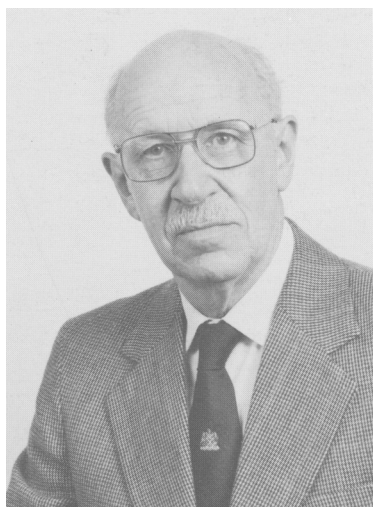


This issue of *Clay Minerals* contains papers read at a joint meeting of the Clay Minerals Group of the Mineralogical Society and the Thermal Methods Group of the Royal Society of Chemistry (7–8 November, 1983) held to acknowledge Dr R. C. Mackenzie's formative influence on, and subsequent close association with, both groups since their inception in 1947 and 1965, respectively. During this meeting the title of 'Distinguished Member' of the Clay Minerals Group was awarded to Dr Mackenzie and the text of the citation accompanying this award is reproduced below.

Clay Minerals Group

'Distinguished Member' Citation



As a mark of esteem in recognizing outstanding individual achievements in clay research and in acknowledgement of exceptional service, the Clay Minerals Group has designated a special category of 'Distinguished' membership. It is with pleasure that the first such title is conferred on *Dr R. C. Mackenzie*.

Robert Mackenzie was born in Ross and Cromarty, near the village of Portmahomack, on 7 May 1920, and after acquiring a sound grounding in scientific subjects at Tain Royal Academy proceeded to the University of Edinburgh where he graduated with a First Class Honours Degree in Chemistry in 1942. An appointment as soil surveyor at The Macaulay Institute for Soil Research in Aberdeen was deferred until he had completed studies in gas-phase reaction kinetics for the award of a PhD in 1944.

Subsequent work on soils at the Macaulay Institute soon concentrated on laboratory studies and he was particularly concerned with the pre-treatment of clays for identification purposes, especially by X-ray diffraction. In 1948 he set up a separate section to deal specifically with physico-chemical investigations of soils. Pioneering studies on ancillary phases such as sesquioxides and amorphous materials followed, a number of techniques in chemical dissolution becoming standard procedures for soil investigations.

When several laboratory sections were amalgamated in 1959 to form a reconstituted Department of Pedology he was appointed Head (a position he retained until he retired in 1983). In recognition of his original contributions to clay mineralogy he was awarded a DSc degree from the University of Edinburgh in 1957 and in 1961 he was elected a Fellow of the Royal Society of Edinburgh.

Dr Mackenzie was associated with many developments in the methodology of laboratory investigations and placed particular emphasis on a multi-technique approach to the study of clays. When, at an early stage in his work at the Macaulay Institute, the opportunity was given of assessing the research potential of thermal

analysis he took up the challenge with enthusiasm and, with the construction of home-made DTA equipment, embarked on the second enduring passion of his scientific career.

Much of the subsequent work was to form the background to a Mineralogical Society monograph, *The Differential Thermal Investigation of Clays*, published in 1957, of which he was editor. Although he was later to edit an extended work on differential thermal analysis for Academic Press (volumes 1 and 2 published in 1970 and 1972), the monograph long remained the main reference book and is still much referred to and quoted. His methodical filing and assessment of thermal analysis results at the Macaulay Institute also formed the basis of a SCIFAX punched-card data index published by Cleaver-Hume Press Ltd in 1965. He was closely concerned with the formation of a Thermal Methods Group under the auspices of the Society of Analytical Chemistry in 1965, becoming its first Chairman.

Dr Mackenzie has had a long and fruitful association with the Clay Minerals Group itself, being one of its most supportive and active members. He was an early member of the Group and an Honorary Secretary in its formative years, serving in this capacity for seven years between 1949 and 1956. From 1959 to 1964 he was Editor of the Group's journal, *Clay Minerals Bulletin*, as it then was, and to this day remains a valued member of the Editorial Board of its successor *Clay Minerals*. Notwithstanding a natural desire to be encouraging and helpful, his capacity for critical appraisal and an authoritative editorial style has long been an asset in handling scientific papers of widely varying merit and content.

In 1972 he was elected Chairman of the Group for the statutory three years and almost immediately afterwards undertook an important duty as convenor of the scientific committee for the Sixth International Clay Conference in Oxford in 1978, contributing greatly to the success of the conference in his efficient, smooth (and diplomatic) handling of the scientific proceedings.

He is, indeed, very much at home in the international sphere. Not only has he attended nearly all the International Clay Conferences, contributing papers on original research or presenting invited plenary lectures—even occasionally indulging a personal interest in the historical aspects of clay research (*vide* a recent contribution on volkonskoites)—but he has served both on the Council of the Association Internationale Pour L'Étude des Argiles and on its Nomenclature Committee (being Chairman of that select body for eight years). In a recently completed term as President of the AIPEA he piloted through a set of revised statutes and by-laws (almost single-handedly) and his concern for the younger aspiring scientist was largely responsible for the introduction of an international travel award scheme for promising young clay mineralogists.

His international proclivities have also extended to the thermal analysis field. He was jointly responsible for the organization of the first International Conference on Thermal Analysis in Aberdeen in 1965. This led to the formal establishment of an International Confederation for Thermal Analysis in 1968, for which he has been Treasurer since its inception and in which he has served in various official capacities (including chairmanship of another nomenclature committee).

His reputation abroad, coupled with that of the Macaulay Institute itself, has occasioned a large number of visits from scientists overseas, both of a passing nature and for longer periods of attachment for training or collaborative research. He has also responded to many requests for lecture tours and advisory visits overseas and has latterly held Visiting Professorships at the University of Cairo and Riyadh, dealing in particular with arid and saline soils.

Dr Mackenzie's outstanding scientific achievements have already been recognized by other august bodies. He was the recipient of the first Mettler Award in thermal analysis in 1968 and was presented with the Netzsch-GEFTA award of the West German Thermal Analysis Society in 1982. A tribute of particular personal satisfaction was the receipt of the 15th Society for Analytical Chemistry Gold Medal in 1980. Other more recent distinctions include the award of 'Archiginnasio' from the City of Bologna during the International Clay Conference there in 1981, and of the Emanuel Bořický Medal from the Faculty of Science, Charles University, on the occasion of the joint meeting of the European Clay Groups in Prague in 1983.

In conferring the status of 'Distinguished Member' on Dr R. C. Mackenzie, the Clay Minerals Group not only pays tribute to his scientific accomplishments but testifies to the high degree of affection and regard with which he is held by fellow members.