

Table of Contents

Preface	iii
L.J. Cabri	
Sample Preparation and Bulk Analytical Methods for PGE	1
E.L. Hoffman and B. Dunn	
The Platinum-Group Minerals	13
L.J. Cabri	
Ternary and Quaternary Phase Systems with PGE	131
E. Makovicky	
Platinum-Group Element Geochemistry of Mafic and Ultramafic Rocks	177
J.H. Crocket	
The Aqueous Geochemistry of the Platinum-Group Elements with Applications to Ore Deposits	211
S.A. Wood	
A Review of Rhenium-Osmium Isotope Geochemistry of Platinum-Group Minerals and Platinum Mineralization	251
K.H. Hattori	
Sudbury PGE Revisited: Toward an Integrated Model	273
C.E.G. Farrow and P.C. Lightfoot	
Magmatic-Hydrothermal Cu- and Pd-rich Deposits in Gabbroic Rocks from North America	299
D.H. Watkinson, M.J. Lavigne and P.E. Fox	
Contact-type and Magnetitite Reef-type Pd-Cu Mineralization in Ferroan Olivine Gabbros of the Coldwell Complex, Ontario	321
C.T. Barrie, A.D. MacTavish, P.C. Walford, R. Chataway and R. Middaugh	
Platinum-Group Element Mineralization in Paleoproterozoic Basic Intrusions in Central and Northeastern Ontario, Canada	339
R.S. James, S. Jobin-Bevans, R.M. Easton, P. Wood, J.L. Hrominchuk, R.R. Keays and D.C. Peck	
Stratiform and Contact-type PGE-Cu-Ni Mineralization in the Fox River Sill and the Bird River Belt, Manitoba	367
D.C. Peck, R.F.J. Scoates, P. Theyer, G. Desharnais, L.J. Hulbert and M.A.E. Huminicki	
Platinum-Group Element Deposits in the Bushveld Complex, South Africa	389
R.G. Cawthorn, R.K.W. Merkle and M.J. Viljoen	

Platinum-Group Element Distributions in the Rustenberg Layered Suite of the Bushveld Complex, South Africa	431
S.-J. Barnes and W.D. Maier	
Platinum-Group Element Mineralization in the Stillwater Complex, Montana	459
M.L. Zientek, R.W. Cooper, S.R. Corson and E.P. Geraghty	
Platinum-Group Element Mineralization of the Great Dyke, Zimbabwe	483
T. Oberthür	
Platinum-Group Element Mineralization in Layered Intrusions of Northern Finland and the Kola Peninsula, Russia	507
T.T. Alapieti and J.J. Lahtinen	
The PGE Mineralization of Disseminated Sulphide Ores of the Noril'sk-Taimyr Region	547
M.Z. Komarova, S.M. Kozyrev, O.N. Simonov and V.A. Lulko	
PGE Mineralization of the Monchegorsk Layered Mafic-Ultramafic Intrusion of the Kola Peninsula	569
A.V. Dedeev, T.N. Khashkovskaya and A.S. Galkin	
Komatiite-associated Ni-Cu-(PGE) Deposits: Geology, Mineralogy, Geochemistry, and Genesis	579
C.M. Lesher and R.R. Keays	
Magmatic Ni-Cu-(PGE) Sulphide Deposits in China	619
M.-F. Zhou, Z.-X. Yang, X.-Y. Song, R.R. Keays and C.M. Lesher	
Platinum-Group Elements in the Palaeogene North Atlantic Igneous Province	637
J.C.Ø. Andersen, M.R. Power and P. Momme	
Alaskan-type Complexes and Their Platinum-Group Element Mineralization	669
Z. Johan	
Platinum-Group Minerals (PGM) in Placer Deposits	721
T.W. Weiser	
The Mineralogy and Behaviour of PGM During Processing of the Noril'sk-Talnakh PGE-Cu-Ni Ores	757
S.M. Kozyrev, M.Z. Komarova, L.N. Emelina, O.I. Oleshkevich, O.A. Yakovleva, D.V. Lyalinov and V.I. Maximov	
The Mining and Beneficiation of South African PGE Ores — An Overview	793
R.K.W. Merkle and A.D. McKenzie	
A Review of the Beneficiation and Extractive Metallurgy of the Platinum-Group Elements, Highlighting Recent Process Innovations	811
S. Cole and C.J. Ferron	
Authors' Biographies	845