## Contents

Preface vii

**Martini, I. P., French, H. M. & Alberti, A. P.** Ice-marginal and periglacial processes and sediments: an introduction 1

**Ingólfsson, Ö.** Fingerprints of Quaternary glaciations on Svalbard 15

**Lønne, I. & Nemec, W.** Modes of sediment delivery to the grounding line of a fast-flowing tidewater glacier: implications for ice-margin conditions and glacier dynamics 33

**Lønne, I. & Nemec, W.** The kinematics of ancient tidewater ice margins: criteria for recognition from grounding-line moraines 57

**Lukas, S. & Sass, O.** The formation of Alpine lateral moraines inferred from sedimentology and radar reflection patterns: a case study from Gornergletscher, Switzerland 77

**Pérez Alberti, A., Diaz, M. V., Martini, I. P., Pasucci, V. & Andreucci, S.** Upper Pleistocene glacial valley-junction sediments at Pias, Trevinca Mountains, NW Spain 93

**Carling, P. A., Knapen, M., Borodavko, P., Herget, J., Koptev, I., Huggenberger, P. & Parnachev, S.** Palaeoshorelines of glacial Lake Kuray–Chuja, south-central Siberia: form, sediments and process 111

**Keller, M., Hinderer, M., Al-Aimi, H. & Rausch, R.** Palaeozoic glacial depositional environments of SW Saudi Arabia: process and product 129

**French, H.** Frozen sediments and previously-frozen sediments 153

**Levy, J. S., Head, J. W. & Marchant, D. R.** Gullies, polygons and mantles in Martian permafrost environments: cold desert landforms and sedimentary processes during recent Martian geological history 167

**Thorn, C. E., Darmody, R. G. & Dixon, J. C.** Rethinking weathering and pedogenesis in alpine periglacial regions: some Scandinavian evidence 183

**Guglielmin, M., Favero-Longo, S. E., Cannone, N., Piervittori, R. & Strini, A.** Role of lichens in granite weathering in cold and arid environments of continental Antarctic 195

**Vandenberghhe, J.** Periglacial sediments: do they exist? 205

**Van Steijn, H.** Stratified slope deposits: periglacial and other processes involved 213

**Oliva, M. & Ortiz, A. G.** Holocene slope dynamics in Sierra Nevada (south Spain). Sedimentological analysis of solifluction landforms and lake deposits 227

**Brookfield, M. E.** Aeolian processes and features in cool climates 241

**Newell, W. L. & Dejong, B. D.** Cold-climate slope deposits and landscape modifications of the Mid-Atlantic Coastal Plain, Eastern USA 259

Index 277