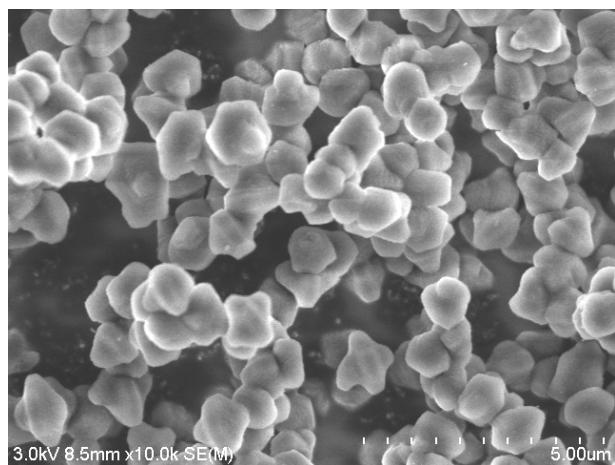


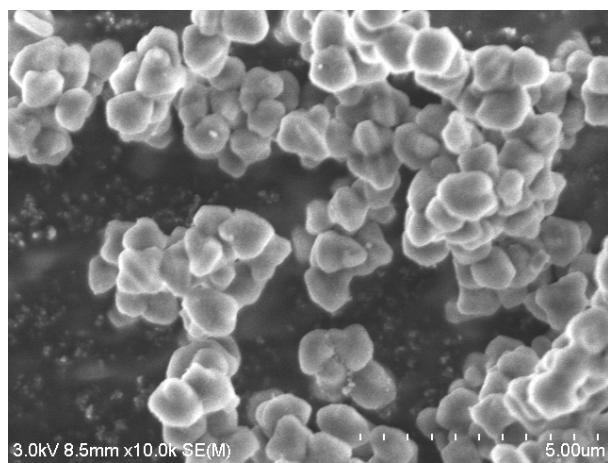
Alkali metal cation doped Al-SBA-15 for carbon dioxide adsorption: Electronic  
supplementary information

Arnošt Zukal, Jana Mayerová and Jiří Čejka\*

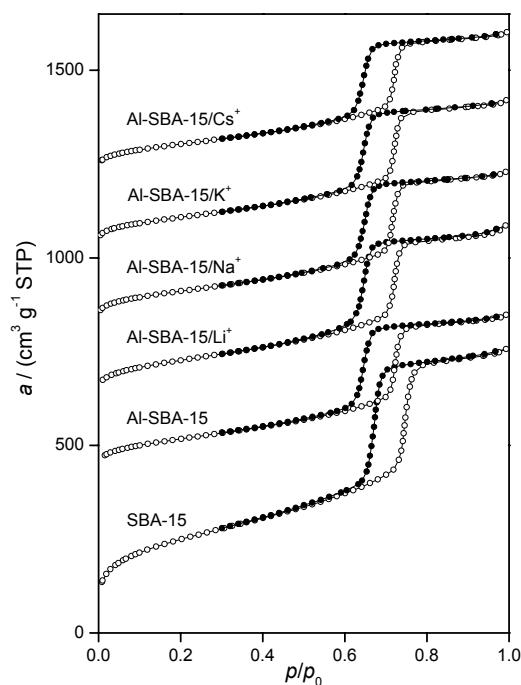
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[jiri.cejkal@jh-inst.cas.cz](mailto:jiri.cejkal@jh-inst.cas.cz)



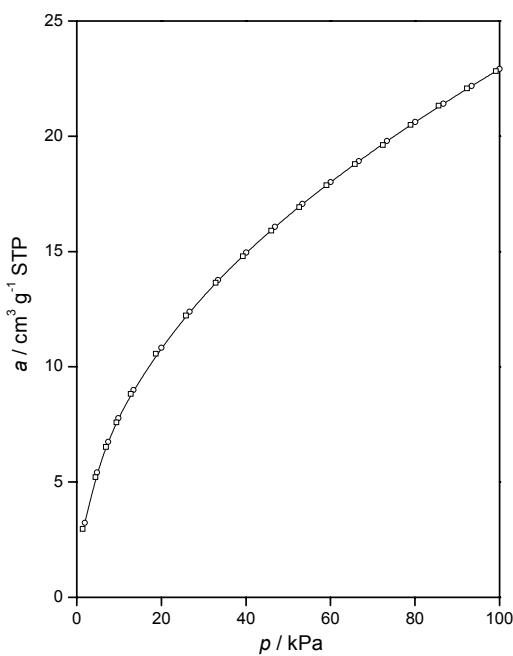
**Figure S1.** Scanning electron image of starting sample SBA-15.



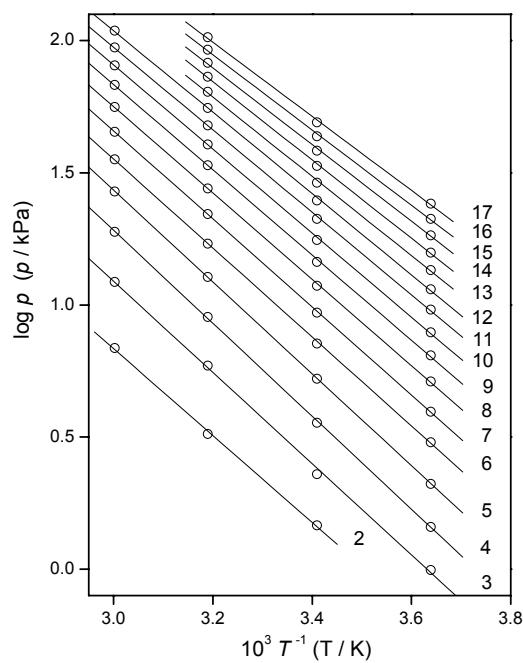
**Figure S2.** Scanning electron image of the sample Al-SBA-15.



**Figure S3.** Nitrogen adsorption isotherms at  $-196\text{ }^{\circ}\text{C}$  for starting SBA-15 silica and modified samples. (The isotherms for modified samples are offset vertically by 400, 600, 800, 1000, and 1200  $\text{cm}^3/\text{g}$  STP.)



**Figure S4.** Adsorption isotherms of carbon dioxide at  $20\text{ }^{\circ}\text{C}$  on Al-SBA-15/Na<sup>+</sup> measured immediately after nitrogen isotherm (○) and after next five adsorption/desorption cycles (□).



**Figure S5.** Adsorption isosteres of carbon dioxide on sample Al-SBA-15/ $K^+$ . Points were calculated by numerical interpolation, lines represent linear fit. All the isosteres are marked with corresponding amount adsorbed in  $\text{cm}^3 \text{ g}^{-1}$  STP.