

# MINERALOGICAL MAGAZINE

CONTENTS OF No. 221

(June 1953)

Proceedings of the Mineralogical Society for 1952 . . . . .	xxxvii
S. H. U. BOWIE and J. E. T. HORNE: Cheralite, a new mineral of the monazite group . . . . .	93
B. MASON and C. J. VITALIANO: The mineralogy of the antimony oxides and antimonates . . . . .	100
D. S. COOMBS: The pumpellyite mineral series . . . . .	113
C. D. WATERSTON: An occurrence of harmotome in north-west Ross-shire . . . . .	136
K. CARR, R. W. GRIMSHAW, and A. L. ROBERTS: A hydrous mica from Yorkshire fireclay . . . . .	139
F. SMITHSON: High-order plates for the microscopic examination of mineral grains . . . . .	145
F. CHAYES: The relation between area and volume in micrometric analysis . . . . .	147
L. HELLER: X-ray investigation of hillebrandite . . . . .	150

## MINERALOGICAL ABSTRACTS

(Vol. 12, No. 2, pp. 65-126)

Notices of Books (p. 65).—Topographical Mineralogy (p. 68).—Artificial Minerals (p. 74).—Growth and Corrosion of Crystals (p. 85).—X-rays and Crystal-structure (p. 89).—Meteorites and Tektites (p. 99).—Radioactive Minerals (p. 108).—Clay Minerals (p. 113).—Miscellaneous (p. 121).

*Authors of papers abstracted.*—Ahrens 101, Alderman 81, Alexanian 119, Allen 116, Amafuji 114, Amelincx 87-8, Andô 116, Andrews 92, Atlas 80, Aurivillius 96, Bacon 93, Bain 110, Barber 117, Barić 126, Barnes 95, Barrer 84, Barshad 120, Bartholomew 121, Bassett 78, Begemann 109, Belyankin 77, Berdesinski 77, Berger 92, Berkey 66, Birdsall 84, Birot 120, Blanchin 118, Bloss 89, Bond 92, Bramao 117, Brehler 86, Brindley 98-9, Brooker 10, Buckley 85, Bugge 125, Cady 117, Caillère 120, Campbell 65, Caster 65, Castro 114, Chatterjee 125, Chirvinsky 105, Choong 89, Cole 79, Collier 119, Cooley 109, Corey 75, 120, Corwin 75, Craig 65, Dahlman 95, Davis 79, Dekeyser 73-8, Dodin 106, Donnay 96, Dragsdorf 117, Dyal 121, Ehlers 80, Engeln 65, Erickson 126, Eskola 71, Evans 120, Fairbanks 66, Faucher 118, Feldman 109, Fesenkov 107, Fiedles 123, Flörscher 108, 126, Flörke 94, Frank 85, Franke 76, Friedlaender 123, Frondel 108, 111, Furtwängler 84, Fuyat 124, Gaskin 116, Gerling 107, Goldsmith 80, Goring 121, Gorman 111, Grenville-Wells 90, Guillemin 68, Hamilton 84, Harjanne 71, Harrison 98, Haseman 79, Heller 83, Hendricks 117, 121, Hénon 120, Herpin 94, Heuvel 120, Hey 103, 108, Hilmy 78, Honda 114, Houtermans 109, Hsueung 120, Hügi 102, Huttenlocher 102, Imelik 118, Isaac 109, Jackson 79, 120, Jérémme 103, Juurinen 71, Kaitaro 123, Kearns 100, Keith 82, 122, Kelley 73, Kern 86, Kimura 114, Kokkoros 95, Kouvo 124, Kozu 122, Krinov 105, Krishnan 71, Krufa 70, Kühn 126, Lambert 103, Lang 108, Lapin 79, Lelubre 103, Levinson 98, Lindroth 67, Linstedt 94, McAndrew 93, McConnell 124, McDowall 123, Macgregor 72, Macnamara 100, Marshall 117, Martin 109, Martinez 86, Mason 121, Matheson 111, Matschinski 102, Mayne 100, Megaw 98, Midgley 97, Mikheev 94, Miller 66, Mitchell 91, Mitra 118, Mokievsky 94, Molé 75, Morey 77, Mosebach 80, Müller 91, Muraoka 116, Murdoch 74, Mutó 114, Nagasawa 114, Nakahira 98, Neuhaus 88, Neuvonen 82, Nicolas 119, Nuffield 91, 110, Oakley 107, Ogniben 126, Ojha 102, Onorato 90, Osborn 81, Ossaka 116, Oughton 99, Padurow 99, Palmer 113, Paneth 100, Paper 75, Peixoto 95, Penrose 66, Perkins 117, Pfefferkorn 89, Phair 112, Phillipsborn 85, Picciotto 109, Pike 84, Pinson 101, Praagh 86, Prettre 118-19, Proix-Noe 84, Prouvost 75, Qurashi 95, Radczewski 115, Rajagopalan 118, Ramsdell 91, Rasor 110, Raasmann 69, Reasbeck 100, Rieck 76, Robinson 109, Rodgers 109, Roedder 81, Roof 90, Rose 108, Roy 125, Ruchweim 121, Sabatier 80, 123, Sadran 86, Saito 88, Saksela 70, Samson 116, Schairer 81-2, Schiavinato 115, Schlyter 91, Schulz 78, Sedlacek 69, Sen 125, Shafranovsky 94, Shimamoto 112, Siegel 92, Silver 73, Silverman 124, Simpson 68, Singer 100, Slawson 74, Smiltens 76, Smith 96, 103, 108, Southworth 118, Steacy 109, Stevels 76, Stillwell 110, Strunz 69, Sudó 113-14, 116, Sullivan 111, Suter 73, Swerdlow 117, Swinnerton 75, Switzer 74, 113, Tait 81, Takubo 112, Tanemura 114, Tavora 95, 98, 110, Taylor 78, 83, The 119, Thilo 78, Thode 100, Thomas 118, Tonani 101, Trall 112, Tuttle 79, 122, Tyndale-Biscoe 72, Urey 99, 100, Vaasjoki 123, Valkenberg 84, Van Houten 114, Vasilier 105, Vitaliano 121, Vogel 101, Volborth 123, Vose 123, Vuitée 88, Vyalov 106, Wadley 93, Ward 121, Webb 74, Well 87, Weiser 124, We sel 104, White 84, Willis 86, Wilson 125, Winkler 92, Wolf 74, Wymond 125, Yagi 81, Yashchenko 107, Yoder 83, Yudin 106, Zachariassen 90, Zans 73.

Printed in Great Britain by CHARLES BATEY at the University Press, Oxford