Preface

The present issue is the result of a project born in 1984 within the Belgian Geological contact-group "Géologie des Sédiments Tertiaires Belges — Geologie van de Tertiaire Afzettingen in België (G.S.T.B.-G.T.A.B.)", which is sponsored by the National Fund for Scientific Research, Belgium. The aim of the project was to provide an updated and well documented synthesis on the Ypresian stratotype, not merely based on palaeontological criteria as in previous attempts, but also including a wide range of non-biostratigraphic aspects.

This volume is dedicated to our friend and colleague Willy WILLEMS who provided, until his early death in 1984, the impetus for the re-evaluation of the Ypresian stratotype and the accomplishment of the project. Shortly after the completion of his first synthesis on the Ypresian stratotype (WILLEMS, BIGNOT & MOORKENS, 1981), WILLEMS already intended to compile a new and revised version, as he was aware of some shortcomings in the published one. Unfortunately, his manuscript remained unfinished. Thierry MOORKENS, with the help of Etienne STEURBAUT and Jan DE CONINCK, has now completed this text for the present issue.

Meanwhile, the Ypresian stratotype was re-investigated by various others, using different new methodologies. Some of these investigations succeeded in clarifying and extending the knowledge of the Ypresian in its type-area. The study of the calcarous nannofossils by Etienne STEURBAUT, with the help of Dirk NOLF for the field-work (STEURBAUT & NOLF, 1986) led to some remarkable results, among which, those refuting the traditionally accepted correlations of the Ypresian deposits in the Belgian Basin. These revisions and corrections, and several other aspects on Ypresian stratigraphy have been presented and commented on by the contributors to the present issue at a special meeting of the G.S.T.B.-G.T.A.B. contact-group in Brussels on 21 May 1987. The results of this meeting have been worked out in detail and are presented in this volume. It is evident that a lot of progress has been made since WILLEMS' last compilation-work, especially in the non-palaeontological field, including off-shore seismics, wireline logging of wells and sedimentological, petrographical and mineralogical analyses. The results from these investigations seem to be in agreement with the biostratigraphical data, which have also been markedly refined. Nevertheless, it has to be said that WILLEMS' work remains of great importance, being based on well-chosen and well interpretable sections, including the Kallo borehole, on which the biostratigraphical framework of the Belgian Ypresian was established.

This volume succeeds in providing a new picture of the Ypresian stratotype because of its multifaceted approach, in which the indications of "event stratigraphy" become increasingly visible. Much additional detailed work remains to be carried out, especially on geochemistry and palaeomagnetism. Some of these aspects appear to be promising fields of investigation, and certainly will guide the choice of further studies, which we hope to carry out in the future.

The Editors, January 1988.