Synthesis and Characterization of Nanoporous Copolymers with Potential Gas Storage Applications

Xu Zhou

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Chemistry

S. Richard Turner, Chair
Alan R. Esker
Richard D. Gandour
Harry W. Gibson

August 28, 2013
Blacksburg, VA

Keywords: nanoporous polymer, semirigid alternating copolymer, gas sorption, surface area, functionalized stilbene, functionalized maleimide, hypercrosslinked polymer, suspension polymerization, free radical polymerization, mesoporous silica, CO₂ capture.

Copyright © 2013, Xu Zhou