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of Silver Exchanged Zeolite Stability for Noble Gas Processes

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Noble gas processes are based on the use of adsorbent materials. Among them, silver-exchanged zeolites are the most efficient for Xe extraction. Before the use of a material in processes, it is crucial to ensure its performance, especially when use in systems operating 24/7. Ag-ZSM-5 (one of the studied exchanged zeolite) is an efficient candidate to enrich Xe, but long term stability seems to remain a topic.

In our study, we assay to elucidate the relation between the structure of the material (Ag-ZSM-5 from different suppliers and synthesis) and the property (xenon uptake and deactivation). In our study, we investigated structure parameters that influence the properties that were already referenced in the literature. We expect the identification of the ideal structure will enable determination of the best adsorbent to use in a process.

Promotional text

Latest insights on the use of silver exchanged zeolites in noble gas processes: structure-property relation.

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Oral preference format

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