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Carbon monoliths as CO₂ sorbents

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Abstract: The paper presents the results of study on the synthesis of carbon monoliths. The hard template method was used in the synthesis, where a silica monolith was applied as a structure scaffold. The obtained monoliths were characterized by a flow structure of macropores and an extensive network of micro and mesopores. The influence of the carbon precursor on the structural and sorption properties was investigated. It was found that the materials synthesized using resorcinol and phenol showed the highest sorption capacity.

Attachments:

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