Number 7

Changes in the physical and chemical properties of biogenic silica from the Central Equatorial Pacific: Part III, specific pore volume, mean pore size, and skeletal ultrastructure of acid-cleaned samples
David C. Hurd, H. Stuart Pankratz, Vernon Esper, James Fugate, and Henry Morrow 833

Petrochemical investigation of the Shadow Lake piemontite zone, eastern Sierra Nevada, California .................. Mary Keskinen 896

Experimental dehydration of pargasite and calculation of its entropy and Gibbs energy
Henry R. Westrich and John R. Holloway 922

The thermodynamics of cation hydrolysis
C. E. Baes, Jr., and R. E. Mesmer 935

The Hooke imprint on the Huttonian theory ........ Ellen T Drake 963

DISCUSSIONS

Diffusion of seawater ions: significance and consequences of cross coupling effects
Sam Ben-Yaakov 974

Reply ........................................................................................................ Antonio C. Lasaga 981

Magnetic-polarity stratigraphy of Torrejonian sediments, Nacimiento Formation, San Juan Basin, New Mexico ................................................. Costa Tsentes 989

Reply ......................................................... Louis H. Taylor and Robert F. Butler 991