

BMPC and calorimetry analysis for batch cooling crystallization of organic material

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It is difficult to perform a precise temperature control of a batch cooling crystallizers resulting in different productivities every batch. Also it is difficult to gather real time data of solution and crystals of most organic materials. Using BMPC(batch model predictive control) and calorimetric analysis minimizes batch wise difference due to temperature and real time data can be collected in order to predict the solution and crystal conditions. Through calorimetry, overall crystal growth and supersaturation can be roughly estimated and can be useful for industrial crystallizers.