

THE CANADIAN MINERALOGIST

Volume 20, Index

Author Index

- ANSELL, H.G. with Szymański, J.T., 65
 ARMBRUSTER, T. with BLOSS, F.D., 55
 AYRES, L.D. and Černý, P. Metallogeny of granitoid rocks in the Canadian Shield, 439
 BAILEY, S.W. with Guggenheim, S., 1, 579
 BAKER, J. with Chao, G.Y., 77
 BIRKETT, T.C. with Trzcieski, W.E. Jr., 203
 BLOSS, F.D. and Armbruster, T. Gladstone-Dale constants for H₂O and CO₂ in cordierite, 55
 BONÁRDI, M. with Duke, J.M., 49
 BROWN, M.A. with Page, N.J., 537
 BURKE, E.A.J. with Zakrzewski, M.A., 281
 CASSEDDANNE, J.O. with Cassedanne, J.P., 87
 CASSEDDANNE, J.P. and Cassedanne, J.O. Présence de legrandite dans une pegmatite de Minas Gerais, Brésil, 87
 ČERNÝ, P. with Ayres, L.O., 439
 CHAGNON, H. with Islam, S., 155
 CHAO, G.Y. and Baker, J. Norstrandite from Mont St-Hilaire, Quebec, 77
 with Szymański, J.T., 65
 CHEN, T.T. and Szymański, J.T. A comparison of galkhaite from Nevada and from the type locality, Khaydarkan, Kirgizia, U.S.S.R., 575
 CHERNOSKY, J.V., Jr. The stability of clinochrysolite, 19
 CHIKHAOU, S. and Lévy, C. Expression quantitative de la couleur dans la série tennantite-tétraédrite-influence des substitutions, 101
 CORLETT, M.I. Memorial to Leonard G. Berry, 615
 CRAWFORD, M.L. and Mark, L.E. Evidence from metamorphic rocks for overthrusting, Pennsylvania Piedmont, U.S.A., 333
 DELIENS, M. and Piret, P. Bijvoetite et lepersonnite, carbonates hydratés d'uranyle et de terres rares de Shinkolobwe, Zaïre, 231
 DUKE, J.M. and Bonardi, M. Chromian andradite from Réaume township, Ontario, 49
 EGGLETON, R.A. with Guggenheim, S., 1
 ELMORE, D. with Rucklidge, J.C., 111
 FARROW, R.A. with Odum, J.K., 91
 FEININGER, T. Glaucophane schist in the Andes at Jambalo, Colombia, 41
 FILIPPIDIS, A. Experimental study of the serpentinization of Mg-Fe-Ni olivine in the presence of sulfur, 567
 FOSCOLOS, A.E., Reinson, G.E. and Powell, T.G. Controls on clay-mineral authigenesis in the Viking sandstone, central Alberta. I. shallow depths, 141
 FOSTER, C.T., Jr. Textural variation of sillimanite segregations, 379
 GHENT, E.D. High-grade metamorphism: preface, 293
 ——— Knitter, C.C., Raeside, R.P., and Stout, M.Z. Geothermometry and geobarometry of pelitic rocks, upper kyanite and sillimanite zones, Mica Creek area, British Columbia, 295
 GORTON, M.P. with Rucklidge, J.C., 111
 GOVE, H.E. with Rucklidge, J.C., 111
 GRUNDY, H.D. and Hassan, I. The crystal structure of a carbonate-rich cancrinite, 239
 GUGGENHEIM, S. and Bailey, S.W. The superlattice of minnesotaite, 579
 ——— Bailey, S.W., Eggleton, R.A., and Wilkes, P. Structural aspects of greenalite and related minerals, 1
 HAFFETY, J. with Page, N.J., 537
 HASSAN, I. with Grundy, H.D., 239
 HAUFF, P.L. with Odum, J.K., 91
 HAWTHORNE, F.C. The crystal structure of boggsdite, 263
 HESSE, R. with Islam, S., 155
 HOLLISTER, L.S. Metamorphic evidence for rapid (2 mm/yr) uplift of a portion of the Central Gneiss Complex, Coast Mountains, B.C., 319
 HUTCHEON, I. with Nahnybida, C., 129
 ISLAM, S., Hesse, R., and Chagnon, A., Zonation of diagenesis and low-grade metamorphism in Cambro-Ordovician flysch of Gaspé Peninsula, Quebec Appalachians, 155
 JAMBOR, J.L. and Owens, D.R. Re-examination of robinsonite from Vall de Ribes, Spain, 97
 JANSE, A.J.A. with Mitchell, R.H., 211
 JONES, W. with Manning, P.G., 169
 KELLER, P. with Povarennykh, A.S., 601
 KILIUS, L.R. with Rucklidge, J.C., 111
 KIRKER, J. with Nahnybida, C., 129
 KODAMA, H., Longworth, G., and Townsend, M.G. A Mössbauer investigation of some chlorites and their oxidation products, 585
 KRISTIANSEN, R. with Povarennykh, A.S., 601
 LAUFER, E.E. and Mossman, D.J. The identification of sepiolite in the Prairie Evaporite Formation of Saskatchewan, 151
 LÉVY, C. with Chikhaoui, S., 101
 LITHERLAND, A.E. with Rucklidge, J.C., 111
 LONGWORTH, G. with Kodama, H., 585
 LOOMIS, T.P. Numerical simulation of the disequilibrium growth of garnet in chlorite-bearing aluminous pelitic rocks, 411
 ——— and Nimick, F.B. Equilibrium in Mn-Fe-Mg aluminous pelitic compositions and the equilibrium growth of garnet, 393
 LUSTENHOUWER, W.J. with Zakrzewski, M.A., 281
 MANNING, P.G. and Jones, W. The binding capacity of ferric hydroxides for non-apatite inorganic phosphorus in the sediments of the depositional basins of Lakes Erie and Ontario, 169
 MARTIGNOLE, J. and Nantel, S. Geothermobarometry of cordierite-bearing metapelites near the Morin anorthosite complex, Grenville province, Quebec, 307
 MEYER, H.O.A. with Ntanda, F.M., 217
 MITCHELL, R.H. and Janse, A.J.A. A harzburgite-bearing monchiquite from Wawa, Ontario, 211
 MIYANO, T. Stilpnomelane, iron-rich mica, K-feldspar and hornblende in banded iron-formation assemblages of the Dales Gorge Member, Hamersley Group, Western Australia, 189
 MOREAU, J. with Ntanda, F.M., 217
 MOSSMAN, D.J. with Laufer, E.E., 151
 NAHNYBIDA, C., Hutcheon, I., and Kirker, J. Diagenesis of the Nisku Formation and the origin of late-stage cements, 129
 NTANDA, F.M., Moreau, J., and Meyer, H.O.A. Particularités des inclusions cristallines primaires des diamants du Kasai, Zaïre, 217
 ODUM, J.K., Hauff, P.L., and Farrow, R.A. A new occurrence of ammoniojarosite in Buffalo, Wyoming, 91
 OWENS, D.R. with Jambor, J.L., 97
 with Szymański, J.T., 65
 PAGE, N.J., Pallister, J.S., Brown, M.A., Smewing, J.O., and Haffty, J. Palladium, platinum, rhodium, iridium and ruthenium in chromite-rich rocks from the Samal ophiolite, Oman, 537
 PALLISTER, J.S. with Page, N.J., 537
 PAULY, H. Gladstone-Dale calculations applied to fluorides, 593
 PERRAULT, G. and Szymański, J.T. Steacyite, a new name, and a re-evaluation of the nomenclature of "ekantite"-group minerals, 59
 PIGAGE, L.C. Linear regression analysis of sillimanite-forming reactions at Azure Lake, British Columbia, 349
 PIRET, P. with Deliens, M., 231
 POVARENNYKH, A.S., Keller, P., and Kristiansen, R. Infrared absorption spectra of swedenborgite and quartzite, 601
 POWELL, T.G. with Foscolos, A.E., 141
 REINSON, G.E. with Foscolos, A.E., 141
 ROBERTS, A.C. with Szymański, J.T., 65
 ROBERTSON, B.T. Occurrence of epigenetic phosphate minerals in a phosphatic iron-formation, Yukon Territory, 177
 ROZENSON, I. with Spiro, B., 29
 RUCKLIDGE, J.C., Gorton, M.P., Wilson, G.C., Kilius, L.R., Litherland, A.E., Elmore, D., and Gove, H.E. Measurement of Pt and Ir at sub-ppb levels using tandem-accelerator mass spectrometry, 111
 SCOTT, J.D. with Szymański, J.T., 271
 SMEWING, J.D. with Page, N.J., 537
 SPIRO, B. and Rozenson, I. Formations and properties of authigenic minerals in bituminous calcareous shales, Ghareb Formation, Israel, 29
 SPRY, P.G. An unusual garnite-forming reaction, Geco base-metal deposit, Manitowadge, Ontario, 549
 SZYMAŃSKI, J.T. The crystal structure of hydrodresserite, BaAl₂(CO₃)₂(OH)₂·3H₂O, 253
 ——— with Chen, T.T., 575
 ——— with Perrault, G., 59
 ——— and Scott, J.D. A crystal-structure refinement of synthetic brannerite, UT₃O₇, and its bearing on rate of alkaline-carbonate leaching of brannerite in ore, 271
 ——— Owens, D.R., Roberts, A.C., Ansell, H.G., and Chao, G.Y. A mineralogical study and crystal-structure determination of nonmetamict ekanite, ThCa₂SigO₂₉, 65
 TOWNSEND, M.G. with Kodama, H., 585
 TRACY, R.J. and Dietsch, C.W. High-temperature retrograde reactions in pelitic gneiss, central Massachusetts, 425
 TRZCIENSKI, W.E. Jr. and Birkett, T.C. Compositional variations of pumpellyite along the western margin of the Quebec Appalachians, 203
 WEIDNER, J.R. Iron-oxide magmas in the system Fe-C-O, 553
 WILKES, P. with Guggenheim, S., 1
 WILSON, G.C. with Rucklidge, J.C., 111
 ZAKRZEWSKI, M.A., Burke, E.A.J., and Lustenhouwer, W.J. Vuorelainenite, a new spinel, and associated minerals from the Satra (Doverstorp) pyrite deposit, central Sweden, 281

Subject Index

- A comparison of galkhaite from Nevada and from the type locality, Khaydarkan, Kirgizia, U.S.S.R., (Chen & Szymafski), 575
- A crystal-structure refinement of synthetic brannerite, U_2O_7 , and its bearing on rate of alkaline-carbonate leaching of brannerite in ore, (Szymafski & Scott), 271
- A harzburgite-bearing monchiquite from Wawa, Ontario, (Mitchell & Janse), 211
- A mineralogical study and crystal-structure determination of nonmetamict ekanite, $ThCa_2Si_6O_{20}$, (Szymafski et al.), 65
- A Mössbauer investigation of some chlorites and their oxidation products, (Kodama et al.), 585
- A new occurrence of ammoniojarosite in Buffalo, Wyoming, (Odum et al.), 91
- An unusual gahnite-forming reaction, Geco base-metal deposit, Manitowadge, Ontario, (Spry), 549
- Bijvoetite and lepersonnite, carbonates hydratés d'uranyle et de terres rares de Shinkolobwe, Zaïre, (Deliens & Piret), 231
- Book review, 123, 291, 605
- CHEMICAL ANALYSIS** (see also Electron microprobe analysis)
- Minerals*
- chlorite, 587, legrandite, 87, pachnolite, 597, PGE analysis, 111, 537, thomsenolite, 597
- Chromian andradite from Réaume township, Ontario, (Duke & Bonardi), 49
- Compositional variations of pumpellyite along the western margin of the Quebec Appalachians, (Trzciencki & Birkett), 203
- Controls on clay-mineral authigenesis in the Viking sandstone, central Alberta, L. Shallow depths, (Foscolos et al.), 141
- CRYSTALLOGRAPHY** (see also Twinning)
- $Al(OH)_3$ polymorphism, 81, galkhaite, 575, greenalite, 5, illite crystallinity, 159, minnesotaita, 579, normalized intensity distributions, 260
- CRYSTAL STRUCTURE** (see also X-ray Diffraction)
- boggdilite, 263, brannerite, 271, cancrinite, 239, caryophyllite, 10, ekanite, 68, greenalite, 7, hydrodresserite, 253, minnesotaita, 583, steacyite, 73
- Powder Data*
- ammoniojarosite, 93, bijvoetite, 236, brannerite, 273, caryophyllite, 5, chromian andradite, 52, clay minerals, 147, ekanite, 69, greenalite, 5, hydrodresserite, 259, legrandite, 82, lepersonnite, 236, norstrandite, 82, sepiolite, 151, vuorelainenite, 287
- Diagenesis of the Nisku Formation and the origin of late-stage cements, (Nanhbyda et al.), 129
- D.T.A.**
- lepersonnite, 235
- ELECTRON MICROPROBE ANALYSIS**
- alabandite, 288, almandine, 44, ankerite, 195, benavidesite, 288, bijvoetite, 235, biotite, 310, 337, 354, 427, boulangerite, 288, brannerite, 273, caryophyllite, 10, chlorite, 276, 338, clinopyroxene, 222, cordierite, 310, 337, 427, dolomite, 138, ekanite, 67, Fe-mica, 192, ferrodolomite, 195, freibergite, 288, gahnite, 550, galena, 288, galkhaite, 576, garnet, 44, 51, 213, 225, 310, 337, 352, 427, gedrite, 337, geocronite, 288, glaucophane, 43, gumdumite, 288, hogbomite, 550, hornblende, 192, hyprsthene, 337, ilmenite, 227, 356, K-feldspar, 192, 355, kyanite, 226, lepersonnite, 235, lizardite (Mn), 10, magnetite, 212, manganochromite, 284, muscovite, 353, nigerite, 550, norstrandite, 81, olivine, 212, 220, 568, $PbSb_2S_4$, 99, plagiopite (Sn), 550, plagioclase, 310, 355, pumpellyite, 204, pyrophanite, 284, pyroxene, 212, pyrrhotite, 227, 288, riebeckite, 196, robinsonite, 97, rutile, 227, 284, sapphire, 310, schreyerite, 284, serpentine, 569, siderite, 195, sphalerite, 288, spinel, 213, stannite, 288, staurolite, 338, 354, 550, stilpnomelane, 192, tennantite, 102, tetraehdrite, 102, ullmannite, 288, unnamed $PbSb_2S_4$, 99, vuorelainenite, 284, zinkenite, 99
- Equilibrium in Mn-Fe-Mg aluminous pelitic compositions and the equilibrium growth of garnet, (Loomis & Nimick), 393
- Evidence from metamorphic rocks for overthrusting, Pennsylvania Piedmont, U.S.A., (Crawford & Mark), 333
- EXPERIMENTAL** (see also Petrology)
- General*
- brannerite leaching, 275, calculated pelite phase diagrams, 398, clinochrysolite stability, 19, density of mixtures, 98, Gladstone-Dale constants, 55, 593, homogenization temperatures, 137, serpentinization, 567, stable isotope geochemistry, 138, tandem-accelerator mass spectrometry, 111, thermochemical data, 25, 36, 396
- System*
- Fe-C-O, 555, MgO-SiO₂-H₂O, 19
- Experimental study of the serpentinization of Mg-Fe-Ni olivine in the presence of sulfur, (Filippidis), 567
- Expression quantitative de la couleur dans la série tennantite-tetraehdrite: influence des substitutions, (Chikhoui & Lévy), 101
- Formation and authigenic minerals in bituminous calcareous shales, Ghareb Formation, Israel (Spiro & Rozenson), 29
- Geothermobarometry of cordierite-bearing metapelites near the Morin anorthosite complex, Grenville province, Quebec, (Martignole & Nantel), 307
- Geothermometry and geobarometry of pelitic rocks, upper kyanite and sillimanite zones, Mica Creek area, British Columbia, (Ghent et al.), 295
- Gladstone-Dale constants for H₂O and CO₂ in cordierite, (Bloss & Armbruster), 55
- Gladstone-Dale calculations applied to fluorides, (Pauly), 593
- Glaucophane schist in the Andes at Jambalo, Columbia, (Feininger), 41
- High-grade metamorphism: preface (Ghent), 293
- High-temperature retrograde reactions in pelitic gneiss, central Massachusetts, (Tracy & Dietsch), 425
- Infrared absorption spectra of swedenborgite and queitite, (Povarennykh et al.), 601
- INFRARED SPECTRA**
- queitite, 601, swedenborgite, 601
- Iron-oxide magmas in the system Fe-C-O, (Weidner), 555
- Linear regression analysis of sillimanite-forming reactions at Azure Lake, British Columbia, (Pigage), 349
- Measurement of Pt and Ir at sub-ppb levels using tandem-accelerator mass spectrometry, (Rucklidge et al.), 111
- Memorial to Leonard G. Berry, (Corlett), 615
- Metalogeny of granitoid rocks in the Canadian Shield, (Ayres & Černý), 439
- Metamorphic evidence for rapid (2 mm/yr) uplift of a portion of the Central Gneiss Complex, Coast Mountains, B.C., (Hollister), 319
- MICROHARDNESS**
- bijvoetite, 232, vuorelainenite, 283
- MINERAL DATA**
- almandine, 43, $Al(OH)_3$ polymorphs, 81, ammoniojarosite, 91, ankerite, 195, benavidesite, 288, bijvoetite, 231, boggdilite, 263, 598, brannerite, 271, brucite, 25, cancrinite, 239, caryophyllite, 9, chlorite, 586, chromian andradite, 50, clinochrysolite, 19, clinopyroxene, 222, cordierite, 55, diamond, 217, ekanite, 59, 65, Fe-mica, 192, ferrodolomite, 195, forsterite, 25, galkhaite, 575, garnet, 43, 50, 213, 225, geocronite, 288, glaucophane, 43, greenalite, 3, hornblende, 192, hydrodresserite, 253, illite, 159, ilmenite, 227, jarlite, 598, K-feldspar, 197, kyanite, 225, legrandite, 87, lepersonnite, 231, magnetite, 212, microcline, 30, minnesotaita, 17, 579, norstrandite, 77, olivine, 212, 220, opal-CT, 32, pachnolite, 596, pumpellyite, 203, pyrophanite, 286, pyroxene, 212, pyrrhotite, 227, queitite, 601, riebeckite, 196, robinsonite, 97, rutile, 227, 286, schreyerite, 286, sepiolite, 151, siderite, 195, spinel, 213, steacyite, 59, 73, stilpnomelane, 192, swedenborgite, 601, talc, 25, tennantite, 101, tetraehdrite, 101, thomsenolite, 596, unnamed Pb-Mo sulfide, 288, unnamed $PbSb_2S_4$, 99, vuorelainenite, 281, yaroslavitte, 597, yukon phosphate suite, 177, zinkenite, 98
- MOSSBAUER SPECTROSCOPY**
- $Fe(OH)_3$, 170, trioctahedral chlorite, 585,
- NEW MINERALS**
- bijvoetite, 231, lepersonnite, 231, steacyite, 59, unnamed Pb-Mo sulfide, 288, unnamed $PbSb_2S_4$, 99, vuorelainenite, 281
- NOMENCLATURE**
- bijvoetite, 231, brannerite, 271, cancrinite, 239, eclogite, 228, ekanite-group, 59, jarosite group, 94, lepersonnite, 231, minnesotaita, 579, norstrandite, 79, steacyite, 59, 73, unnamed Pb-Mo sulfide, 288, unnamed $PbSb_2S_4$, 99, vuorelainenite, 281, zinkenite, 99
- Nordstrandite from Mont St-Hilaire, Quebec, (Chao & Baker), 77
- Numerical simulation of the disequilibrium growth of garnet in chlorite-bearing aluminous pelitic rocks, (Loomis), 411
- Occurrence of epigenetic phosphate minerals in a phosphatic iron-formation, Yukon Territory, (Robertson), 177
- OPTICAL PROPERTIES**
- General*
- ammoniojarosite, 93, bijvoetite, 234, cordierite, 56, ekanite, 67, glaucophane, 43, legrandite, 82, lepersonnite, 234, norstrandite, 81
- Reflectance*
- tennantite-tetraehdrite, 101, unnamed Pb-Mo sulfide, 288, vitrinite, 138, 160, vuorelainenite, 283
- Palladium, platinum, rhodium, iridium and ruthenium in chromite-rich rocks from the Samail ophiolite, Oman, (Page et al.), 337
- Particularités des inclusions cristallines primaires des diamants du Kasai, Zaïre, (Ntanda et al.), 217
- PETROLOGY** (see also Experimental)
- anchizone boundaries, 162, authigenic clay, 141, authigenic microcline in shale, 30, chemical zoning of garnet, 297, 310, 362, 401, 412, 431, diagenesis of carbonates, 129, diagenesis of clay, 151, 155, diamond inclusions, 217, eclogite paragenesis, 228, epigenetic phosphates, 177, Fe/(Fe+Mg) ratio, 198, fluid inclusions, 136, 325, gahnite-forming reaction, 549, geobarometry, 139, 164, 208, 213, 223, 312, geothermometry, 136, 162, 213, 223, 297, 311, glaucophane schist, 42, granitoid metallogeny, 439, harzburgite xenoliths, 212, high-grade metamorphism, 293, illite crystallinity, 159, iron formation, 177, 189, iron-oxide magma, 555, lamprophyre, 211, legrandite in pegmatite, 87, maturation indicators, 155, metapelites, 293, 307, 349, 393, 425, PGE analysis, 111, 540, PGE in chromite, 541, pumpellyite chemistry, 206, sillimanite-forming reactions, 349, 379, solubility diagrams, 36, transported diagenesis, 155
- Présence de legrandite dans une pegmatite de Minas Gerais, Brésil, (Cassendanne & Cassendanne), 87
- Proceedings of the twenty-seventh annual meeting of the Mineralogical Association of Canada, 109
- Re-examination of robinsonite from Vall de Ribes, Spain, (Jambor & Owens), 97
- ROCKS**
- ophiolite, 540, Pt and Ir in ultramafics, 117, 540, wehrilite, 50
- SCANNING ELECTRON MICROGRAPHS**
- ammoniojarosite, 92, anatase, 34, authigenic kaolinite, 145, authigenic quartz, 145, bijvoetite, 233, glauconite, 145, heulandite, 34, lepersonnite, 232, microcline, 31, norstrandite, 78, quartz, 34
- Steacyite, a new name, and a re-evaluation of the nomenclature of the "ekante"-group minerals, (Perrault & Szymafski), 59
- Stilpnomelane, iron-rich mica, K-feldspar and hornblende in banded iron-formation assemblages of the Dales Gorge Member, Hamersley Group, Western Australia, (Miyano), 189
- Structural aspects of greenalite and related minerals (Guggenheim et al.), 1

Textural variation of sillimanite segregations, (Foster), 379

TEXTURES

cements in carbonate rocks, 129, gahnite, 551, chromian andradite, 51, chromite, 540, metamorphic, 323, 353, 379, 426, 549, secondary biotite and garnet, 428, sillimanite segregation, 353, 379, staurolite, 549, symplectite, 323, wehrilite, 49, yukon phosphate suite, 177

T.G.A.

lepersonite, 235

The binding capacity of ferric hydroxides for non-apatite inorganic phosphorus in the sediments of the depositional basins of Lakes Erie and Ontario, (Manning & Jones), 169

The crystal structure of a carbonate-rich cancrinite, (Grundy & Hassan), 239

The crystal structure of boggildite, (Hawthorne), 263

The crystal structure of hydrodresserite, $BaAl_2(CO_3)_2(OH)_4 \cdot 3H_2O$, (Szymanski), 253

The identification of sepiolite in the Prairie Evaporite Formation of

Saskatchewan, (Laufer & Mossman), 151

The stability of clinochrysoilite (Chernosky Jr.), 19

The superlattice of minnesotaite, (Guggenheim & Bailey), 579

TWINNING (see also Crystallography)

minnesotaite, 579

Vuorelainenite, a new spinel, and associated minerals from the Satra (Doverstorp) pyrite deposit, central Sweden, (Zakrzewski et al.), 281

X-RAY DIFFRACTION (see also Crystal Structure)

Cell Dimensions

ammoniojarosite, 92, bijvoetite, 237, boggildite, 263, brannerite, 272,

cancrinite, 240, chromian andradite, 50, clinochrysoilite, 21, ekanite, 68,

galkhalite, 576, hydrodresserite, 254, lepersonite, 237, minnesotaite,

581, norstrandite, 79, olvine (Ni), 568, vuorelainenite, 287

Zonation of diagenesis and low-grade metamorphism in Cambro-Ordovician flysch of Gaspé Peninsula, Quebec Appalachians, (Islam et al.), 155

3^{ÈME} RÉUNION SPÉCIALISÉE DE L' O T A N SUR
LES FELDSPATHS, LES FELDSPATHOÏDES ET LEURS
PARAGENESES

26 JUIN AU 7 JUILLET, 1983
RENNES, FRANCE.

DIRECTEUR : WILLIAM L. BROWN

Une réunion spécialisée de niveau post-doctorat est organisée au cours de laquelle 15 enseignants présenteront une revue des travaux récents et 60 à 80 étudiants participeront à des tables rondes et communiqueront les résultats de leur recherche. Les sujets abordés s'étendront des structures, sur-structures et propriétés physiques aux paragenèses et occurrences dans les roches.

L' O T A N et le C N R S apporteront une aide financière partielle pour l'organisation de cette réunion.

Les demandes d'inscription sont à adresser, avec curriculum vitae, bibliographie, et pour les jeunes scientifiques une lettre de recommandation avant le 31 janvier 1983 à W.L. Brown qui fournira des informations supplémentaires.

W.L. BROWN
Laboratoire de Pétrologie-Géochimie,
Faculté des Sciences
B.P. 239
54506 VANDOEUVRE-LES-NANCY Cédex
FRANCE

THE CANADIAN MINERALOGIST

**Journal of the
Mineralogical Association
of Canada**



**Editors, L.J. Cabri
R.F. Martin**

Volume 20, 1982

THE CANADIAN MINERALOGIST

Volume 20, Index

Contents

Structural aspects of greenalite and related minerals S. GUGGENHEIM, S.W. BAILEY, R.A. EGGLETON & P. WILKES	1
The stability of clinochrysotile J.V. CHERNOSKY, JR.	19
Formation and properties of authigenic minerals in bituminous calcareous shales, Ghareb Formation, Israel B. SPIRO & I. ROZENSON	29
Glaucofane schist in the Andes at Jambaló, Colombia T. FEININGER	41
Chromian andradite from Réaume township, Ontario J.M. DUKE & M. BONARDI	49
Gladstone–Dale constants for H ₂ O and CO ₂ in cordierite F.D. BLOSS & T. ARMBRUSTER	55
Steacyite, a new name, and a re-evaluation of the nomenclature of "ekinite"-group minerals G. PERRAULT & J.T. SZYMAŃSKI	59
A mineralogical study and crystal-structure determination of nonmetamict ekanite, ThCa ₂ Si ₈ O ₂₀ J.T. SZYMAŃSKI, D.R. OWENS, A.C. ROBERTS, H.G. ANSELL & G.Y. CHAO	65
Nordstrandite from Mont St-Hilaire, Quebec G.Y. CHAO & J. BAKER	77
Présence de legrandite dans une pegmatite de Minas Gerais, Brésil J.P. CASSEDANNE & J.O. CASSEDANNE	87
A new occurrence of ammoniojarosite in Buffalo, Wyoming J.K. ODUM, P.L. HAUFF & R.A. FARROW	91
Re-examination of robinsonite from Vall de Ribes, Spain J.L. JAMBOR & D.R. OWENS	97
Expression quantitative de la couleur dans la série tennantite-tétraédrite: influence des substitutions S. CHIKHAOUI & C. LÉVY	101
Measurement of Pt and Ir at sub-ppb levels using tandem-accelerator mass spectrometry J.C. RUCKLIDGE, M.P. GORTON, G.C. WILSON, L.R. KILIUS, A.E. LITHERLAND, D. ELMORE & H.E. GOVE	111
Diagenesis of the Nisku Formation and the origin of late-stage cements C. NAHNYBIDA, I. HUTCHEON & J. KIRKER	129
Controls on clay-mineral authigenesis in the Viking sandstone, central Alberta. I. Shallow depths A.E. FOSCOLOS, G.E. REINSON & T.G. POWELL	141
The identification of sepiolite in the Prairie Evaporite Formation of Saskatchewan E.E. LAUFER & D.J. MOSSMAN	151

Zonation of diagenesis and low-grade metamorphism in Cambro-Ordovician flysch of Gaspé Peninsula, Quebec Appalachians	S. ISLAM, R. HESSE & A. CHAGNON	155
The binding capacity of ferric hydroxides for non-apatite inorganic phosphorus in the sediments of the depositional basins of Lakes Erie and Ontario	P.G. MANNING & W. JONES	169
Occurrence of epigenetic phosphate minerals in a phosphatic iron-formation, Yukon Territory	B.T. ROBERTSON	177
Stilpnomelane, iron-rich mica, K-feldspar and hornblende in banded iron-formation assemblages of the Dales Gorge Member, Hamersley Group, Western Australia	T. MIYANO	189
Compositional variations of pumpellyite along the western margin of the Quebec Appalachians	W.E. TRZCIENSKI, JR. & T.C. BIRKETT	203
A harzburgite-bearing monchiquite from Wawa, Ontario	R.H. MITCHELL & A.J.A. JANSE	211
Particularités des inclusions cristallines primaires des diamants du Kasai, Zaïre	F. MVUEMBA NTANDA, J. MOREAU & H.O.A. MEYER	217
Bijvoetite et lepersonnite, carbonates hydratés d'uranyle et de terres rares de Shinkolobwe, Zaïre	M. DELIENS & P. PIRET	231
The crystal structure of a carbonate-rich cancrinite	H.D. GRUNDY & I. HASSAN	239
The crystal structure of hydrodresserite, $BaAl_2(CO_3)_2(OH)_4 \cdot 3H_2O$	J.T. SZYMAŃSKI	253
The crystal structure of bøgildite	F.C. HAWTHORNE	263
A crystal-structure refinement of synthetic brannerite, UTi_2O_6 , and its bearing on rate of alkaline-carbonate leaching of brannerite in ore	J.T. SZYMAŃSKI & J.D. SCOTT	271
Vuorelainenite, a new spinel, and associated minerals from the Sättra (Doverstorp) pyrite deposit, central Sweden	M.A. ZAKRZEWSKI, E.A.J. BURKE & W.J. LUSTENHOUWER	281
High-grade metamorphism: preface	E.D. GHENT	293
Geothermometry and geobarometry of pelitic rocks, upper kyanite and sillimanite zones, Mica Creek area, British Columbia	E.D. GHENT, C.C. KNITTER, R.P. RAESIDE & M.Z. STOUT	295
Geothermobarometry of cordierite-bearing metapelites near the Morin anorthosite complex, Grenville province, Quebec	J. MARTIGNOLE & S. NANTEL	307
Metamorphic evidence for rapid (2 mm/yr) uplift of a portion of the Central Gneiss Complex, Coast Mountains, B.C.	L.S. HOLLISTER	319
Evidence from metamorphic rocks for overthrusting, Pennsylvania Piedmont, U.S.A.	M.L. CRAWFORD & L.E. MARK	333
Linear regression analysis of sillimanite-forming reactions at Azure Lake, British Columbia	L.C. PIGAGE	349
Textural variation of sillimanite segregations	C.T. FOSTER, JR.	379
Equilibrium in Mn-Fe-Mg aluminous pelitic compositions and the equilibrium growth of garnet	T.P. LOOMIS & F.B. NIMICK	393

Numerical simulation of the disequilibrium growth of garnet in chlorite-bearing aluminous pelitic rocks	T.P. LOOMIS	411
High-temperature retrograde reactions in pelitic gneiss, central Massachusetts	R.J. TRACY & C.W. DIETSCH	425
Metallogeny of granitoid rocks in the Canadian Shield	L.D. AYRES & P. ČERNÝ	439
Palladium, platinum, rhodium, iridium and ruthenium in chromite-rich rocks from the Samail ophiolite, Oman	N.J. PAGE, J.S. PALLISTER, M.A. BROWN, J.D. SMEWING & J. HAFFTY	537
An unusual gahnite-forming reaction, Geco base-metal deposit, Manitouwadge, Ontario	P.G. SPRY	549
Iron-oxide magmas in the system Fe-C-O	J.R. WEIDNER	555
Experimental study of the serpentinization of Mg-Fe-Ni olivine in the presence of sulfur	A. FILIPPIDIS	567
A comparison of galkhaite from Nevada and from the type locality, Khaydarkan, Kirgizia, U.S.S.R.	T.T. CHEN & J.T. SZYMAŃSKI	575
The superlattice of minnesotaite	S. GUGGENHEIM & S.W. BAILEY	579
A Mössbauer investigation of some chlorites and their oxidation products	H. KODAMA, G. LONGWORTH & M.G. TOWNSEND	585
Gladstone-Dale calculations applied to fluorides	H. PAULY	593
Infrared absorption spectra of swedenborgite and queitite	A.S. POVARENNYKH, P. KELLER & R. KRISTIENSEN	601
Book reviews		605
X-Ray Diffraction by Disordered and Ordered Systems	F.C. HAWTHORNE	
An Introduction to Ore Geology	E.T.C. SPOONER	
A Systematic Classification of Nonsilicate Minerals	R.I. GAIT	
Proceedings of the twenty-seventh annual meeting of the Mineralogical Association of Canada		609
Memorial to Leonard G. Berry	M.I. CORLETT	615
Index	J.D. SCOTT & L.K. BOWRING	617