

CONTENTS OF No. 370, APRIL 1989

	<i>page</i>
D. J. VAUGHAN: Spectroscopic Studies of Minerals: Principles, Applications and Advances	133
R. G. BURNS: Spectral mineralogy of terrestrial planets: scanning their surfaces remotely	135
D. S. URCH: Bonding in minerals: the application of PAX (photoelectron and X-ray) spectroscopy to the direct determination of electronic structure	153
A. TLILI, D. C. SMITH, J.-M. BENY and H. BOYER: A Raman microprobe study of natural micas	165
A. D. LAW: Studies of the orthoamphiboles. IV. Mössbauer spectra of anthophyllites and gedrites	181
J. M. CHARNOCK, C. D. GARNER, R. A. D. PATRICK and D. J. VAUGHAN: EXAFS and Mössbauer spectroscopic study of Fe-bearing tetrahedrites	193
G. WALKER, O. E. ABUMERE and B. KAMALUDDIN: Luminescence spectroscopy of Mn ²⁺ centres in rock-forming carbonates	201
S. RICHARDSON and D. J. VAUGHAN: Surface alteration of pentlandite and spectroscopic evidence for secondary violarite formation	213
S. RICHARDSON and D. J. VAUGHAN: Arsenopyrite: A spectroscopic investigation of altered surfaces	223
C. A. GEIGER, B. WINKLER and K. LANGER: Infrared spectra of synthetic almandine-grossular and almandine-pyrope garnet solid solutions: evidence for equivalent site behaviour	231
J. PURTON and D. S. URCH: High-resolution silicon K β X-ray spectra and crystal structure	239
<hr/> <hr/>	
R. G. CAWTHORN, J. W. BRISTOW and D. I. GROVES: Magnesian ilmenite in picritic basalts from the Karoo Province, South Africa	245
R. NAWAZ and G. RYBACK: Re-examination of kirwanite: a ferri-ferrohornblende from Co. Down, Northern Ireland	253
D. D. HOGARTH and J. E. T. HORNE: Non-metamict uranoan pyrochlore and uranpyrochlore from tuff near Ndale, Fort Portal area, Uganda	257
P. G. SPRY and E. U. PETERSEN: Zincian h�ogbomite as an exploration guide to metamorphosed massive sulphide deposits	263