

OBITUARY

PROFESSOR J. L. MARTIN VIVALDI

(1918–1974)

Born in May, 1918 in Granada, Professor Martin Vivaldi graduated in Chemical Studies in the University of that city in 1941, and took his doctorate in 1949. The following year he was appointed 'colaborador científico' by the CSIC (equivalent of the DSIR), and commenced his career of research in the laboratories of the Zaidin Agricultural Experiment Station, Granada. He retained his contacts with the university, and in 1962 became Professor of Crystallography, Mineralogy and Mineral Technology there.

In his research work, he was ingenious in overcoming the initial difficulties due to the shortage of equipment which afflicted Spanish universities in the early 1950's. There was a concentration on thermal analysis and imbibition studies, partly because initially X-ray equipment was not available. Some of his early dehydration studies were carried out by successive direct weighings on an ordinary balance. Dr Vivaldi soon assembled a group of keen collaborators, and resolved his difficulties, either by acquisitions, or by construction of specially designed apparatus. He retained his interest in thermal methods of analysis, to which he made some substantial contributions, notably with Fenoll Hach-Ali and Girela Vilchez (the latter being his principal collaborator in instrument design). Another of his special interests was the fibrous group of clay minerals. These two interests came together when, with R. H. S. Robertson he contributed the chapter on 'The Palygorskite-Sepiolite Group' to the Mineralogical Society's international reference book on *The Electron-Optical Investigation of Clays*.

When the chair in Madrid became vacant in 1963, he was well qualified to present himself for it. The decision was not a simple one, for two reasons. First of all, the application involved the gruelling 14-day ordeal of the 'oposición'. The second reason for hesitation was Vivaldi's very intimate association with Granada. His family had resided there for generations; he was known to everyone in the city (it was, and probably still is, the sort of city where one can be known to everyone). None the less, the temptation to go to the central university was not to be resisted, and Vivaldi triumphantly overcame the obstacle of the 'oposición'.

The name Vivaldi, by the way, in accordance with Spanish custom, is his mother's name, and although of Italian origin (he once said to me that it implies a distant relationship with the composer), had been known in Granada for generations. He generally used this name, as I am doing here, both because of its intimate association with the city, and because the name Martin in Spain is about as common as Jones is here.

In Madrid, the tempo of his publications increased; about half of his output resulted from his five years' tenure of the chair. At the same time, he was installing a new department, since his arrival in Madrid more or less coincided with the shifting of the department from its old central location to a new building in the University City (and also coincided incidentally with a series of student protests which resulted in the new department taking on the appearance somewhat of a fortified camp). He also played a major part in arranging the International Congress of Clay Minerals, which was very successfully held in Madrid in 1972.

Apart from his scientific career, Vivaldi was a man of wide interests, an entertaining and fluent talker on a wide variety of subjects, with a fund of knowledge of all the peculiarities and traditions of his native Andalucia, and an unsurpassed capacity for richly humorous mimicry of the more extraordinary of its dialects. He wrote a considerable amount of poetry, and although he never showed it to me, I am assured that it is good (one of his sisters has published volumes of poetry). He made a substantial contribution to his country's scientific development, and he was dedicated and capable of intense concentration; yet he was very far indeed from being a totally single-minded scientist, one of J. B. Priestley's 'grey men', but in every way a thoroughly rounded human being.

DOUGLAS M. C. MACÉWAN