Special Issue

Novel Solvents and Methods in Distillation Process

Message from the Guest Editor

The distillation process is the cornerstone of chemical engineering, and with the introduction of new solvents and innovative methods, significant progress has been made in the distillation process. These developments aim to improve separation efficiency, reduce energy consumption, and enhance product purity. New solvents, such as ionic liquids and deep eutectic solvents, have unique properties such as low volatility, high thermal stability, and adjustable polarity, which can be used to optimize distillation processes. In addition, methods such as extraction distillation, azeotropic distillation, and pressure swing distillation are being improved to handle complex mixtures and challenging separations. These novel methods not only address traditional limitations but also pave the way for more environmentally friendly and sustainable distillation practices. In this Special Issue, we hope to collect the latest research progress in new distillation technologies and solvent-related fields to promote the development and prosperity of the distillation industry.

Guest Editor

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Editor-in-Chief

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