

Particles

There are different approaches to the modelling of particles. CiT offers several options by considering particles as entities built-up by discrete units (usually monomers, see Predici) or described in terms of continuous quantities (diameter, masses, volumes). The common framework of both fields is given by means of population balances.

With PARSIVAL the following applications already have been treated:

- Crystallization processes
- Dispersion processes
- Precipitation reactions
- Mill characteristics
- Aerosol modeling
- Polymer particles
- Nanostructures
- Bio pellets

Obviously, the modelling of particles and disperse processes does not end after picturing a reactor within sufficient accuracy. Parameter estimation, identification of kernels, optimization and optimal and online control should follow and are supported by CiT's products.