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**Base catalytic properties of organoamino-silica hybrids prepared using cashew nut shell liquid components as templates.**

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This work was aimed at finding the catalytic efficiency of organoamino-silica hybrids prepared over some components of cashew nut shell liquid (CNSL) as templates. Cardanol and anacardic acid as major components of CNSL were screened for their efficiency as templates in synthesizing the hybrids. The hybrids were prepared by one-pot co-condensation of three classes of organoaminesilanes and tetraethoxysilane at two differed loading ratios, namely 1:4 and 1:9. The results showed that anacardic acid and cardanol formed about 9.2% and 66.3% yields, respectively. Consequently most hybrids were therefore prepared using cardanol. A few hybrids were also prepared using a mixture of cardanol and dodecylamine, the later being a previously established template. The prepared hybrids were characterized by using HCl acid citation technique, Diffuse Reflectance Infrared Fourier Transform Spectroscopy (DRIFTS) and Atomic Force Microscopy (AFM). Results indicated that the organic group loading ranged between 0.5 to 2.3 mmol per gram of silica, depending on the loading ratio, type of template and nature of the organoaminesilane. On the other hand, DRIFTS results revealed that the organoaminesilyl groups were successfully incorporated in the silica matrix for each category of the template used. Furthermore, by using AFM the grain size average for cardanol templated hybrids were found to be about 0.25  $\mu\text{m}$  wide and those of the co-templated hybrids were about 0.4  $\mu\text{m}$  wide with irregular shapes. The hybrids were tested for catalytic activity in a model Henry reaction, in particular a reaction between benzaldehyde and excess nitroethane. Results showed that 81% to 98% of benzaldehyde could be converted into product within 3h showing that the prepared hybrids are suitable catalysts for the model reaction.