Supplementary materials

On the Optimization of Ni/A and Ni/X Synthesis Procedure toward Active and Selective Catalysts for the Production of CH_4 from CO_2

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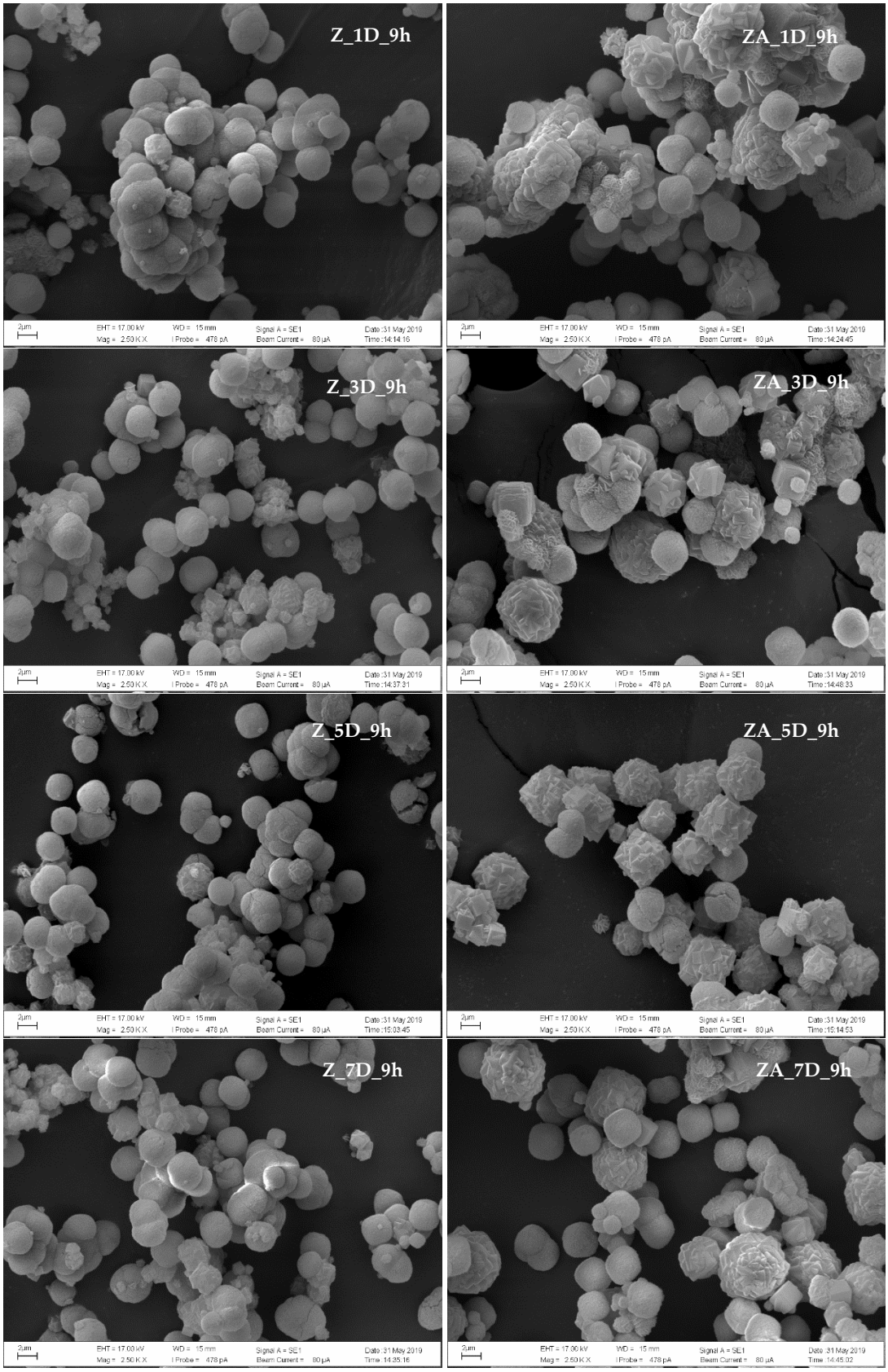

Figure S1 Comparison of SEM images between two kinds of samples; with (right) and without (left) organic substances addition with different aging times.

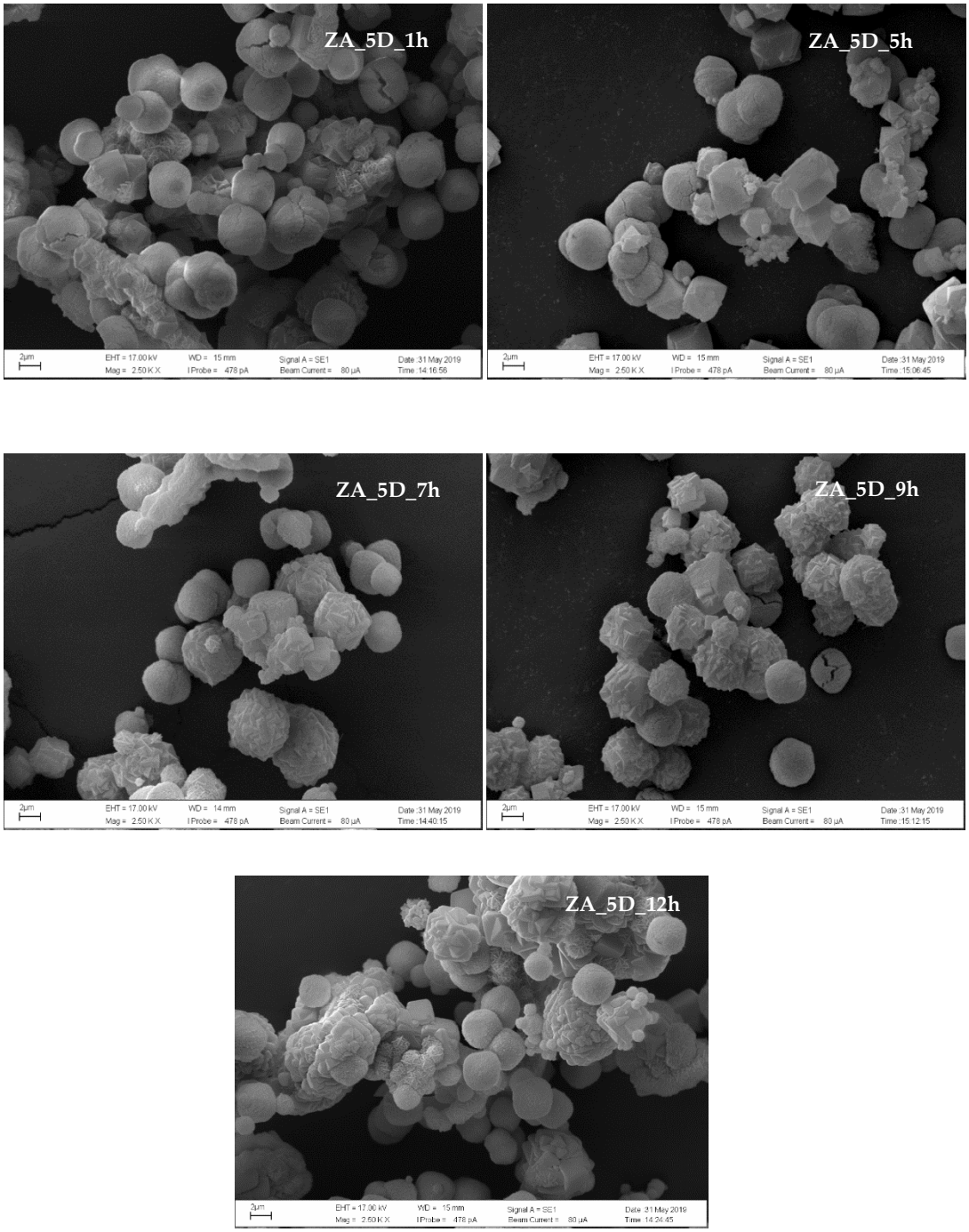

Figure S2 SEM images of zeolites with different crystallization times.

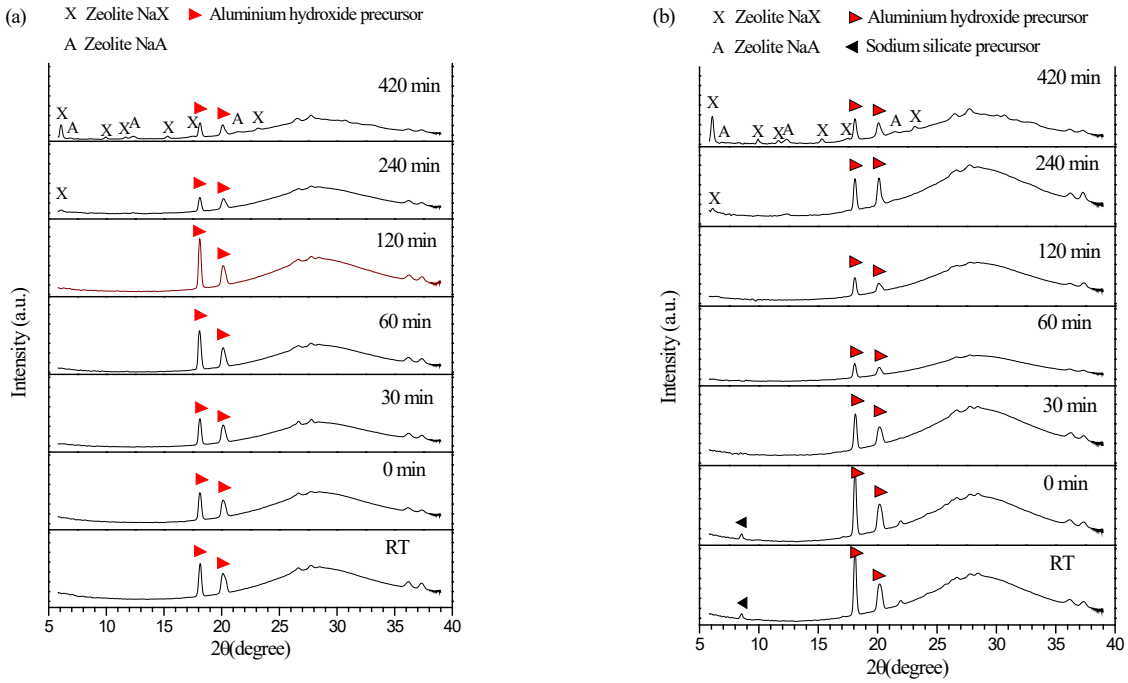

Figure S3 Comparison WAXS spectra of zeolite (a) without and (b) with addition of CTAB and heptane during heating at 100 °C for 7 h.

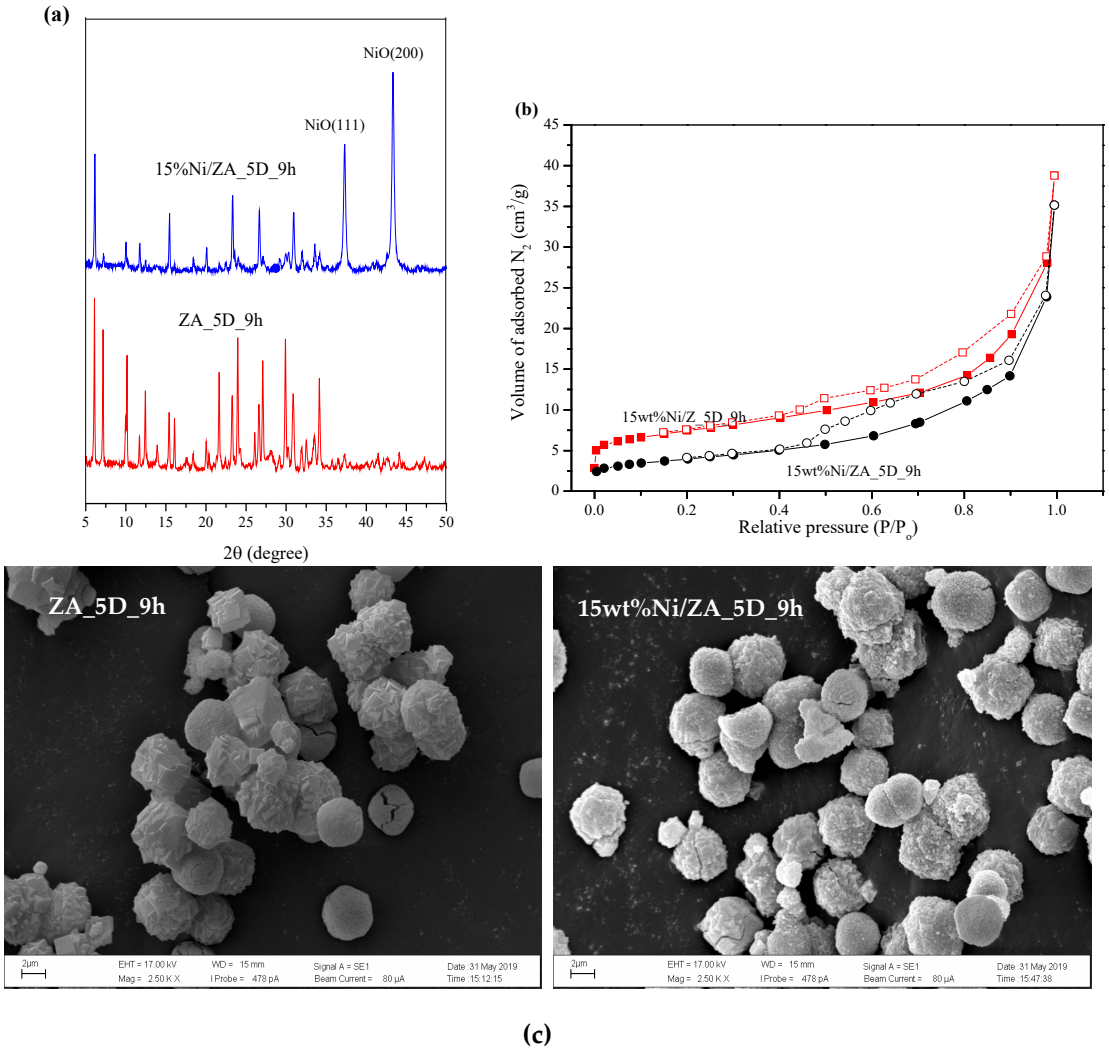

Figure S4 (a) XRD patterns of zeolite support and 15wt%Ni/zeolite (b) N_2 adsorption-desorption isotherms of 15wt%/zeolite with addition of organic phase (ZA_5D_9h) compared with15wt%Ni/zeolite without addition of organic phase (Z_5D_9h) and (c) SEM images of ZA_5D_9h and 15wt%Ni/ZA_5D_9h.

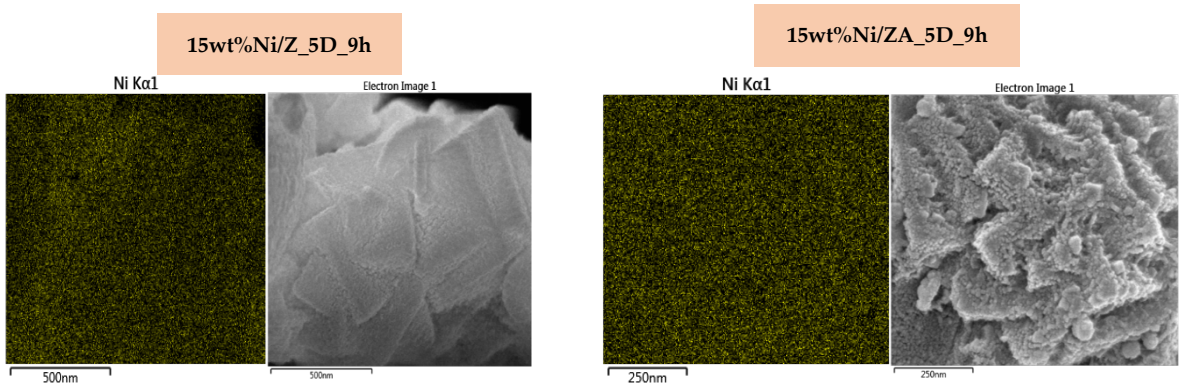

Figure S5 SEM and mapping images of 15wt%Ni/Z_5D_9h and 15wt%Ni/ZA_5D_9h.