

OBITUARY H. M. E. SCHÜRMAN (1891-1979)¹J. J. DOZY²

The geologist Heinrich Moritz Emil Schürmann, called 'Doc' by his friends, was an outstanding personality. He was an eminent representative of the pre-World War II generation of geologists.

Oil exploration was at that time still bushwork, considered by the outside world as a romantic occupation. The industry

then had to rely on the zest for hard work and the judgement of individual geologists, who had to shoulder, often alone, a heavy responsibility. Under Schürmann's direction a beginning was made in the Royal Dutch-Shell Group towards a multidisciplinary development by the introduction of gravity and seismic methods of exploration, the use of aerial photography and sedimentary petrography, by research on oil source rocks and the origin of petroleum, developments that would entirely dominate exploratory activity in later years.

It seems therefore appropriate to delve somewhat deeper into the background of this man, whose personality contributed undoubtedly to the success of the Group in the thir-

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ties and forties and who exercised a marked influence in the world of geologists during the fifties and sixties.

The Schürmann family originated from the Rhineland, in particular from the former duchy of Berg, the old capital of which was Lennep. The family was engaged in the cloth-manufacture and textile industry. Father Schürmann owned a spinningmill in the village of Dahlhausen, not far from Lennep. Emil – born March 24, 1891 in Dessau (Anhalt) – grew up in the large family home near the mill in the then still rural valley of the Wupper. As a boy he was very much interested in natural history. He collected butterflies, dried plants, stuffed animals, birds eggs, etc. He kept his collections in a special room in the house fitted up as a 'museum'. He was also much interested in a quarry behind the house, where a search had been made for copper ore.

For his secondary education Emil was sent to the old-fashioned 'Real-Gymnasium' in Lennep, where one had to speak Latin in class, and a rattan cane was always present. Doc made a note that 'not a day passed without one of the boys having to feel the cane'. In his second year the use of Latin as teaching medium was discontinued, but the cane remained! He travelled every morning at 6 o'clock by train to school in Lennep and kept this habit of early rising during his whole life.

When Emil was sixteen he transferred to the more modern Gymnasium at Düsseldorf. The teachers liked the boy, who showed so much interest in many things. They encouraged him and put him to work, for instance in the map collection of the school. In his spare time he was allowed to help out in the mineralogical and geological collections of the municipal museum. He knew the surroundings of Düsseldorf and Lennep well and he had formed for himself an idea of the geology of the region. He met the state-geologist Dr. Fliegel in Düsseldorf and showed him many useful outcrops. In this way he collected a fair amount of geological knowledge during the years he was in the 'Gymnasium'.

In 1910 Emil came up as a 19 year old student in Bonn. He studied geology and mineralogy with Professors Steinmann and Brauns. In connection with his previous experience he was spared certain subjects and practical exercises. Thus he was able to complete his studies in three years time with a doctors thesis on the sedimentary inclusions in the basalts of the Finkenberg. It was based on work he had begun already during his Gymnasium years.

When Schürmann had almost finished his studies, one of his professors, Prof. Wanner, obtained an assignment from the 'Koninklijke' (the Royal Dutch Petroleum Company) to carry out a survey in Egypt. Wanner was asked to select an assistant in Bonn to accompany him, somebody who would eventually be agreeable to join the company afterwards. Schürmann, when asked, found it a difficult decision, but accepted on the basis of Wanners experience during several earlier assignments with this company. Thus, in the beginning of 1913, Schürmann travelled for the first time to Egypt. In July he was back in Bonn to defend his thesis and to obtain

his doctor's degree. After that he returned to Egypt, but now as a geologist in the employment of the Anglo-Egyptian Oilfields Ltd.

A year later the first world war broke out. As a german citizen in Egypt Schürmann found himself in a difficult situation. Citizens of the Central Powers were interned. The company was able to procure him a safe-conduct, transferred him to the (then Netherlands) East-Indies and in December 1914 he arrived in Batavia. He was set to work as a field geologist in Java and South Sumatra and also as a geologist in the producing oil fields in the latter area. While in South Sumatra he married Marie Brautigam in 1919. After the war he returned for six months on furlough to Europe. In 1921 he was nominated chief geologist for the Indies in Batavia. He did not like this job because, due to the slow boat connections with the oil fields, he had not much real work to do. He asked to be transferred in an administrative job, and so he left in 1922 for Borneo as an assistant to the 'Administrateur' or general manager at Balikpapan, where he was nominated three years later as Deputy General Manager. After his European furlough in 1926 he was sent in 1927 as General Manager to Pangkalan Brandan on North Sumatra. He liked this work amidst many estates and enjoyed the contacts with the Sultan and the authorities. He hoped to be able to develop his career in the Indies, where he felt at home.

He hesitated therefore to accept a nomination as the first chief of the newly established Geological Department of the 'Bataafsche Petroleum Maatschappij' (B.P.M.) in The Hague in 1930. Thus, Schürmann was entrusted with the direction of the exploration effort of the Royal Dutch-Shell Group as a whole. During twenty years he filled this position in which his knowledge and his personality showed to full advantage. He practised a paternal authority in his department following a well considered policy which was not always appreciated by his staff. Some were in a way apprehensive of him. He remained always honest, straightforward, consequent and had a good sense of humor. A strict rectilinear behaviour was more natural to him than flexibility. He was able to delegate a great deal to his collaborators. Schürmann was a faithful and trusted assistant and advisor of his superiors, who consulted him regularly. His excellent personal contacts with the directors, both in London and The Hague, determined to a high degree his influence on the Group's exploration policy. His simply worded, clear advise was usually gladly accepted. Doc could convince with a few words, where others perhaps would have failed with detailed and lengthy argument.

During the second world war Schürmann found himself again in a difficult situation. He had obtained the Netherlands nationality in 1924, but his German background was apparent to everybody with whom he got into contact. Nevertheless he felt it his duty, under the prevailing circumstances, to protect not only 'his own' people against deportation and forced labour by his former compatriots. Together with L.U. de Sitter – and on the latter's instigation – he was able to

get the cooperation of B.P.M., the Limburg collieries and the State Commission for Geodesy for starting a renewed geological and geophysical survey of The Netherlands, so that students and finished geologists and mining engineers present in this country, who were cut off from their field of activity abroad, could be put to work and kept busy. He went through thick and thin to shield any activity by or within the BPM's organisation entrusted to him against the occupying power. He knew that by doing so he covered unseemingly a considerable amount of illegal activity.

After the war was over he was suspected of collaboration with the enemy and placed under arrest during 4½ months. He must have understood that his indispensable contacts with the German authorities might throw suspicion of collaboration upon him. He was exonerated. In spite of this degrading treatment, he never showed a grudge against those who brought about his arrest. This testifies to a rare greatness of character.

The significance of Schürmann in connection with the development of the Group's exploration from a highly individual effort to a collective and multidisciplinary activity has been mentioned already.

In 1949 Schürmann lost his wife and in 1951 he was pensioned off from the Group's service. However, Doc remained active as a consulting geologist, a.o. for Burmah Oil Cy., ECAFE, the Netherlands government, the United Nations and above all as president from 1956 to 1964 of the 'Exploration Advisory Committee' of the Consortium of oil companies responsible for the exploration and production of the Iranian oil.

The industrial career described so far would appear to be a satisfying accomplishment for a man's life. Next to his industrial activity Schürmann remained not only interested in geological sciences, he found also opportunity to carry on with scientific work, as follows from the list of his publications. The mainstay consists of petrological subjects, igneous rocks of Egypt, but also from elsewhere in the world. He was also specially interested in rocks containing glaucophane. Later in his life the Precambrian basement as a whole, and in particular in North Africa, attracted his attention. He needed reliable age determinations in connection with this study and promoted actively the establishment of the 'Stichting voor Isotopen Geologisch Onderzoek' and the Isotopic Geological Laboratory of the Foundation of Pure Scientific Research (Z.W.O.) in Amsterdam. Till the end of his life Doc kept himself busy with his collections, which consisted, apart from the rocks he had studied, of archaeological objects and old coins. He established in 1949 a foundation to accommodate his many collections.

Schürmann's organizing ability extended beyond the Royal Dutch-Shell Group. His pushing power as president of the Royal Geological and Mining Society of The Netherlands from 1946 to 1956 brought this society back to prosperity after the war. For this reason he was, while still active as president in 1950, bestowed with an honorary membership.

His many excellent contacts abroad put him in a position to promote successfully a strong international association of the geologists in the world. The fact that he happened to be from 1953-1960 president of the Netherlands Contact Committee for the International Geological Congresses provided him with an excellent opportunity to achieve this end. The foundation of the International Union of Geological Sciences in 1962 was also a result of his efforts. From 1953 to 1972 he was, together with J. Cuvillier, editor of the 'International sedimentary petrographical series', a series of books published by E. J. Brill in Leiden. Fifteen volumes saw the light during his time. Between 1956 and 1960 he was president of the International Abstracting Service and from 1959 to 1966 a member of the board of the Foundation Geological Investigation Netherlands New Guinea. He was at the same time president of its Executive Committee.

Schürmann's activities and his accomplishments were widely and publicly recognized. His honorary membership of the Royal Geological and Mining Society of The Netherlands in 1950 has been mentioned already.

Her Majesty Queen Juliana of The Netherlands nominated him in 1954 as Officer in the Order of Oranje-Nassau and in 1971 as Knight in The Order of the Netherlands Lion.

The Rhenisch Friedrich Wilhelm University of Bonn honoured him on the occasion of his golden doctorate in 1963.

The Royal Geological and Mining Society of The Netherlands accorded him the Van Waterschoot van der Gracht medal in 1972 as stimulator, coördinator and organizer of new trends of research.

Doc Schürmann passed away peacefully at his home next to his collections on June 13th, 1979.

Reviewing this active life, one recognizes Schürmann as an enlightened spirit, grown up at a time when the ability to exercise authority was still appreciated and a time during which his particular abilities could reach full maturity. Due to his zest for work, strength of character and loyalty he was always able to contribute to high level decisions, wherever he occupied himself, in his oil company or in the outside world.

He remained until the end of his life the interested investigator that he had already become at school, working and writing in his study on subjects often connected with his collections.

He will be remembered by his friends as a personality in the grand manner.

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