

Carles was a person who loved science, undoubtedly influenced by the figure of his father, Lluís Miravitlles Millé (Professor of Applied Geology at the University of Barcelona, UB, Spain). Carles received his

PhD in pharmacy under the supervision of Manuel Font-Altaba (Professor of Crystallography of the UB) and undertook several stays in the Dpt. de Chimie-Physique et Crystallography of the University of Leuven (Belgium). There he came into contact with Dr Gabriel Germain, who, together with Professor Michael Woolfson and Dr Peter Main, was one of the leading scientists in direct methods, which were emerging as a powerful technique for solving crystal structures. In 1974, he was appointed as Scientific Researcher at the Institute of Earth Sciences 'Jaume Almera' (now GeoSciences Barcelona) of the CSIC and contributed decisively to the popularization of this methodology in Catalonia. During this time, his research interest focused on structural crystallography and X-ray diffraction, mainly on organic compounds of pharmacological interest. In 1980, he organized the European Crystallographic Meeting (ECM-6) in Barcelona. He became Full Professor of the CSIC in 1986 and, in the same year, was nominated Director of ICMAB.

Apart from his interest in scientific research, in the second half of the 1980s he combined a very successful vision and a great capacity for work to create and promote ICMAB at the forefront of materials science research. He was able to mobilize this emerging discipline, anticipating it within the CSIC, achieving the creation of four new Materials Science Institutes in Spain and later promoting the existence of a 'National Materials Science Plan'. He was also very active in promoting the international collaboration of ICMAB with many research centers and institutions, mainly around Europe. The debt we owe him goes far beyond the ICMAB community and extends to this field's scientific community.

On the other hand, Carles Miravitlles' wisdom in promoting a new CSIC research center in the Bellaterra Campus of the Autonomous University of Barcelona (UAB) was the seed that later turned this campus into one of the largest research concentrations in southern Europe. Carles' ability to attract diverse talent and to convince political and institutional leaders to launch large-scale operations was exceptional. And this is the legacy he has left to all of us at ICMAB: the passion for excellence, internationalization

and scientific ambition that has led us to be recognized twice as Severo Ochoa Excellent Centre in the area of advanced functional materials.

Carles Miravitlles not only contributed to building the basic skeleton of the ICMAB, he was also determinant in other areas of management of the CSIC and his beloved Catalonia: first, as CSIC Delegate in Catalonia (from 1987 to 1992), where he was able to promote institutional relationships with the Generalitat de Catalunya; and later, by encouraging the CSIC to create a new research center in Nanoscience and Nanotechnology that eventually became the current Catalan Institute of Nanoscience and Nanotechnology (ICN2). He also managed to collaborate with companies with the capacity to carry out research on the campus, creating the MATGAS Economic Interest Group, with the participation of the company Carburos Metálicos (now, part of Air Products), the CSIC and the UAB. Once released from the direction of ICMAB, he agreed to become the Director of the 'Eduardo Torroja' Institute in Madrid (2008-2009) to modernize and reorganize the center. Finally, Carles Miravitlles returned to ICMAB, and until a few months before his death, he was still regularly coming to the Institute.

In addition to these positions at CSIC, Carles Miravitlles was president of the Spanish Committee of Crystallography and, since 1993, a full member of the Royal Academy of Arts and Sciences of Barcelona, of which he was also Vice Secretary. He was a member of the Chemistry Section of the European Academy, President of the Expominer Fair, and an academician of the Royal Academy of Pharmacy of Catalonia since 2016. In 1992 he received the Narcís Monturiol Medal in scientific merit from the Generalitat de Catalunya, for his dedication to the study of new materials and for contributions to the field of crystallography.

Carles Miravitlles' human qualities and bonhomie were hallmarks that accompanied him throughout his life and were recognized by everyone. He distinguished himself by being very positive, being kind to everyone, whether they shared his opinion or not, and always keeping a certain degree of irony and sarcasm about the research and administration management structures, both state and autonomous. His mastery of human relations at all levels and of political structures made him an undisputed leader among research managers.

To preserve his memory, the conference room of the ICMAB has been named after him.