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# **Adsorption Process in Chemical Engineering**

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## **Message from the Guest Editors**

This Special Issue will focus on, but is not limited to. theoretical and experimental advancements developments related to the process systems engineering of adsorption as follows: the synthesis, characterization, and functionalization of novel multifunctional adsorbents computer-aided design of adsorbent preparation routes; the modeling of batch and continuous multicomponent adsorption systems; the control and optimization of adsorption processes; the design of intensified adsorption processes; computational tools for adsorption process engineering; the industrial design and scale-up of adsorption-based separations; artificial intelligence-based adsorption applications; life cycle analysis; circular-based production and supply chains of traditional and novel adsorbents; and case studies on the applications of emerging adsorbents in environmental depollution processes, industrial separations, energy storage, carbon dioxide capture, and the recovery of value-added products. The authors are invited to submit original research papers, reviews, and short communications.











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