Thermochemical Energy Storage process based on zeolite 13X

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Thermal storage systems (TESs), particularly thermochemical storage systems (TCMs), are a promising alternative for harnessing solar energy, allowing energy availability (summer) to be decoupled from its demand in home and non-home heating (winter) [1]. In this context, a TCM process, based on zeolite 13X, also involving the pellets handling, has been experimentally studied. The aim is to evidence the system performances and to understand how these could be influenced by the operating conditions.