

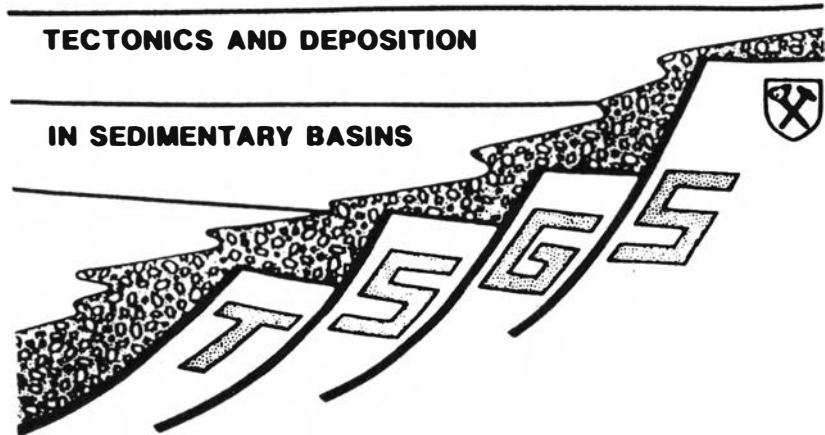
Special Issue

Proceedings of the 4th TSGS Conference
held in Stavanger, Norway, November 26th – 28th, 1986

TECTONICS AND DEPOSITION IN SEDIMENTARY BASINS

Edited by

A.G. KOESTLER & S. OLAUSSEN



PROCEEDINGS OF THE 4TH TSGS CONFERENCE
HELD IN STAVANGER, NOVEMBER 26TH-28TH, 1986

TECTONICS AND DEPOSITION IN SEDIMENTARY BASINS

EDITORS

A. G. KOESTLER & S. OLAUSSEN

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Editor's Note

The current issue of NGT comprises a series of contributions presented at the 4th annual meeting of the Tectonics and Structural Geology Studies Group (TSGS). This sectional meeting of the Geological Society of Norway (NGF) was held in Stavanger, November 26th–28th, 1986, and the proceedings are being published for the first time in NGT, which in itself represents something of a milestone.

The editors of our special issue, Andreas Koestler (Geo-Recon A/S, Oslo) and Snorre Olaussen (Statoil, Stavanger), have done a remarkable job in putting this proceedings volume together. The advantages of having pro-

ceedings in a regular journal which is cited in the main scientific bibliographical retrieval systems throughout the world, are many and obvious. A most important advantage is the immediate global distribution and the more lasting value of the published material compared with publication in a one-off volume from a small publishing house.

The volume has been made possible by the allocation of 84 regular pages from NGT's annual budget along with an external grant from NOPEC A/S covering printing expenses for the additional pages.

Ola M. Sæther

Preface

The 4th annual meeting of the Tectonics and Structural Geology Studies Group (TSGS) of the Geological Society of Norway (NGF) was held in Stavanger from November 26th to 28th, 1986. The meeting topic was 'Tectonics and Deposition in Sedimentary Basins'.

The aim of the TSGS is to organize annual meetings on different topics in the fields of tectonics and structural geology and to bring together people from academic and industrial institutions for information exchange and discussion. The fourth meeting brought geologists together on a topic which is of considerable importance to academic research and with regard to industrial application. Over 200 participants from several different countries were present.

The current volume contains twelve of the contributions presented at the meeting and gives an overview of the large range of themes relating to the interaction of basin tectonics and sedimentation. Some general aspects of extensional tectonics and the structural architecture of sedimentary basins are contained in the first part of the issue (Galloway, Sclater & C  l  rier, White). Regional analyses of the North Atlantic–Arctic region (Larsen, Norton, McClay & Way) and the Norwegian continental shelf (Brekke & Riis)

show the location and geologic history of numerous sedimentary basins and discuss the close interrelationship of tectonics and sedimentation in a regional tectonic framework. Several papers are presented taking different areas as examples to illustrate the control of tectonic activity on the characteristics of sediment deposition. For example, basin development during the Mesozoic and Cenozoic time has been addressed, with examples from the northern Viking Graben (Giltner), the Moray Firth basin (Bird) and offshore West Spitsbergen (Eiken & Austegard). Small-scale deformation features and their structural implications are studied using an example from the Troll Field (Gabrielsen & Koestler). In the final section of the volume, some examples of sedimentary basins developed during Precambrian–Palaeozoic times are presented. These are illustrated for the Hedmark Basin by Nystuen and for the S. Wales Basin by James.

Abstracts of papers given at the conference but not submitted for publication in this issue are to be found in a section at the end.

The following speakers were specially invited by the TSGS conference committee: Prof. J. Crowell (University of California at Santa Barbara) spoke on 'Tectonic controls of thick

sedimentation'; Prof. W. E. Galloway (University of Texas at Austin) on 'Depositional and structural architecture of prograding continental margins'; Dr. J. P. Nystuen (Norges Landbrukshøyskole, Ås) on 'Relation between sedimentation and tectonics in the "Sparagmite Basin" of southern Norway'; Prof. J. G. Sclater (University of Texas at Austin) on 'Extensional models for formation of sedimentary basins'; Dr. D. Worsley (Saga Petroleum a.s., Høvik) on 'The lithostratigraphic scheme for Tromsøflaket in a regional structural framework'.

The conference committee consisted of H. Brekke, B. Johansen, A. G. Koestler, S. Olausen, F. Riis, and J. Slørdal and was chaired by R. H. Gabrielsen. A. Lunde and O. M. Saether were associated members.

The conference was sponsored by NOPEC A/S (Norwegian Exploration Consultants) and their financial contribution, without which this proceedings volume could not have been published, is gratefully acknowledged. Thanks are also extended to the members of the editorial staff of NGT in allocating a regular issue to this purpose and for generously using their time and expertise to make this volume possible. The editors thank all the reviewers who worked so diligently to improve the manuscripts for publication. The reviewers are listed below in alphabetical order:

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