## Contents

Acknowledgements ix  
Preface x  
ROBERTSON, A. H. F., SEARLE, M. P. & RIES, A. C. Introduction xi  

### Evolution of the Oman Tethyan Continental Margin

ROBERTSON, A. H. F. & SEARLE, M. P. The northern Oman Tethyan continental margin: stratigraphy, structure, concepts and controversies 3  
BLENDINGER, W., VAN VLIET, A. & HUGHES CLARKE, M. W. Updoming, rifting and continental margin development during the Late Palaeozoic in northern Oman 27  
LEE, C. W. A review of platform sedimentation in the Early and Late Permian of Oman, with particular reference to the Oman Mountains 39  
RABU, D., LE METOUR, J., BECHENNEC, F., BEURRIER, M., VILLEY, M. & BOURDILLON-DE-GRISSAC, CH. Sedimentary aspects of the Eo-Alpine cycle on the northeast edge of the Arabian Platform (Oman Mountains) 49  
PRATT, B. R. & SMEWING, J. D. Jurassic and Early Cretaceous platform margin configuration and evolution, central Oman Mountains 69  
SCOTT, R. W. Chronostratigraphy of the Cretaceous carbonate shelf, southeastern Arabia 89  
WAGNER, P. D. Geochemical stratigraphy and porosity controls in Cretaceous carbonates near the Oman Mountains 127  
WATTS, K. F. Mesozoic carbonate slope facies marking the Arabian platform margin in Oman: depositional history, morphology and palaeogeography 139  
COOPER, D. J. W. Sedimentary evolution and palaeogeographical reconstruction of the Mesozoic continental rise in Oman: evidence from the Hamrat Duru Group 161  
BERNOULLI, D., WESSERT, H. & BLOME, C. D. Evolution of the Triassic Hawasina Basin, Central Oman Mountains 189  
TOZER, E. T. & CALON, T. J. Triassic ammonoids from Jabal Safra and Wadi Alwa, Oman, and their significance 203  
DE WEVER, P., BOURDILLON-DE-GRISSAC, CH. & BECHENNEC, F. Permian to Cretaceous radiolarian biostratigraphic data from the Hawasina Complex, Oman Mountains 225  
KICKMAIER, W. & PETERS, Tj. Manganese occurrences in the Al Hammah Range — Wahrah Formation, Oman Mountains 239  
MANN, A. & HANNA, S. S. The tectonic evolution of pre-Permian rocks, Central and Southeastern Oman Mountains 307

HANNA, S. S. The Alpine deformation of the Central Oman Mountains 341


DUNNE, L. A., MANOOGIAN, P. R. & PIERINI, D. F. Structural style and domains of the Northern Oman Mountains (Oman and United Arab Emirates) 375

MICHAELIS, P. L. & PAUKEN, R. J. Seismic interpretation of the structure and stratigraphy of the Strait of Hormuz 387

BOOTE, D. R. D., MOU, D. & WAITE, R. I. Structural evolution of the Suneinah Foreland, Central Oman Mountains 397

WARBURTON, J., BURNHILL, T. J., GRAHAM, R. H. & ISAAC, K. P. The evolution of the Oman Mountains Foreland Basin 419

CAWOOD, P. A., GREEN, F. K. & CALON, T. J. Origin of culminations within the Southeast Oman Mountains at Jebel Ma Jhool and Ibra Dome 429

COFFIELD, D. Q. Structures associated with nappe emplacement and culmination collapse in the Central Oman Mountains 447

SHELTON, A. W. The interpretation of gravity data in Oman: constraints on the ophiolite emplacement mechanism 459

EL-SHAZLY, A. K. & COLEMAN, R. G. Metamorphism in the Oman Mountains in relation to the Semail ophiolite emplacement 473

NOLAN, S. C., SKELTON, P. W., CLISSOLD, B. P. & SMEWING, J. D. Maastrichtian to early Tertiary stratigraphy and palaeogeography of the Central and Northern Oman Mountains 495

SKELTON, P. W., NOLAN, S. C. & SCOTT, R. W. The Maastrichtian transgression onto the northwestern flank of the Proto-Oman Mountains: sequences of rudist-bearing beach to open shelf facies 521


MAIZELS, J. & McBEAN, C. Cenozoic alluvial fan systems of interior Oman: palaeoenvironmental reconstruction based on discrimination of palaeochannels using remotely sensed data 565

Geology and Tectonics of South Oman

GASS, I. G., RIES, A. C., SHACKLETON, R. M. & SMEWING, J. D. Tectonics, geochronology and geochemistry of the Precambrian rocks of Oman 585

WRIGHT, V. P., RIES, A. C. & MUNN, S. G. Intraplatformal basin-fill deposits from the Infracambrian Huqf Group, east Central Oman 601

MATTES, B. W. & CONWAY MORRIS, S. Carbonate/evaporite deposition in the Late Precambrian–Early Cambrian Ara Formation of Southern Oman 617

HEWARD, A. P. Salt removal and sedimentation in Southern Oman 637

RIES, A. C. & SHACKLETON, R. M. Strictures in the Huqf–Haushi Uplift, east Central Oman 653

MOSELEY, F. The structure of Masirah Island, Oman 665

SHACKLETON, R. M., RIES, A. C., BIRD, P. R., FIBRANTDT, J. B., LEE, C. W., & CUNNINGHAM, G. C. The Batain Melange of NE Oman 673
CONTENTS

FILBRANDT, J. B., NOLAN, S. C. & RIES, A. C. Late Cretaceous and early Tertiary evolution of Jebel Ja’ alan and adjacent areas, NE Oman 697

SHACKLETON, R. M. & RIES, A. C. Tectonics of the Masirah Fault Zone and eastern Oman 715

MOUNTAIN, G. S. & PRELL, W. L. A multiphase plate tectonic history of the southeast continental margin of Oman 725

PRELL, W. L. and the shipboard scientific party of ODP Leg 117. Neogene tectonics and sedimentation of the SE Oman continental margin: results from ODP Leg 117 745

SHIMMIELD, G. B., PRICE, N. B. & PEDERSON, T. F. The influence of hydrography, bathymetry and productivity on sediment type and composition on the Oman Margin and in the Northwest Arabian Sea. 759

Regional Tectonic Setting


STONELEY, R. The Arabian continental margin in Iran during the Late Cretaceous 787

SENGOR, A. M. C. A new model for the late Palaeozoic–Mesozoic tectonic evolution of Iran and implications for Oman 797

Index 835