

Kaoru Harada 1927-2010

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Kaoru Harada passed away on November 20th, 2010. During the 18 years spent in the USA with Sidney Fox, at Florida State University (1956–1964), then at University of Miami (1964–1974), and later on at Tsukuba University in Japan, he tackled all the important aspects of prebiotic amino acids: their prebiotic synthesis, the origin of one-handedness and their polymerization into peptides.

To synthesize amino acids from postulated primitive terrestrial atmospheres, Kaoru Harada first used heat as an energy source. Looking for energy sources operating efficiently in aqueous solutions, he became interested in using contact glow discharge electrolysis and argon arc plasma, as well as nitrogen arc plasma. Harada's interest in amino acid production was not only terrestrial. He found compounds that could be hydrolyzed into amino acids in lunar fines. He also carefully analyzed meteorites.

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Kaoru Harada understood very early the great importance of amino acid homochirality in natural proteins. He contributed significantly to the asymmetric synthesis of amino acids and to their total optical resolution. Later, his interest moved toward the racemization of protein amino acids with ageing.

With Sidney Fox, Kaoru Harada also devoted a tremendous amount of bench work to the phenomenon of thermal polymerization of amino acids. Working in Sid's shadow, he left the promotion of the work to the latter, so that the proteinoid and microsphere adventure became the "Fox and Harada" story. Because of Sid's style of presentation and enthusiasm for the prebiotic significance of thermal polypeptides, the scientific community progressively forgot the multi-faceted dimension of Kaoru's scientific production. This was an unfortunate treatment for someone who combined all of the qualities of a good scientist: creativity, knowledge, dexterity, diversity and humanism. He was, in addition, a real artist capable of drawing portraits and elaborating origami in a few minutes. Kaoru also enjoyed performing tricks of chemical magic, which helped to promote organic chemistry. Another hobby, while traveling, was photographing the graves of famous scientists.

We miss him very much.

André Brack and Alan Schwartz