

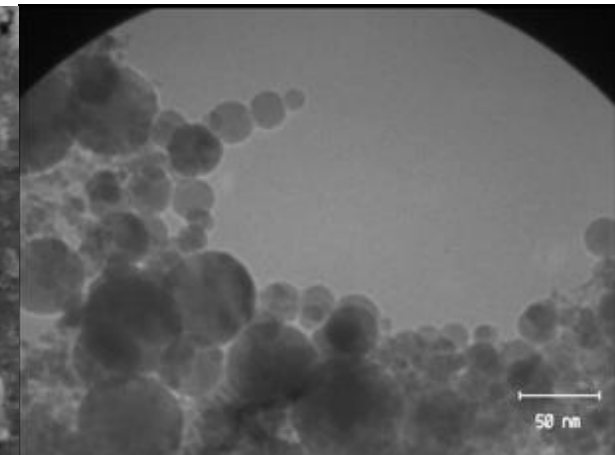
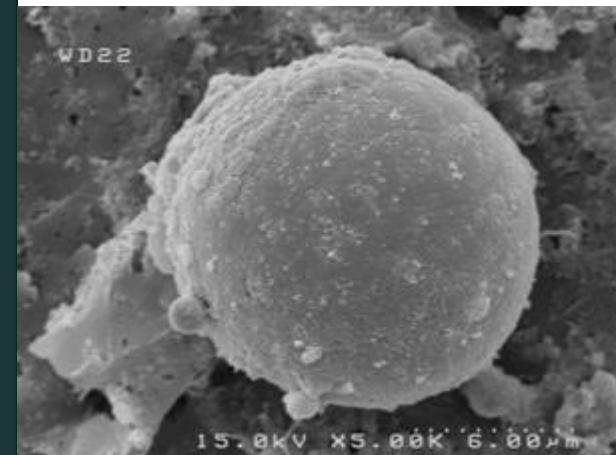


Plasma Nano Colloid maker (PNC) machine

January 2014



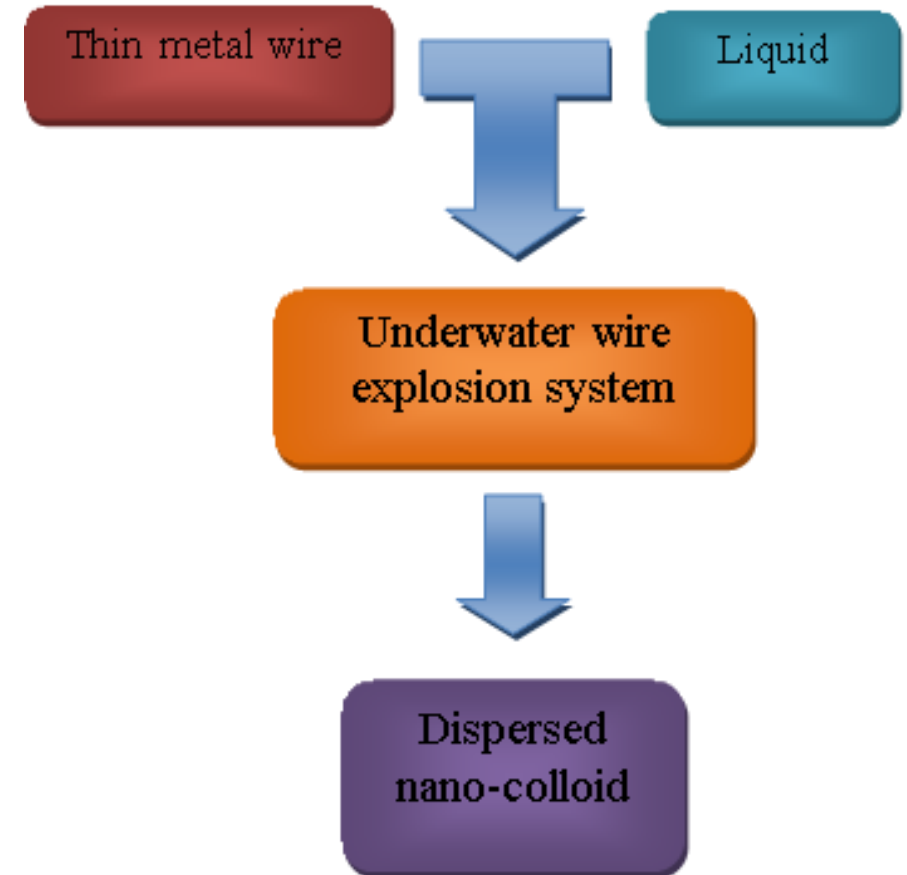
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EEW method for producing metallic nano colloids

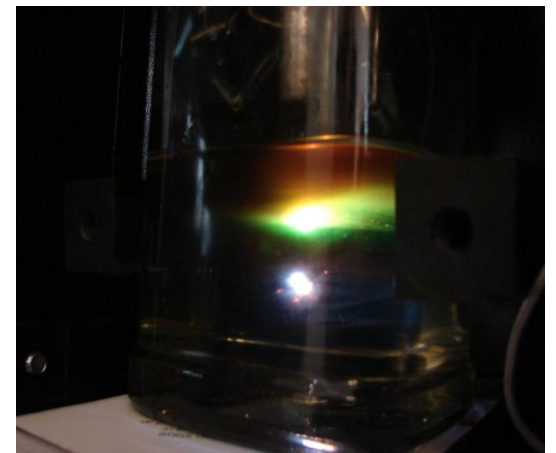
In **EEW (Electrical Explosion of Wire)** technology by using of extra high electric voltage and current, the primary wire is converted into nano particles via under liquid wire explosion process.

In this method, any type of thin conductive wire can be transformed into nano particles.



Advantages of under liquid EEW method

- Ability of producing a wide range of metallic nano-colloids which can be provided in thin wire shape.
- A wide range of liquid media including Water, Oil, Glycerin and etc can be applied
- Excellent dispersion of Metallic nano particles in related liquid.
- Ability of producing in laboratorial scale with different concentrations.
- Environmental friendly.
- High productivity.



Plasma Nano colloid maker machine

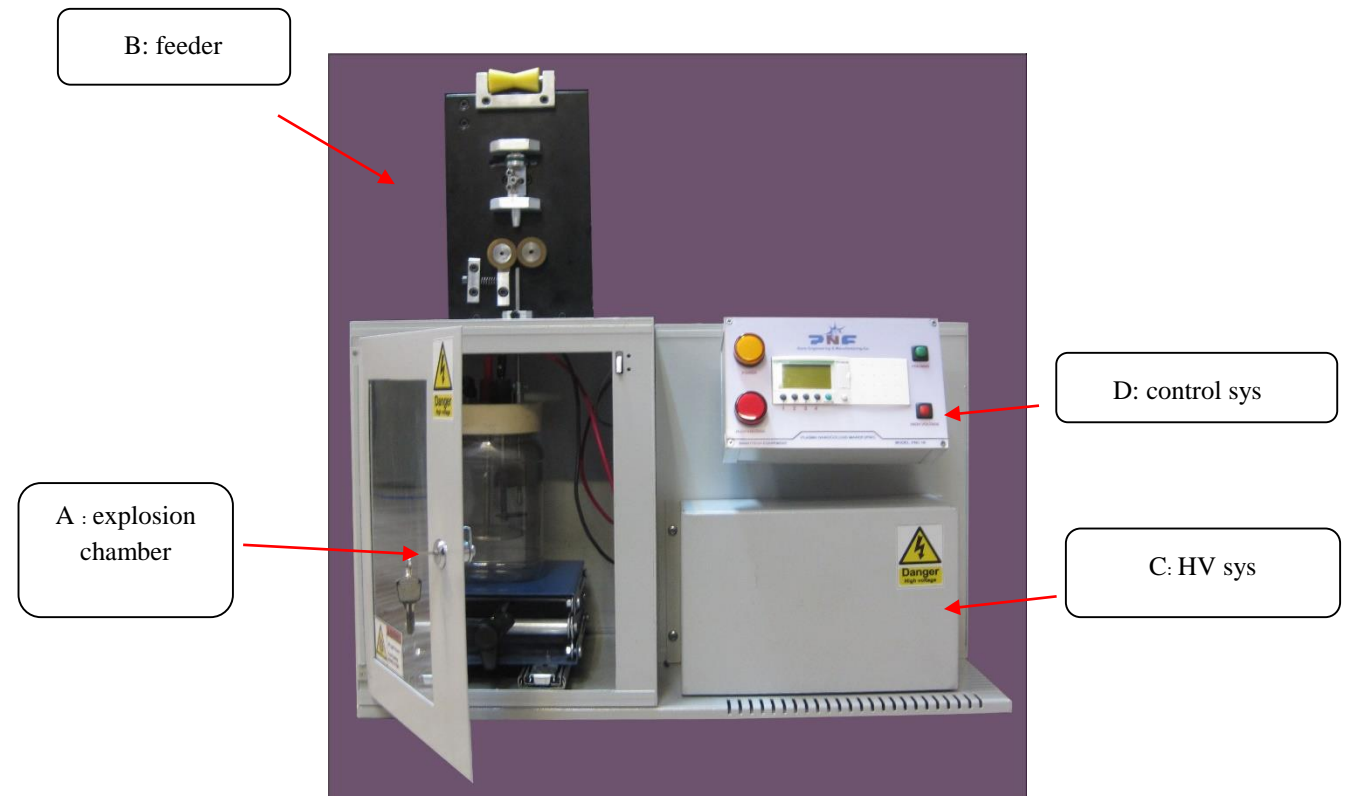
PNF Co. is developing the new method to produce metallic nano colloids under liquid wire explosion.



Components & technical specifications

- Chamber & its accessories
- Feeding system
- HV power supply system
- Control & monitoring system

MODEL		PNC1k-C
Output voltage		300-700 V DC
Input power		1P 220VAC 500 W
Shot period		5 sec
Wire	Max. diameter	0.20mm
	Exploding length	2 cm
Input wire		any conductive metal
Particle size, average		10-50nm
System weight		25 kg



Products

Different range of nano colloids for various applications in laboratory production such as:

Ag nano colloid in water, Glycerin

Cu nano colloid in water, oil & glycerin

Fe nano particle in water

Au nano colloid in water

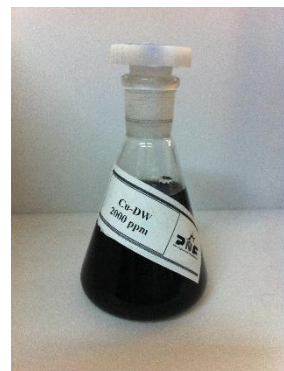
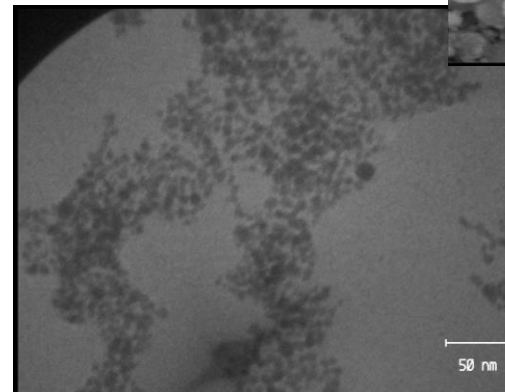
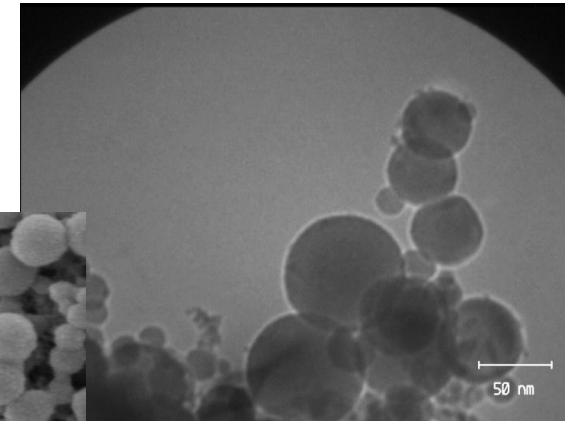
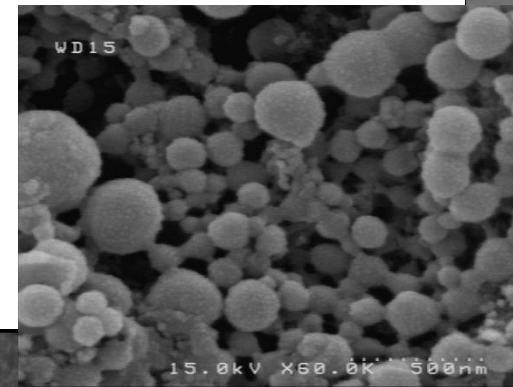
Molybdenum nano colloid in water

Brass nano particle in water

Nickel nano colloid

Tin-Cu alloy nano particle

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Products

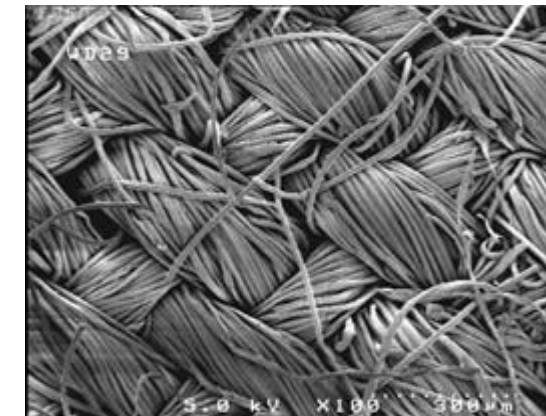
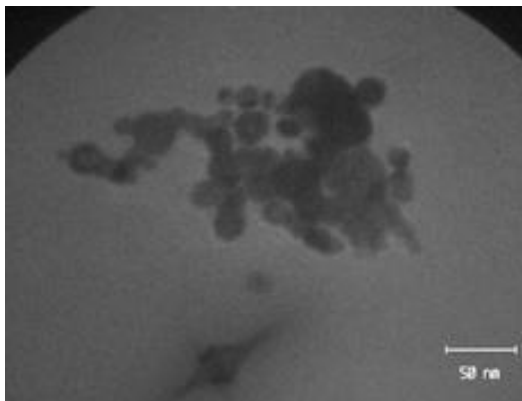


Final products

Silvermax:
antibacterial liquids and silver ink & paste

Oilmax:
nano additive for engine oil

Coolmax:
nano additive for auto cooling system and tooling machine



Applications

Nano Gold

- Cancer treatment
- Bacteria identification
- Enzyme identification
- Drug carriers
- Food additives
- Cosmetics additives

Nano Fe

- Waste water treatment
- Ferro Fluids

Ni-Cu

- Lubricant additives

Nano Copper

- conductive coatings
- conductive inks & pastes
- Facial spray
- Lubricant additives

Nano Silver

- Antibacterial applications
- Conductive inks & pastes
- Conductive coatings
- Medical care