Molecular Plasma Group

Gaston Geenslaan 1
3001 LEUVEN
België
Contact: Gill Scheltjens
Aantal medewerkers: 11-50

T: +32478417885
E: science@molecularplasmagroup.com
I: www.molecularplasmagroup.com

Contributing to a better world by innovation

Why MPG

We contribute to a greener and more sustainable world by revolutionizing surface modification with our Molecular Plasma Technology. MPG's mission is to bridge the gap between research and industry, and to bring clarity in the field of atmospheric plasma processing.

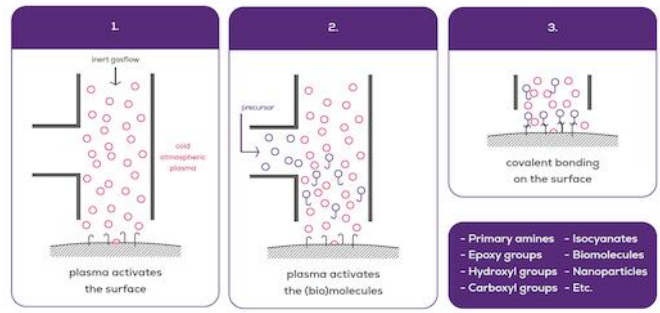
From R&D to industrial implementation

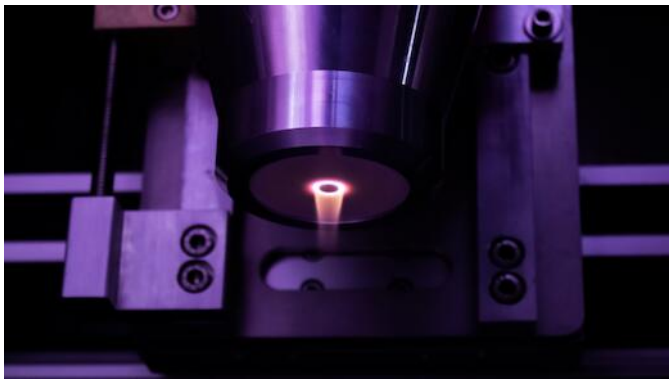
Your state-of-the-art, innovative research using our core technology is guaranteed to result in robust and reproducible solutions. We ensure industrial scalability and valorization of applications that are fully developed or owned by our customers or partners.

The magic that matters

MPG is a full-service provider, designing, constructing and servicing equipment ranging from lab systems for universities and R&D centres to fully commercial solutions. At MPG, we value support through advanced trainings, webinars, and hands-on workshops at our plasma facilities located in Belgium (Leuven) or Luxembourg (Foetz).

Molecular Plasma Principle





KEY APPLICATIONS

- Adhesion between difficult-to-bond materials: teflon, carbon fibre, polyolefins, gold,…
- Instant biomolecule immobilisation: antibodies, peptides, proteins, DNA,…
- Non-stick release coatings
- Anti-biofouling coatings
- Antiviral & antibacterial coatings
- Fibre & powder treatment

OUR MACHINES

- PlasmaKIT
- PlasmaSpot MINI
- PlasmaSpot MAXI
- PlasmaPowder
- PlasmaLine

Versatile

The MPG technology allows an extremely wide range of precursor molecules (e.g. organic, inorganic, biomolecules, antibacterial, antiviral, nano-particles,…) onto any type and shape of substrate.

Single-step process

The surface functionalization is performed in a single step, dry process. No drying time or incubation is required afterwards. Ease-of-use and safety are key.

Permanent

A plasma coating is achieved by combining the atmospheric plasma and (in)organic chemicals. The plasma activates the surface and the molecules to create a permanent covalent bond between both.

Eco-friendly

No solvents are required for the plasma deposition process. The typical consumption rate of chemicals is easily 100 times less compared to conventional coating methods.

Readily scalable

The plasma deposition takes place at atmospheric pressure and temperature, making it easy to implement and easy to scale.