



Crystallization Process and Simulation Calculation

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Message from the Guest Editors

As an important unit operation, crystallization is a process in which nucleation, growth, agglomeration, and breakage are regulated to produce high-quality crystals and achieve efficient separation as well as purification. Since a crystallization process often presents the characteristics of strong coupling, nonlinearity, and large lagging, it is a challenge to rationally design a robust, well-characterized process to efficiently crystallize and prepare a high-quality crystalline product. The development of process analytical technology that can provide fast and accurate inline or online measurement is of great importance in the design and control of crystallization processes. Simulation technology, e.g., molecular dynamics simulation and hydrodynamics simulation, can provide a time- or location-dependent insight into the process on multiple scales. These experimental and simulation tools can greatly help to further investigate crystallization processes.

This Special Issue serves to provide a platform for researchers to report results and findings in crystallization process technologies, simulation and process analytical technologies, and relevant crystallization studies





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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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