Number 4

Provenance and plate tectonic indexing of lower Paleozoic sandstones, Quebec and Maine......................Frederick L. Schwab 401

$^{40}$Ar/$^{39}$Ar constraints on chronology of Augusta fault zone movement and Late Alleghanian extension, southern Appalachian Piedmont, South Carolina and Georgia
  H.D. Maher, Jr., R.D. Dallmeyer, D.T. Secor, Jr., and P.E. Sacks 428

A chemical and thermodynamic model of aluminous dioctahedral 2:1 layer clay minerals in diagenetic processes: regular solution representation of interlayer dehydration in smectite
  Barbara Ransom and Harold C. Helgeson 449

Magnetization and geochemistry of greigite-bearing Cretaceous strata, North Slope Basin, Alaska
  Richard L. Reynolds, Michelle L. Tuttle, Cynthia A. Rice,
  Neil S. Fishman, John A. Karachewski, and David M. Sherman 485