Ultra-pure nano-colloids
For all needs

Au Pt Au/Pt Ag Ru Pd Cu Zn X

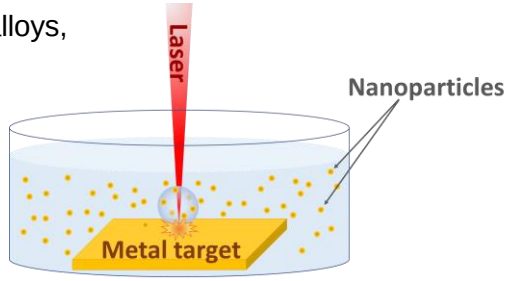
# NANO-Colloids

## Ultra-pure nanoparticles via laser ablation

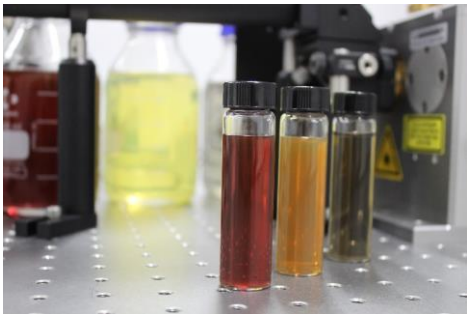
Laser ablation is a physical process used to generate nanoparticles. It involves the use of short laser pulses focused on a target material placed in a liquid environment. The target absorbs the energy from the laser and is vaporized. The vaporized material then cools down and condenses into spherical nanoparticles. This results in highly charged particles that are therefore highly stable without the need, in most cases, of any type of chemical stabilizer.

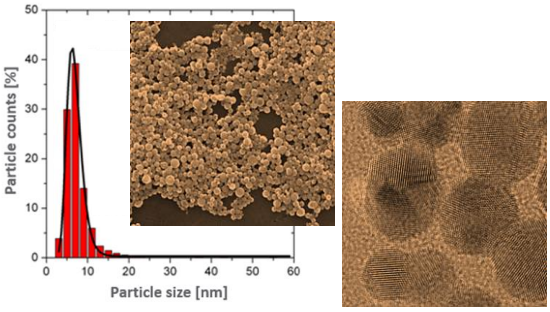
## Advantages of laser-ablated NPs

- Ultra-high purity
- Broad choice of materials (pure elements, alloys, special stoichiometric compositions)
- In water or organic media
- Selection of capping agents
- Easy to functionalize.
- Highly active surface
- Safe and non-toxic
- Long shelf-life (>1 y)




The use of short laser pulses allows to carry out the nanoparticle synthesis process in a wide range of liquid carriers, including volatile organic solvents. It allows the conversion of almost any solid or powder material into a colloid with nearly **endless material-liquid combinations** and is therefore a powerful technique for material screening and individual applications.






Thanks to ultra-high purity, RHP nanoparticles are the ideal choice for a broad range of applications, including **medical/pharma**, **sensors**, **catalysis**, etc.

**RHP-Technology GmbH**
Austrian Research Center
2444 Seibersdorf, Austria
+43 (2255) 20 600
info@rhp.at
www.rhp-technology.com