



To Professor Dr. Emile den Tex

on the occasion of his retirement from the chair of Petrology, Mineralogy and Crystallography, which he held at the State Universities of Leiden (since 1959) and Utrecht (1978-1983).

Royal Geological and Mining Society of The Netherlands

OPHIOLITES AND ULTRAMAFIC ROCKS

PREFACE

This special issue is dedicated to Professor Dr. Emile den Tex on the occasion of his retirement from the chair of petrology, mineralogy and crystallography.

Den Tex started his scientific career with his Ph.D. thesis on the petrology of the basic and ultrabasic rocks in the Belledonne Massif in France, delivered in 1949 and published in 1950. The work had been supervised by Prof. Dr. E. Niggli and contained, besides a thorough analysis of the petrology of the Massif also elements on its structure, all written in French.

Then came his Australian period. He became a lecturer, for a short time first in Sydney, followed by eight years in Melbourne. Most of his work was concerned with structural field work and quartz fabrics in the Snowy Mountains and in Broken Hill. That shift from chemical to structural petrology determined the greater part of his career.

In the meantime E. Niggli had left Leiden for Bern and was succeeded by W. P. de Roever, who, after a few years accepted a nomination at the University of Amsterdam. Much to his astonishment Den Tex was asked to take over the chair of petrology, mineralogy and crystallography at the State University of Leiden. He accepted the position and found that the petrological field work had moved from the Belledonne

Massif in France to Galicia in North-West Spain. The first visit to that region enthused him: a large field of petrological and structural investigations lay ahead.

His first two Ph.D. students, however, still had been working in the Belledonne Massif. Kalsbeek (1962) incorporated in his thesis statistical work on zircons to find the origins of the various amphibolites; he also studied the fabric of mica and of quartz. Ypma's work (1963) concerned fluid inclusions in connection with rejuvenation of ore deposits, a line of research that was further abandoned.

In the first period at Leiden Den Tex focused his attention on the development of fabrics. Not only as a means to decipher the complicated structural geology of Galicia, but also as a study in itself, as testified by various specialized theses (Collee, 1962, publ. 1963; Avé Lallemant, 1967, publ. 1969; Möckel, 1969; van Zuuren, 1969, publ. 1970; Engels, 1972; Buiskool Toxopeus, 1977).

A first objective was to improve the methods to obtain data. Möckel (1969) was the first to use a computer procedure for counting and for representation of petrofabric diagrams. A second objective was to understand the fundamental processes of fabric formation, as exemplified in the work of Buiskool Toxopeus (1977) on dislocation substructures in deformed olivine.

Gradually Den Tex returned to purely petrological work leaving the fabric studies to the structural geologists. Several Ph.D. theses resulted from fieldwork in Galicia (NW Spain): Floor, 1966, publ. 1967; Arps, 1970; Maaskant, 1970; Hubregtse, 1973; Van Calsteren, 1977 and Kuijper, 1979. Whereas the first four concentrated on description, on chemistry and on genetic relations, the other two dealt primarily with geochronological research, thus completing the picture of Galicia. In between three other Ph.D. theses were supervised by Den Tex: Oosterom, 1963 on Norwegian ultramafites, Vos, 1966 on Canadian quartz diorites, and Den Roever, 1972 on Calabrian metabasites.

After nearly twenty years Galicia appeared to be exhausted and a new region for fieldwork was found in the Italian Western Alps. Only one thesis (Minnigh, 1979) resulted from this work due to structural changes imposed by the Dutch Ministry of Education and Science on the earth sciences in the Netherlands. These lead, after a struggle of fourteen years, to a merger of the Utrecht and the greater part of the Leiden Subfaculties of Geology and Geophysics by the end of 1979. Den Tex joined the petrology group in Utrecht, which worked in Scandinavia. Two Ph.D. candidates studied magmatic processes: Otten, 1983 in Sweden and Huysmans, 1984 in the Cyclades, Greece.

From the start of his career in the Belledonne Massif, Den Tex has always had a strong interest in ultramafic rocks and ophiolites, as is evident from several of the Ph.D. theses mentioned. For that reason the editors of this issue could not think of a better topic to honour his scientific achievements.

During the last years at Leiden and during the five years until his retirement at the State University of Utrecht, Den Tex became more and more interested in the petrological consequences of large scale events such as plate tectonics, as can be seen from one of his recent publications (Den Tex, 1982). In that paper Den Tex gave an excellent summary of his career: 'My particular autometamorphism I can trace from the facies of a minor poet through a petrologist and microstructural geologist, only to find myself retrograded to a petrologist and finally degraded to a bureaucratic papyrologist'. We can, however, not agree with the description of the last process and consider it rather an upgrading, due to his personality.

His leadership became soon apparent, having been president of the Leiden geological student's union. Add to this his open mindedness, his initiative, his diplomacy and his gift of speech and it is at once clear why Den Tex is the chairman – and if not, at least member – of so many commissions, committees or councils on geological affairs. Currently, o.a. he is the chairman of the Royal Netherlands Geological and Mining Society. It is also natural that he was elected in 1979 as the first dean of the renewed Subfaculty of Geology and Geophysics at the State University of Utrecht. The obligatory retirement from the State University of Utrecht fortunately did not prevent him to shift to the Open University in The Netherlands, where he is now working on the geology course.

His work brought him many international contacts and so he was involved in the Geodynamics Project, a Penrose Conference on ophiolites and the European Union of Geosciences. The choice of contributions to this issue reflects his international contacts.

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