



Low-Pressure Capture Using Ionic Liquids

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue “Low-Pressure Capture Using Ionic Liquids” solicits articles for publication in the MDPI journal ChemEngineering.

This Special Issue aims to compile relevant contributions that study the influence of ionic liquid molecular structures on absorption and diffusion, as well as those that apply ionic liquids for the selective solvated diffusion of gases via supported liquid membranes, gas–liquid membrane contactors, or free surface (i.e., membrane-less) gas–liquid contactors. Computational modeling and experimental manuscripts, as well as comprehensive reviews, are welcome. Significant and new contributions to the molecular dynamics modeling of solvated diffusion through ionic liquids; the development of quantitative structure–property relationships for the prediction of ionic liquid properties and behavior; experiments to report gas uptake, diffusion, and permeance with novel ionic liquids; and the development and scale-up of ionic-liquid-based chemical engineering processes for gas capture from atmospheres at reduced pressure or having contaminants at torr-level partial pressures are particularly desired.

