

1. Record Nr.	UNINA9910132193103321
Titolo	From depositional systems to sedimentary successions on the Norwegian continental shelf // edited by A. W. Martinius [and four others]
Pubbl/distr/stampa	Chichester, England : , : Wiley-Blackwell, , 2014 ©2014
ISBN	1-118-92045-7 1-118-92043-0 1-118-92044-9
Descrizione fisica	1 online resource (712 p.)
Collana	International Association of Sedimentologists ; ; Number 46
Disciplina	552/.509481
Soggetti	Sedimentary structures - Norway Sedimentology - Norway Continental shelf - Norway Geology, Stratigraphic - Eocene Geology, Stratigraphic - Paleocene Petroleum - Geology - Norway
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	From Depositional Systems to Sedimentary Successions on the Norwegian Continental MARGIN; Copyright; Contents; Preface; Dedication to John Gjelberg, Michael Talbot and Trevor Elliott; Chapter 1 Generic autogenic behaviour in fluvial systems: lessons from experimental studies; INTRODUCTION; AUTOGENIC PROCESSES; Steep-gradient alluvial fan; Moderate-gradient braided stream systems; Low-gradient rivers; FREQUENCY OF AUTOGENIC PROCESSES; ALLOGENIC CONTROLS ON GENERIC AUTOGENIC BEHAVIOUR; Aggradation rate; Sea-level; Climate; Tectonics; DISCUSSION; IMPLICATIONS Reconstructions of generic avulsion behaviour Steep-gradient and moderately-gradient systems; Low-gradient river systems; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; Chapter 2 Climatic and tectonic controls on Triassic dryland terminal fluvial system

architecture, central North Sea; INTRODUCTION; Central North Sea stratigraphic framework; Regional tectonic setting; DEPOSITIONAL SETTING; Early to early Middle Triassic facies associations; Middle to Late Triassic facies associations; Terminal character of the Triassic fluvial systems; TECTONIC CONTROLS ON FACIES ARCHITECTURE Extensional basin architecturePods and interpods - deposition versus preservation; CLIMATIC CONTROLS; An arid rift interior; Skagerrak Formation fluvial expansion during pluvial phases; Fluvial expansion driven by catchment wettening; Sediment yield; Base level; DISCUSSION; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; Chapter 3 Late Triassic to Early Jurassic climatic change, northern North Sea region: impact on alluvial architecture, palaeosols and clay mineralogy; INTRODUCTION; GEOLOGICAL FRAMEWORK; Stratigraphy and lithology; Basin configuration and structural framework Subdivision of the Lunde Formation and the Staffjord GroupMaterial and methods; Sedimentary facies and alluvial architecture; Palaeosols and mudrock facies; Clay mineralogy and iron oxides; Vertical trends and regional correlation; DISCUSSION; Climate as a controlling factor on sedimentary trends; Tectonics and eustasy versus climate as cause of change in depositional trends; Cause and wider regional aspects of the Triassic-Jurassic climate change; Impact on alluvial architecture and consequences for hydrocarbon exploration; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES Chapter 4 Applying accommodation versus sediment supply ratio concepts to stratigraphic analysis and zonation of a fluvial reservoirINTRODUCTION; AIMS; ACCOMMODATION TO SEDIMENT SUPPLY RATIO: SIGNIFICANCE, RECOGNITION AND TRENDS; Allocyclic and autocyclic control; Fluvial base level; A/S change and recognition criteria; Trends in A/S change; Long-term A/S change versus short-term autogenic processes; APPLICATION TO THE STATFJORD GROUP; General setting and characteristics; Correlation and zonation challenges; Stratigraphic analysis; Reservoir zonation improvements; CONCLUSIONS ACKNOWLEDGEMENTS

---

## Sommario/riassunto

The Norwegian Continental Shelf (NCS), focus of this special publication, is a prolific hydrocarbon region and both exploration and production activity remains high to this day with a positive production outlook. A key element today and in the future is to couple technological developments to improving our understanding of specific geological situations. The theme of the publication reflects the immense efforts made by all industry operators and their academic partners on the NCS to understand in detail the structural setting, sedimentology and stratigraphy of the hydrocarbon bearing units and

---