



## Aldo Domenicano (1938–2022) — dedicated structural chemist, charter member of *Structural Chemistry*

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Aldo Domenicano (1938–2022, Fig. 1) was born in Avezzano, Province of L'Aquila, Italy, roughly halfway between Rome and the Adriatic Sea. He majored in chemistry at the Università degli Studi di Roma “La Sapienza” (today, Sapienza – Università di Roma). He stayed at his alma mater, and his mentor, Alessandro Vaciago (1931–1993), charted his way into the world of research at the international level. First, Aldo spent some time in 1970 with the inorganic chemist Ronald S. Nyholm (1917–1971) at University College London, then with the theoretical chemist Charles A. Coulson (1910–1974) at Oxford University. Although the time he spent with Coulson was very limited, it impacted Aldo and his career reflected Coulson's maxim: “It is always exciting to see order coming out of a mass of facts” [1].

His work with Coulson became Aldo's first publications [2, 3], which appeared after Coulson had died. Aldo built up a fruitful research career in X-ray crystallography at the University of Rome until 1986. He worked in partnership with another structural chemist, Marcello Colapietro. Aldo was interested in the accurate determination of molecular geometry without the influence of intermolecular interactions. Hence, his attention turned to the application of gas-phase electron diffraction for molecular structure determination.

He spent three winter months in 1978–1979 with us in the Budapest electron diffraction group. He learned the technique and became one of the most successful users of gas-phase electron diffraction for molecular structure determination. During the next three decades, some forty(!) joint papers signified our cooperation and two co-edited books [4, 5]. Our interactions included many mutual visits by us and by our respective associates. One of the most interesting areas of our joint inquiry was the investigation of gas–solid

structural differences in substituted benzene derivatives (for references, see, e.g., [6]).

Aldo's work was always characterized by attention to detail, interest in and respect for historical antecedents, and rigorous documentation of *all* attempts in the investigation. He was tireless in expanding the analysis if there was the slightest chance to enhance the accuracy and the reliability of the results. It is a testimonial to his being a workaholic that even with this demanding work ethic, he could produce a large body of research results and publications.

In 1986 there was a change in venue in Aldo's activities. He was appointed Professor of Chemistry at the University of L'Aquila. His domicile remained in Rome where his wife and associate in science, Anna Rita Campanelli, worked at the University of Rome, but he began a weekly commute to L'Aquila. He was enthusiastic about this arrangement, the more so, because moving his affiliation to L'Aquila meant at least a partial return to his homeland. He enjoyed teaching and interactions with his local colleagues, yet his primary interest remained in research. He retired officially from the University of L'Aquila in 2010, but for years he continued lecturing there.

Keeping with expanding computational possibilities, Aldo's latest, and as it turned out, his last, research interest was in the structural variation of phenyl groups as a consequence of the propagation of long-range polar effects through hydrocarbon frameworks. Anna Rita Campanelli and Fabio Ramondo provided references to relevant papers in their introduction to the special issue of *Structural Chemistry* honoring Aldo's 75th birthday [7].

He was never narrowly focused on his immediate work and retained a broad-based cultural interest, for which Rome and Italy provided endless source. In our interactions, he was always an eager partner to follow cultural-scientific goals they being of the most diverse nature as shown by some of the references in [6]. Perhaps, the most intriguing of our cultural-scientific “discoveries” was a fresco displaying an ancient system of elements from the twelfth or thirteenth

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**Fig. 1** Aldo Domenicano and his wife and partner in science, Anna Rita Campanelli, in 2004 (by unknown photographer)

century. We found it in the crypt beneath the cathedral in Anagni, some sixty kilometers southeast of Rome [8]. With Aldo Domenicano's passing, structural chemistry lost a

dedicated contributor, and we lost a good friend. He will be sorely missed.

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