

THE CANADIAN MINERALOGIST

**Journal of the
Mineralogical Association
of Canada**



Volume 13 (1975)

THE CANADIAN MINERALOGIST

Volume 13, 1975

Subject Index

PART 1

Annealing study of metamict, orthorhombic, rare earth, AB_2O_8 -type, Nb-Ta-Ti oxides	RODNEY C. EWING & ARTHUR EHLMANN	1
Textural and compositional variations in a Ni-Co-As assemblage	K. C. MISRA M. E. FLEET	8
The crystal structures of three Canadian vesuvianites	J. C. RUCKLIDGE, V. KOCMAN, S. H. WHITLOW & E. J. GABE	15
X-ray crystallography of weloganite	T. T. CHEN & G. Y. CHAO	22
Binary and ternary sulphosalt assemblages in the $Cu_2S-Ag_2S-PbS-As_2S_3-Sb_2S_3-Bi_2S_3$ system	PHILIP C. GOODELL	27
Mineralogy and geology of the Zgounder silver deposit in Morocco	WILLIAM PETRUK	43
Beryl from the granitic pegmatites at Greer Lake, southeastern Manitoba	P. ČERNÝ & A. C. TURNOCK	55
Two crystal structure refinements of a $P2/n$ titanian ferro-omphacite	L. CURTIS, J. GITTINS, V. KOCMAN, J. C. RUCKLIDGE, F. C. HAWTHORNE & R. B. FERGUSON	62
La yofortierite, un nouveau silicate hydraté de manganèse de St-Hilaire, P.Q.	GUY PERRAULT, YVES HARVEY & RAYMOND PERTSOWSKY	68
Refinement of the structure of Co_9S_8	V. RAJAMANI & C. T. PREWITT	75
A note on the potential mineralogical application of neutron radiography	J. H. CROCKET, A. A. HARMS & L. A. HARTWIG	79
Twin laws versus electrical and optical characters in low quartz	J. D. H. DONNAY & YVON LE PAGE	83
Crystal structure of a natural titanomagnetite	MAVIS Z. STOUT & PETER BAYLISS	86
Further data on lapis lazuli from Latium, Italy	D. D. HOGARTH & W. L. GRIFFIN	89
Resolution of the Mössbauer spectrum of oxykaersutite	F. C. HAWTHORNE & H. D. GRUNDY	91
Cordylite from Mont St. Hilaire, Quebec	T. T. CHEN & G. Y. CHAO	93
Reviewers for volume 12		95
Notice — Waterloo 1975		96
Membership list		97

PART 2

Concerning the construction of the optical orientation diagram of acid and intermediate plagioclases by A. S. Marfunin	JOSEF J. MACEK	105
Charge-transfer processes and the origin of colour and pleochroism of some titanium-rich vesuvianites	P. G. MANNING	110
Platinum-iron alloys: a nomenclature based on a study of natural and synthetic alloys	LOUIS J. CABRI & CLIVE E. FEATHER	117
Thermogravimetric and differential thermal analysis of malachite and azurite in inert atmospheres and in air	M. K. SEGUIN	127
Compositions of coexisting pyrrhotites, pentlandites and pyrites at Spargoville, Western Australia	A. R. RAMSDEN	133
Pyroxene megacrysts from anorthositic rocks: new clues to the sources and evolution of the parent magmas	RONALD F. EMSLIE	138
Rustenburgite and atokite, two new platinum-group minerals from the Merensky Reef, Bushveld Igneous Complex	P. MIHÁLIK, S. A. HIEMSTRA & J. P. R. DE VILLIERS	146
The development of carbonate-bearing biotite isograd assemblages from Tête Jaune Cache, British Columbia, Canada	R. H. PINSENT & D. G. W. SMITH	151
Metamorphic zones in the Snow Lake area, Manitoba	EDGAR FROESE & ELVIRA GASPARRINI	162
Crystal structures of the chalcopyrite series	S. R. HALL	168
Schorl refinement showing composition dependence of the tourmaline structure	SUZANNE FORTIER & GABRIELLE DONNAY	173

Nomenclature of the trioctahedral chlorites	PETER BAYLISS	178
Anhydrous sulphates. I: refinement of the crystal structure of celestite with an appendix on the structure of thenardite	F. C. HAWTHORNE & R. B. FERGUSON	181
The crystal structures of costibite (CoSbS) and paracostibite (CoSbS)	J. F. ROWLAND, E. J. GABE & S. R. HALL	188
A device to aid in centring a crystal on the Gandolfi camera.	E. W. NUFFIELD	197
Nickel sulphide-arsenide assemblage associated with uranium mineralization, Zimmer Lake area, northern Saskatchewan		
Amphibolites from Kuduru and Atmakuru areas, Anantapur District, Andhra Pradesh, South India	DAVID H. WATKINSON, JOHN B. HESLOP & WAYNE D. EWERT	198
Publications received	G. LAKSHMI REDDY & M. S. MURTY	205
Notice to authors		208
		208

PART 3

The crystal structure of triclinic weloganite	J. D. GRICE & G. PERRAULT	209
Stannian andradite from "Davib Ost", South West Africa		
Mineralogy and genesis of bauxites of Nagardaswadi Plateau, Kolhapur District, Maharashtra State (India)	J. R. McIVER & PETER MIHÁLIK	217
A reappraisal of the structures of the serpentine minerals	K. S. BALASUBRAMANIAM & A. I. PAROPKARI	222
Microbeam x-ray diffraction patterns of the serpentine minerals	F. J. WICKS & E. J. W. WHITTAKER	227
Optical-absorption and Mössbauer spectral studies of iron and titanium site-populations in vesuvianites	F. J. WICKS & J ZUSSMAN	244
Zoning in Os-Ir alloys and the relation of the geological and tectonic environment of the source rocks to the bulk Pt:Pt+Ir+Os ratio for placers	P. G. MANNING & M. J. TRICKER	259
Cell edges and infrared spectra of synthetic leucites and pollucites in the system $\text{KAlSi}_3\text{O}_8 - \text{RbAlSi}_3\text{O}_8 - \text{CsAlSi}_3\text{O}_8$	R. F. MARTIN & MARTINE LAGACHE	275
Electron microprobe analyses for pyrochlores from Oka, Quebec		
Mroseite, a calcium tellurite-carbonate from Moctezuma, Sonora, Mexico	W. PETRUK & D. OWENS	282
Anhydrous sulphates. II: refinement of the crystal structure of anhydrite	J. A. MANDARINO, R. S. MITCHELL & R. G. V. HANCOCK	286
The growth habits of olivine — a structural interpretation	F. C. HAWTHORNE & R. B. FERGUSON	289
Monazite from the Mount Pleasant deposit, New Brunswick	M. E. FLEET	292
Optical absorption spectrum of Ni^{2+} in garnierite — discussion	W. PETRUK & D. OWENS	298
reply	B. J. REDDY & S. V. J. LAKSHMAN	300
Proceedings of the Twentieth Annual Meeting of the Mineralogical Association of Canada	G. H. FAYE	302
Selected authors' abstracts		303
Instructions for authors		305
Publications received		315
Erratum		317
Notices		318
		319

PART 4

New data on some palladium arsenides and antimonides		
L. J. CABRI, J. H. G. LAFLAMME, J. M. STEWART, J. F. ROWLAND & T. T. CHEN	321	
Growth habits of clinopyroxene	M. E. FLEET	336
Silica-poor hastingsitic amphiboles from metasomatic alkaline gneisses at Wolfe, eastern Ontario	E. C. APPLEYARD	342
The clotty granite at Perrault Falls, Ontario, Canada	J. A. MORIN & A. C. TURNOCK	352
Mössbauer studies of the reduction spots in Welsh purple roofing slates	P. G. MANNING	358
Leucite survival: the alteration to analcime	A. K. GUPTA & W. S. FYFE	361
The St. Jean Vianney quickclay	I. J. SMALLEY, S. P. BENTLEY & C. F. MOON	364
Howlite and ulexite from the Carboniferous gypsum and anhydrite beds in western Newfoundland	V. S. PAPEZIK & C. C. K. FONG	370

Refinement of the crystal structure of cryolite	F. C. HAWTHORNE & R. B. FERGUSON	377
The crystal structure of mroseite, $\text{CaTeO}_2(\text{CO}_3)$	R. FISCHER, F. PERTLIK & J. ZEMANN	383
Phase relations in the pseudo-ternary system $\text{PbS-Cu}_2\text{S-Sb}_2\text{S}_3$ and the synthesis of meneghinite	S. N. HODA & L. L. Y. CHANG	388
Benjaminite — a re-examination of the type material	E. W. NUFFIELD	394
Benjaminite, reinstated as a valid species	D. C. HARRIS & T. T. CHEN	402
Studies of type pavonite material	D. C. HARRIS & T. T. CHEN	408
Gustavite: two Canadian occurrences	D. C. HARRIS & T. T. CHEN	411
The composition of the lead sulphantimonide, robinsonite	J. L. JAMBOR & A. G. PLANT	415
New data on wakabayashilite	J. D. SCOTT & W. NOWACKI	418
Index for Volume 13		420