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Conversion of Fly Ash into Zeolites and Their Application as Adsorbents of Carbon Dioxide

Guest Editor:

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Deadline for manuscript submissions:

closed (20 May 2022)

Message from the Guest Editor

The Special Issue, "Conversion of Fly Ash into Zeolites and Their Application as Adsorbents of Carbon Dioxide", will address novel approaches and the optimization of existing ones for the utilization of coal fly ash from the combustion of coals through its conversion into zeolite-like materials. This Special Issue aims to collect original research papers and reviews on the conversion of coal fly ash into zeolites and their application for CO₂ adsorption. Both experimental and model studies are of particular interest. Articles and reviews dealing with CO2 adsorption at low and high pressures and regeneration of coal fly ash zeolites, adsorption/desorption cycles, elucidation of adsorption mechanisms through thermodynamic studies. kinetic models, studies on the influence of various components included into the coal ash zeolite matrix onto carbon capture potential, and studies on selectivity and capacity of CO₂ adsorption in equilibrium and dynamic conditions are very welcome. Of great interest are publications on dual systems based on coal fly ash zeolites for CO₂ capture and its catalytic transformation to synthetic fuels or chemical products.













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Message from the Editor-in-Chief

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