

**UPPER CRETACEOUS AND DINANTIAN GEOLOGY AND HYDROGEOLOGY
OF THE THERMAE BOREHOLES OF VALKENBURG AAN DE GEUL
(SOUTH-LIMBURG, THE NETHERLANDS)**

(with 42 figures, 13 tables and 17 plates)

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PREFACE

The Euregio Meuse-Rhine is formed by the provinces of Liège and Limburg in Belgium, the southern part of the province of Limburg in The Netherlands, and the Regio Aachen in the Federal Republic of Germany. Within this region several institutes and organisations are active in the richly variegated field of Earth Sciences. Although their specialists live and work within a relatively small area, they are separated by political, linguistic and cultural frontiers. Therefore it might be considered as a high risk project to combine their knowledge and experience in an attempt to achieve common goals.

However, multidisciplinary and multinational cooperation may be profitable for all participants. In the recent past this has been proved in Euregional meetings like the DIK-Congres of September 28th, 1983, where politicians, geologists and engineers of from these three countries (the Netherlands, Belgium and Federal Republic of Germany) discussed the reevaluation of mineral and energy resources in this area (tijdschrift TH Aken, speciale uitgave 1986, ISSN 0168-9355). This has also been shown by joint investigations by Belgian, Dutch and German geologists during the past decade, which contributed to rapidly increasing knowledge of the subsurface in the Euregio Meuse-Rhine, and which markedly enriched our understanding of common problems.

The present volume is another example of what may be achieved in a very short time if we cross all these barriers. In this case specialists from the following laboratories and institutions have joined their efforts : Natuurhistorisch Museum Maastricht and Geologisch Bureau Heerlen in the Netherlands ; Rheinisch-Westfälische Technische Hochschule Aachen, Institut Fresenius Taunusstein, Büro Dr. Th. Leichtle Aachen and Bodensee-Naturmuseum Konstanz in the Federal Republic of Germany ; and Université Catholique de Louvain and Université d'Etat de Liège in Belgium.

This cooperation is not unique nor is it the first one in the genre. Earlier successful joint investigations have been performed on the Devonian-Carboniferous boundary in the Omolon area of Northeast Siberia (Soviet Union) and in the Belgian Ardenne by Soviet, Belgian and Dutch geologists (a cooperation between the Academia NAUK USSR and the Belgian Geological Survey), in a joint gravity and magnetic survey in the area Liège-Aachen-Sittard-Hasselt by a team of Belgian, Dutch and German specialists, and on the mineral water boreholes of Maastricht (also by a team of Belgian, Dutch and German specialists).

I am sure that it will not be the last project in this region. In this context I may recall that in the very near future (August 1987) a deep reflection seismic survey will be carried out in the western part of the Rheinisches Schiefergebirge and finish for the moment in eastern Belgium. This seismic survey will investigate the front of the Variscan thrust belt with its shallow thrusts in the upper crust and the thus far unknown root zone. Maybe this is another opportunity for a joint exploration by German, Belgian and Dutch geologists in the Euregio Meuse-Rhine, that might reveal the nature of the pronounced gravity and magnetic anomalies and the eastern extension of the « Faille Bordière » in the Maastricht-Liège-Aachen triangle.

I wish to congratulate the international team which so enthusiastically and skilfully realized his work on the Thermae boreholes in Valkenburg a/d Geul. And I express the sincere hope that they may repeat this cooperation in future.

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