

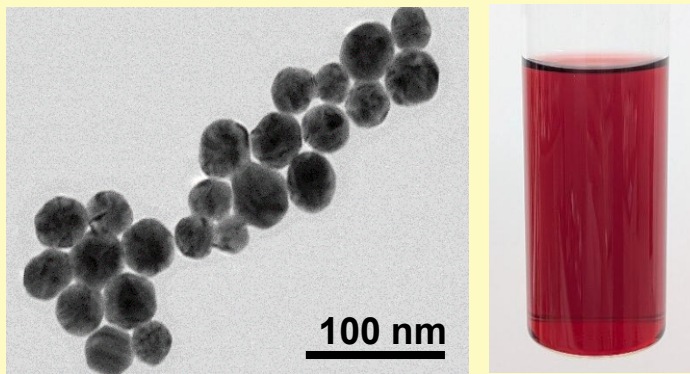
# The Mystery of Nano —Does Shape Influence Color?—

Department of Applied Chemistry, Chemical Engineering and Biomolecular Engineering  
Dr. Kanako Watanabe (TEL: 022-795-7240, e-mail: kanako.w@tohoku.ac.jp)

Nanoparticles, materials with a diameter smaller than 100 nm, have unique optical properties different from bulk materials. We are going to synthesize gold nanoparticles with different shapes using chemical reactions. Through the experiments and lectures, we will design nanomaterials with functional properties.

For instance, nano-sized gold particles have the following properties:

Spherical gold nanoparticles



Particle dispersion is red.



What happens when we change the shape of gold nanoparticles?