

**PLASMA DIAGNOSTICS AND TECHNOLOGIES SRL**

**SEDE: via Matteucci, 38/D - 56124 PISA (PI)**

**CAPITALE SOCIALE: Euro 10.000,00 i.v. - Registro delle Imprese di Pisa – Codice fiscale 02017030509**

**Società in liquidazione volontaria**

**ASSETS PD&T**

Plasma Diagnostics & Technologies (PD&T) is now closing the activity and selling all the assets.

Born on 2011, included as spinoff of University of Pisa, Italy, the initial core- business was based on the realization of spectroscopic and interferometric systems on demand to measure relevant parameters in plasmas and gases, such as density and temperature. Furthermore, the activity was extended to the production of nanoparticles by laser ablation from solid targets, either metallic or dielectric in different solvents.

ASSETS for sale.

Patents:

- Italian Patent B30/0440 “Metodo per la produzione di colloidi contenenti nanoparticelle”  
“Method for producing colloids comprising nanoparticles”

Patent deals with an original method to produce nanoparticles of controlled size, distribution and purity. Nanoparticles produced by this method fit requirements for medical applications because of low toxicity compared with those produced by chemical methods. Nanoparticles can be produced from metals such as Ag, Au, Pd (mainly metallic for H storage), Ti in the TiO<sub>2</sub> molecule and controlled crystalline phase, Fe leading to magnetic nanoparticles and from dielectrics such as Si.

Extension to other countries should be submitted within May 17, 2017.

- PD&T owns 15% of a patent “Diagnosi e terapia termoablattiva del melanoma con nanoparticelle”. Patent deals with the use of Gold nanoprisms, absorbing in the region of blood transparency window, for thermoablation of melanoma cancer cells.

International Patent pending (presented April 2017)

Instruments:

- Oscilloscope Tektronix MDO4054B-3 – 500MHz, 4 Channels, 20M, 2.5GS/s +  
Spectrum analyzer 3GHz + 16 digital channels
- UV-1800 UV VIS Spectrophotometer and USB KABEL 2.0 ST(A)-ST(B) 2,0M  
SHIMADZU ITALIA SRL
- Minute material for chemical lab (PH meter, Autoclave pressure vessel, Heating magnetic plate with temperature control)

Hardware and software

- Production system including laser focusing optics, on-line monitor of concentration and nanoparticle quality from the absorbance. The set-up is compatible with any kind of pulsed laser and designed for operations h24/7.
- All the operations can be set through a LabView Interface. A Mie fit program allows to carry out the relevant parameters in sequence with production and/or offline.

For more details and quotations contact [f.coli@plasmatech.it](mailto:f.coli@plasmatech.it)