

# Clay Minerals

VOLUME 8 • NUMBER 3 • JULY 1970

## CONTENTS

Obituary—William Anderson Mitchell	i
K. WADA and D. J. GREENLAND. Selective dissolution and differential infrared spectroscopy for characterization of 'amorphous' constituents in soil clays	241
M. V. EIRISH and L. I. TRET'YAKOVA. The role of sorptive layers in the formation and change of the crystal structure of montmorillonite	255
A. C. D. NEWMAN. Cation exchange properties of micas. II. Hysteresis and irreversibility during potassium exchange	267
G. BROWN and A. C. D. NEWMAN. Cation exchange properties of micas. III. Release of potassium sorbed by potassium-depleted micas	273
J. D. C. MCCONNELL and S. G. FLEET. Electron optical study of the thermal decomposition of kaolinite	279
M. J. WILSON. A study of weathering in a soil derived from a biotite-hornblende rock. I. Weathering of biotite	291
R. L. PARFITT and D. J. GREENLAND. The adsorption of poly(ethylene glycols) on clay minerals	305
R. L. PARFITT and D. J. GREENLAND. Adsorption of water by montmorillonite-poly(ethylene glycol) adsorption products	317
J. M. BRACEWELL, A. S. CAMPBELL and B. D. MITCHELL. An assessment of some thermal and chemical techniques used in the study of the poorly-ordered aluminosilicates in soil clays	325
S. F. HULBERT and D. E. HUFF. Kinetics of alumina removal from a calcined kaolin with nitric, sulphuric and hydrochloric acids	337
Notes	
J. B. LINCOLN, R. J. MILLER and R. TETTENHORST. Random powder mounts from montmorillonite aerogels	347
K. J. D. MACKENZIE. Thermal decomposition of Derbyshire allophane	349
S. SHIMODA. An expandable chlorite-like mineral from the Hanaoka mine, akita prefecture, Japan	352

BLACKWELL SCIENTIFIC PUBLICATIONS  
OXFORD AND EDINBURGH

*Printed in Great Britain by Willmer Brothers Limited, Birkenhead*