

Supporting information for

Insights into the Pore Structure of KIT-6 and SBA-15 Ordered Mesoporous Silica – Recent Advances by Combining Physical Adsorption with Mercury Porosimetry

Rémy Guillet-Nicolas,^{1,2} Ryaz. Ahmad,¹ Katie A. Cychosz,¹ Freddy Kleitz,^{2*} and Matthias Thommes^{1*}

¹Quantachrome Instruments, 1900 Corporate Drive, Boynton Beach, FL, 33426, USA.

E-mail: Matthias.thommes@quantachrome.com

²Department of Chemistry and CERMA, Université Laval, Québec, QC, G1V0A6, Canada.

E-mail: freddy.kleitz@chm.ulaval.ca

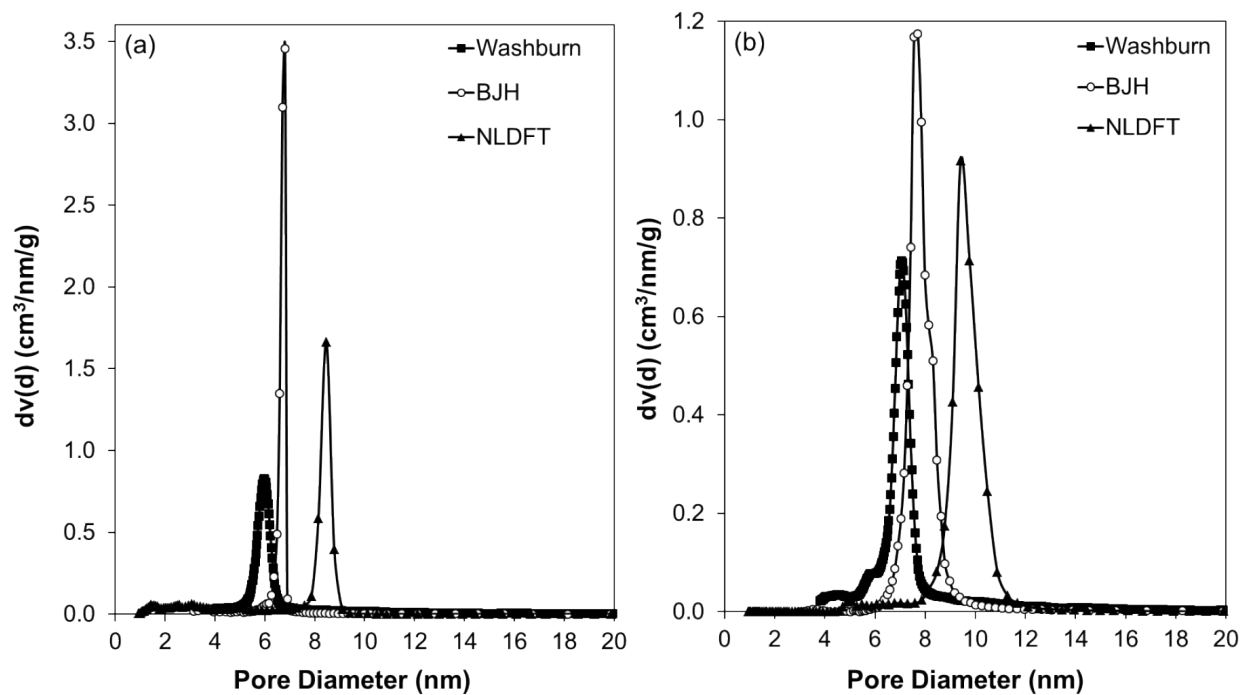


Figure S1. Pore size analysis of KIT-6A (a) and KIT-6B (b) from gas adsorption (using BJH and NLDFT method applied to the desorption branch) and mercury porosimetry (using Washburn equation and calculated for a contact angle of 145 °)

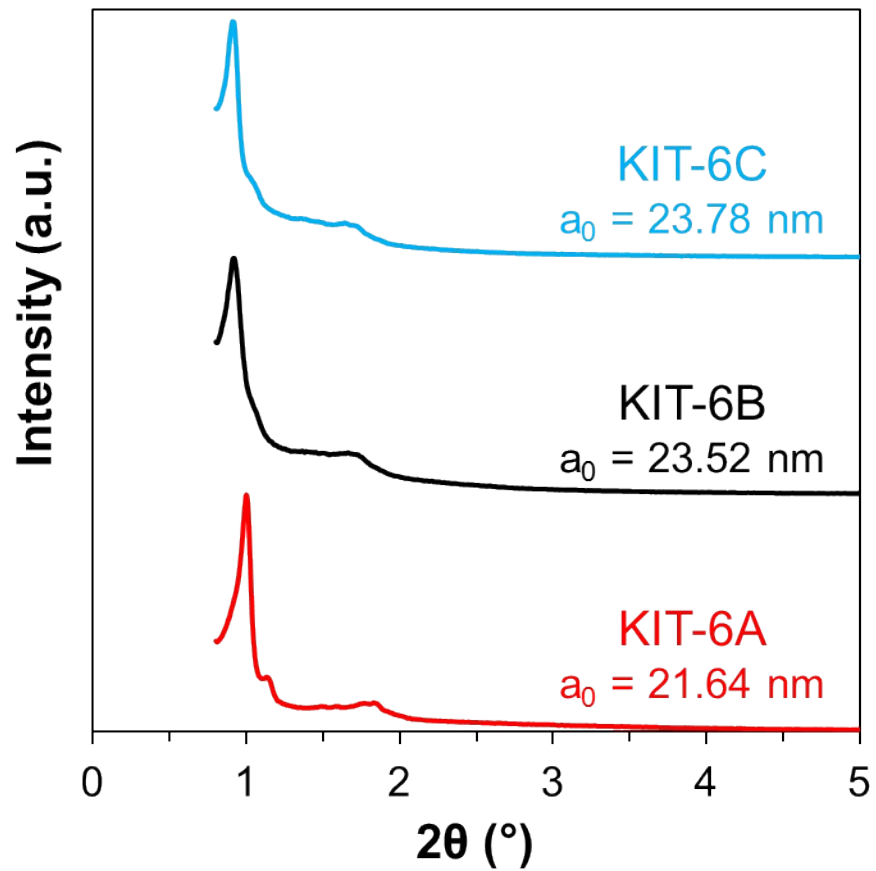


Figure S2. Low angle powder XRD patterns obtained for KIT-6 silica materials with corresponding lattice cell parameter a .

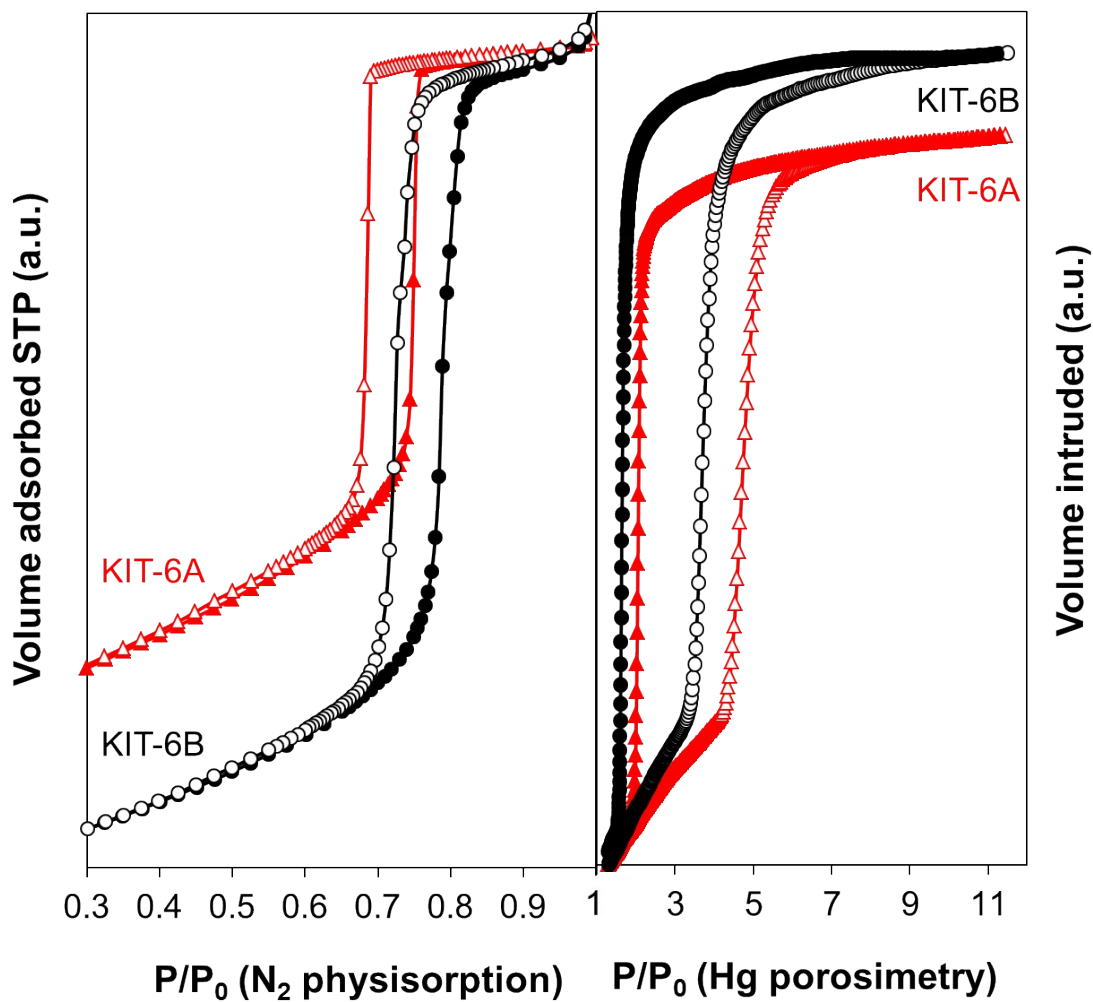


Figure S3. Adsorption (solid) and desorption (hollow) isotherm of a wetting fluid (N₂ at 77 K, left) and corresponding equivalent gas sorption isotherm of a non-wetting fluid (Hg at 298 K, right part) converted from the mercury porosimetry data using Lowell and Shields equation obtained for KIT-6A and KIT-6B.