

Letter to the Editor

Structural Aspects of Crown Complexes with Alkali and Alkaline Earth Cations

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In what purports to be a historical introduction to a paper under the above title (*J. Incl. Phenom.* 4, 43–54 (1986)), Poonia *et al.* state that R. S. Nyholm persuaded the Agricultural Research Council (ARC) to establish a unit to study crown-ether complexes soon after the publication of C. J. Pedersen's first paper in 1967. This is not correct, and in justice to Nyholm and the ARC I wish to put the facts on record.

Prof. Nyholm first suggested the establishment of a group to develop various aspects of inorganic and structural chemistry in relation to agriculture in a discussion with me on 4 December 1962. On 19 March 1963, the ARC agreed in principle to the creation of a Unit of Structural Chemistry under his (honorary) direction, its principal function being, in broad terms, to pursue various long-term chemical themes of interest to agricultural science, particularly in regard to the coordination chemistry of some of the biologically-important metals. When details came to be discussed, Prof. Nyholm, after referring to the already well-established school of coordination chemistry in his department, wrote:

We are now extending our interests to cover the alkali and alkaline-earth metals. The coordination chemistry of these elements, which are very important in agriculture, has been relatively little investigated, although they are known to form covalent complexes.... It is proposed to begin by determining the structures of some model chelate compounds of the alkali metals and alkaline-earth metals including complexes with polydentate ligands, specially synthesised for the purpose and containing highly electro-negative donor atoms....

There was some delay before the ARC's decision could be implemented, firstly to satisfy the Treasury on financial issues, and secondly because of the difficulty in finding suitable laboratory accommodation in central London. However, a deputy director (M. R. Truter) was appointed and the Unit became fully operative on 1 October 1966; before their first paper on crown-ether complexes Nyholm, Truter and co-workers had already published about half-a-dozen papers on other alkali metal complexes.

When Pedersen's seminal work became known in 1967, Nyholm and Truter at once perceived its importance as a means of extending and prosecuting more vigorously their existing plan to use polydentate ligands in their work, and naturally they followed it up. But the suggestion that the taking up of crown ethers was a sudden piece of opportunism on Nyholm's part, quickly supported by a compliant ARC, will not stand up for one moment in the light of the record of Nyholm's involvement in Group I coordination chemistry, and with the ARC, for several years before 1967.

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