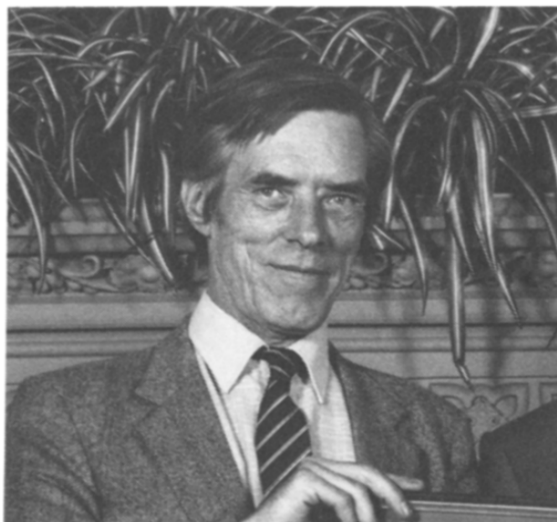


EULOGY
Professor S. Martin Nelson



1928–1985

It is sad to report the passing of a fine scientist and a good friend. I am pleased that we have the opportunity to publish here an appreciation of Martin and his work. Martin will be missed by all his friends, among which group, the Editor was privileged to have belonged.

It is a great honour for me to be allowed to speak about the life of Martin Nelson. To his grieving family and friends, and especially to close friends such as Brian Walker and Mike Burnett, I say: I hope I can do justice to his personal and professional qualities. For those of us lucky enough to have been part of his family, one of his friends—we have all been touched in a number of ways, we have been taught, we have been helped by this fine man.

I have three themes. Martin was a chemist and scholar, a teacher, and a friend.

Martin Nelson made a number of important discoveries at various times in his career:

(1) High spin $\rightleftharpoons$ Low spin crossovers in divalent cobalt, nickel, and iron complexes. This is not just of academic interest, it is the high spin $\rightarrow$ low spin crossover that makes haemoglobin a unique transporter of oxygen in mammals and other biological systems.

(2) In the chemistry of ambidentate ligands he and his co-workers discovered the first example of sulphur atom only bridging thiocyanate, as well as a rare example of nitrogen atom bridging thiocyanate.

(3) However, his greatest contribution is acknowledged to be in the chemistry of macrocyclic ligands. Following his sabbatical leave with Professor Busch at Ohio State University in 1966 there followed a sustained and major contribution to this important field. His team discovered a large number of unusual 7-co-ordinate complexes. They employed large non-transition metal ions as templates for the synthesis of binucleating macrocycles—the template metal could subsequently be replaced by metals which were in themselves ineffective as templates. The momentum of this work built up: the Nelson Group were able to design macrocycles containing metal ions at various separations which could bind and activate small molecules. Their di-copper complexes catalyse the oxidation of, for example, catechols—thus mimicking the oxidase activity of the enzyme tyrosinase.

He made other substantial contributions but it is his macrocycle work which is being increasingly recognised as elegant and important. He was constantly being invited to lecture on this work, and recently he has been a Plenary lecturer at conferences alongside major international figures.

It is my opinion that it is beyond dispute that he was the most talented Inorganic Chemist that Ireland has produced. Paradoxically, he was recognised as a major figure in chemistry outside these islands before honours came here. Nonetheless, the election to the Royal Irish Academy gave him immense pleasure—I think the greatest of pleasures—and his appointment to a Chair of Chemistry at Queens was a fitting acknowledgement to one of its sons who had brought such distinction to the University.

He was a marvellous teacher. He taught us all by his example. He would never compromise the truth; he would never say to you what you wanted to hear if he could not speak honestly. For this quality his friends and students were grateful and could better depend upon his advice and opinions.

I was frequently a co-examiner of research student theses with Martin. At the oral examination Martin was generous in his praise, and never, ever destructive in his criticism. On the contrary—he had the absolutely marvellous quality in as much as where he detected a deficiency in the student's knowledge he was able to lead them through gently and with great clarity. He was an excellent teacher—he was able to discern points of difficulty and lead students to an understanding of a point—and make them believe that they had reached enlightenment under their own steam.

There are many of his ex-students here today. Of all research groups I have ever seen there have been none which had such fierce loyalty of students for their supervisor. I envied the relationship that Nelson and his students had. Many of them are experiencing a special grief. He was their teacher, mentor, friend—they were part of an extraordinary family.

During the last few days I have been aware that word has spread throughout the academic community of Martin Nelson's death. There are

many people here today who have come representing important institutions and major academic departments; they have come a long way to pay their tribute to Martin. There are people in countries all over the world who are learning of his death. There will be great dismay and sadness.

Martin Nelson gave his time generously to all who needed it. We shall all miss this.

He felt privileged to have been able to teach and research at Queens. He was proud to be at Queens and he was proud to be Irish.

His most intense pride, however, was in his family. He was proud of his wife, Jane, and felt fortunate to be able to share their lives in so many ways. He was very proud of his daughters. His friends and colleagues will know how often he talked of Clare and Jenny and their achievements. We all know his great joy—Judith. To see them together and to see their bond of love was a warm experience.

To Jane, Clare, Jenny and Judith, and to other members of the Nelson and McCaughan families: you know you are not alone in your loss. We who were privileged to be close to him have all suffered a great loss. But we were fortunate to have been able to have shared our lives with him. Our lives will never be the same. We loved him. We shall never forget him.

C.A. McAULIFFE
12 December 1985