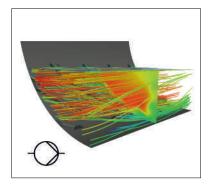
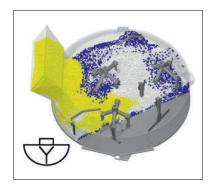


# **Process Simulation**



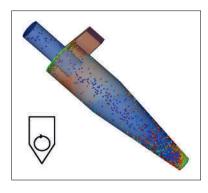
### Conveying - Fluid Simulation

- Modelling of the behavior of fluid media
- Analysis of the mixing behavior of viscous materials
- Examination of dispersed particles/bubbles
- Free surface simulations



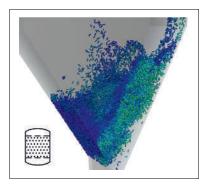
#### Mixing - Particle Simulation

- Description of the static and dynamic behavior of granular materials
- Influence of the particle shape onto the overall particle flow
- Resolution of particle collisions as well as particle breakage



## **Separation – Coupling Approaches**

- Modelling of special physical properties of dispersed flows
- Analysis of mixing behavior and separation processes
- Representation of particle laden and aerated fluid flows
- Combination of multiple simulation approaches into one common model



### Transfer - Multi Scale Simulations

- Integration of additional models representing relevant subprocesses (e.g. drying or catalytic reactions)
- High-resolution calculations of thermodynamic processes
- Modelling of interphase mass and energy transport



#### IAB Weimar gGmbH

Über der Nonnenwiese 1 99428 Weimar

**Dr.-Ing. Justus Lipowsky**Head of Department
Simulation

- 3 +49.3643.8684-156
- +49.3643.8684-113

j.lipowsky@iab-weimar.de www.iab-weimar.de