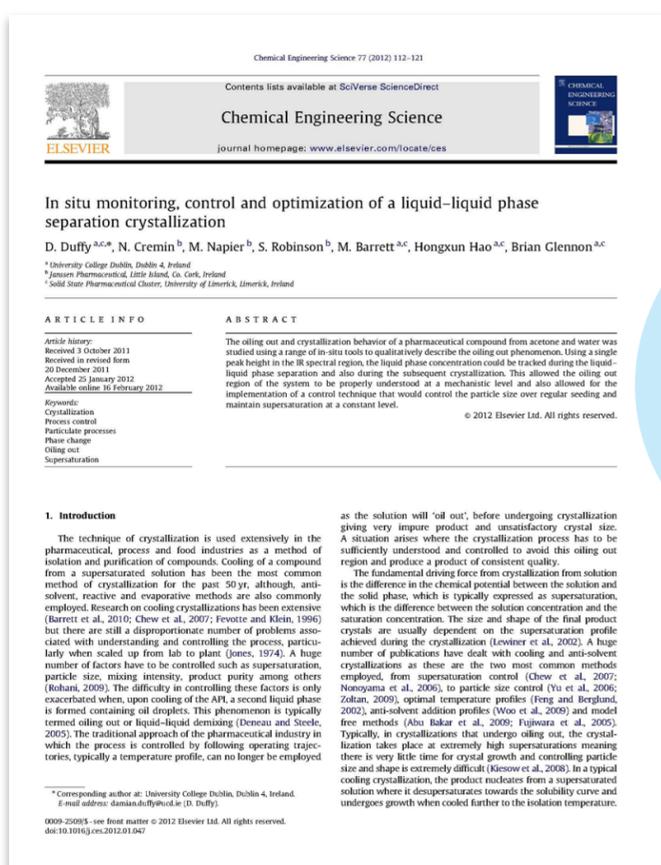


Publication Spotlight

# Janssen Employs PAT to Overcome Oiling Out



The traditional approach of the pharmaceutical industry in which the process is controlled by following operating trajectories, typically a temperature profile, can no longer be employed

as the solution will 'oil out', before undergoing crystallization giving very impure product and unsatisfactory crystal size

prevent oiling out

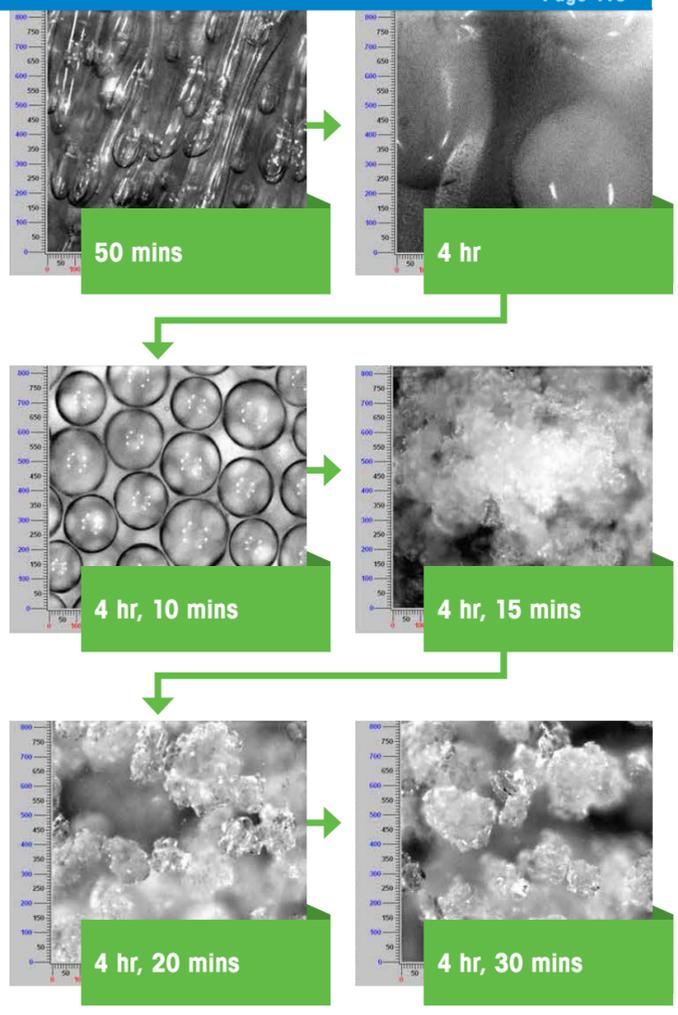
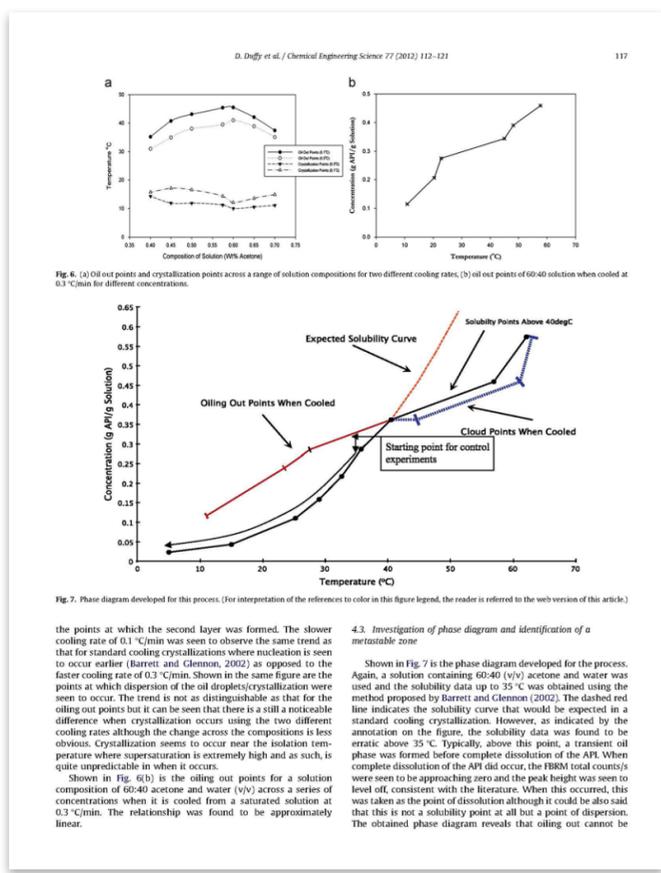
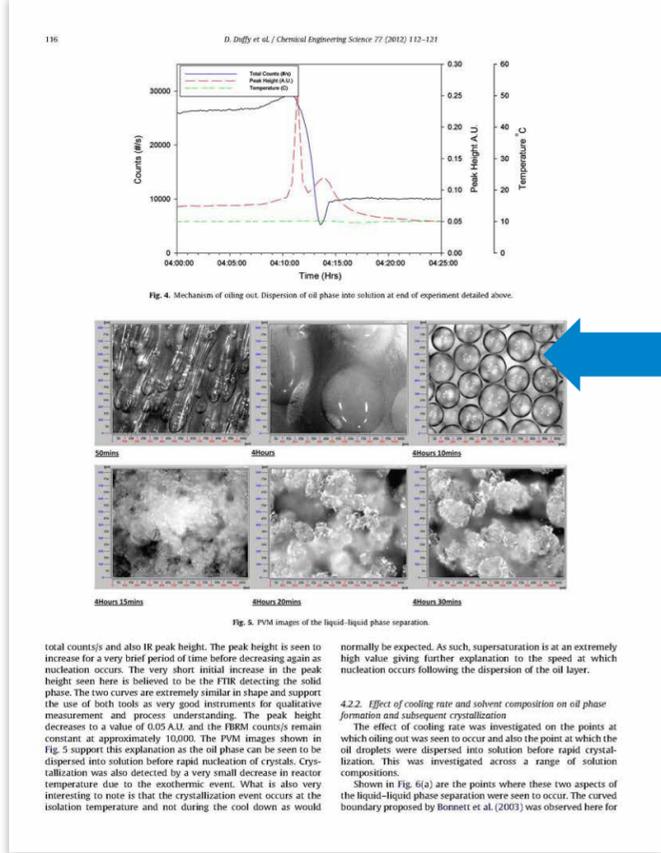
optimize product purity

control crystal size

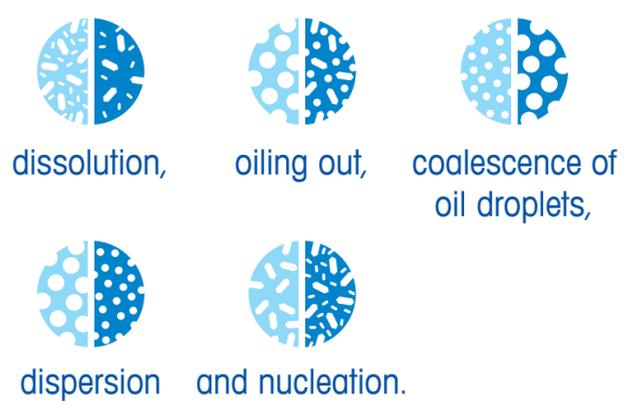
the crystallization process has to be sufficiently understood and controlled to avoid this oiling out region and produce a product of consistent quality

## ParticleView for Mechanistic Process Understanding

PVM [ParticleView] images, from all experiments were used to quantify the effect of different experimental protocols



...PVM [ParticleView] allowed the oil region to be better understood. The process was seen to observe five stages,



This led to the selection of a region where controlled seeded crystallizations could be performed and any undesirable separation could be prevented.

### Featured in this paper:

**ParticleView**  
 ParticleView utilizes real time microscopy and image analysis to help scientists understand hidden crystallization mechanisms and solve challenging problems.