

Contents

Preface	vii
Chapter 1 KHIN ZAW, WIN SWE, BARBER, A. J., CROW, M. J. & YIN YIN NWE. Introduction to the geology of Myanmar	1
Chapter 2 SLOAN, R. A., ELLIOTT, J. R., SEARLE, M. P. & MORLEY, C. K. Active tectonics of Myanmar and the Andaman Sea	19
Chapter 3 RANGIN, C. Active and recent tectonics of the Burma Platelet in Myanmar	53
Chapter 4 KYI KHIN, KHIN ZAW & LIN THU AUNG. Geological and tectonic evolution of the Indo-Myanmar Ranges (IMR) in the Myanmar region	65
Chapter 5 KYI KHIN, SAKAI, T. & KHIN ZAW. Arakan Coastal Ranges in western Myanmar, geology and provenance of Neogene siliciclastic sequences: implications for the tectonic evolution of the Himalaya–Bengal System	81
Chapter 6 HLA HTAY, KHIN ZAW & THAN THAN OO. The mafic–ultramafic (ophiolitic) rocks of Myanmar	117
Chapter 7 NAING MAW THAN, KYI KHIN & MYINT THEIN. Cretaceous geology of Myanmar and Cenozoic geology in the Central Myanmar Basin	143
Chapter 8 MYINT THEIN & MAUNG MAUNG. The Eastern (Back-arc) Basin of Central Myanmar: Basement rocks, lithostratigraphic units, palaeocurrents, provenance and developmental history	169
Chapter 9 ZIN-MAUNG-MAUNG-THEIN, THAUNG-HTIKE, AUNG NAING SOE, CHIT SEIN, MAUNG-MAUNG & MASANARU TAKAI. Review of the investigation of primate fossils in Myanmar	185
Chapter 10 WIN MAW. Historical review of the contribution of geophysics to petroleum discoveries in the Tertiary basins of Myanmar	207
Chapter 11 THAN HTUT. Myanmar petroleum systems, including the offshore area	219
Chapter 12 SEARLE, M. P., MORLEY, C. K., WATERS, D. J., GARDINER, N. J., KYI HTUN, U., THAN THAN NU & ROBB, L. J. Tectonic and metamorphic evolution of the Mogok Metamorphic and Jade Mines belts and ophiolitic terranes of Burma (Myanmar)	261
Chapter 13 THET TIN NYUNT, HANS-JOACHIM MASSONNE & TAY THYE SUN. Jadeitite and other high-pressure metamorphic rocks from the Jade Mines Belt, Tawmaw area, Kachin State, northern Myanmar	295
Chapter 14 AYE KO AUNG & L. ROBIN M. COCKS, Cambrian–Devonian stratigraphy of the Shan Plateau, Myanmar (Burma)	317
Chapter 15 ZAW WIN, KYI KYI SHWE & OHNMAR SOE YIN. Sedimentary facies and biotic associations in the Permian–Triassic limestones on the Shan Plateau, Myanmar	343
Chapter 16 RIDD, M. F. Karen–Tenasserim Unit	365
Chapter 17 AUNG ZAW MYINT, KHIN ZAW, YE MYINT SWE, KOTARO YONEZU, YUE CAI, TAKAYUKI MANAKA & KOICHIRO WATANABE. Geochemistry and geochronology of granites hosting the Mawchi Sn–W deposit, Myanmar: implications for tectonic setting and emplacement	385
Chapter 18 MI PAIK. Geochemistry and geochronology of granitoid rocks in the Mawpalaw Taung area, Thanbyuzayat Township, southern Myanmar: their petrogenesis and tectonic setting	401
Chapter 19 SOE THURA TUN & WATKINSON, I. M. The Sagaing Fault, Myanmar	413
Chapter 20 MYINT THEIN. Current tectonic activity along the Sagaing Fault, Myanmar indicated by alluvial fans	443
Chapter 21 SOE MIN, WATKINSON, I. M., SOE THURA TUN, WIN NAING & TIN LWIN SWE. The Kyaukkyan Fault, Myanmar	453
Chapter 22 MYINT SOE, ISAO TAKASHIMA, KHIN ZAW & YE MYINT SWE. Remote sensing and GIS studies of alteration and predictive mineral exploration in the Central Volcanic Arc, Myanmar	473
Chapter 23 KYAW THU & KHIN ZAW. Gem deposits of Myanmar	497
Chapter 24 KHIN ZAW. Overview of mineralization styles and tectonic–metallogenic setting in Myanmar	531
Chapter 25 YE MYINT SWE, CHO CHO AYE & KHIN ZAW. Gold deposits of Myanmar	557

Chapter 26	KHIN ZAW, YE MYINT SWE, TIN AUNG MYINT & KNIGHT, J. Copper deposits of Myanmar	573
Chapter 27	THAN HTUN, AUNG KYIN & KHIN ZAW. Lead–zinc–silver deposits of Myanmar	589
Chapter 28	THAN HTUN, THAN HTAY & KHIN ZAW. Tin–tungsten deposits of Myanmar	625
Chapter 29	TOE AUNG KYAW. Antimony deposits of Myanmar	649
Chapter 30	GARDINER, N. J., ROBB, L. J., SEARLE, M. P., KYI HTUN & KHIN ZAW. The Bawdwin Mine, Myanmar: a review of its geological setting and genesis	669
Chapter 31	BARBER, A. J., KHIN ZAW & CROW, M. J. The pre-Cenozoic tectonic evolution of Myanmar	687
Appendix	CROW, M. J. & KHIN ZAW. Geochronology in Myanmar (1964–2017)	713
	Index	761
	Foldout map: Geological map of Myanmar	