

Properties of Ca-based sorbents under post-combustion process

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Ca-based dry sorbents for carbon dioxide capture technology after combustion is used in a high-speed fluidized layer reactor, a variety of materials for the strength of the sorbents during the design of the sorbents is used as an additive or support. In this study, it was prepared a K₂CO₃-based dry sorbents (KMC) made using the Ca-based support chain Micro-cell C (MCC), studied and investigated the properties of The KMC sorbin. CO₂ absorption of KMC absorbent was 22% of the theoretical value with 21.6 mg CO₂/g sorbent. In order to solve this sorbents deactivation problem, the process of firing the MCC at 850 ° was prepared sorbents. As a result, it showed a high absorption and excellent regeneration of 95.4 mg CO₂ / g sorbent by removing the inactivation causative agent.