



## **Laser Diffraction**

## What is it used for and why important?

- ☐ For measuring PSD (Particle Size Distribution) in order to check does

  Powder flow or how quickly does it dissolves
- □PSD influences the properties of powder, and the domain of application
- □PSD measurement not enough on its own the results must be coupled by other techniques to correctly interpret and use the measured PSD:
- microscopy, X-ray powder diffraction, surface area measurement –
   chemical composition analysis

## **Basics**

- □Particles scatter light with Intensity pattern that is dependent on particle size
- ☐ It consist of: 1-laser 2- dispersion device 3-detector 4-computer
- ☐ Assuming spherical shape of particles



