

Nano changes everything.

AN INDUSTRY UPDATE FROM



EVÖQ nano

Allo-whats? α-luh-trowps. In chemistry, allotropes are defined as different structural forms of a single chemical element. Allotropism refers to different forms of pure chemical elements. These result from the different ways atoms can bond to one another. The 19th century Swedish chemist Jöns Jakob Berzelius proposed the concept of allotropy in 1841. The word “allotropy” comes from the Greek word *allotropia*, which means “changeableness.” Allotropes undergo a process – usually chemical, under high pressure, or high energy sources - to generate a different version of the source element bonded together in different ways.

CARBON ALLOTROPES

Carbon forms allotropes, each with different characteristics than the source:

- Diamond – a tetrahedral lattice
- Graphite – sheets of hexagonal lattices
- Graphene – two-dimensional honeycomb lattice

IRON ALLOTROPES

Iron forms allotropes, each with different characteristics than the source:

- α-Fe or ferrite – body-centered cubic
- γ-iron or austenine – face-centered cubic
- δ-iron – body-centered cubic

Carbon is the universal building block of life as we know it. Diamond and Graphite are allotropes of Carbon formed under high pressure. Comparing Carbon, to Diamond, to Graphite demonstrates the different characteristics of Carbon allotropes. We wouldn't go to the Smithsonian Institution to see the Hope Graphite or sharpen a #2 diamond pencil to fill out a form. Allotropes each have unique characteristics, benefits, and uses.

EVÖQ Nano uses a patented high-energy laser process that generates a consistently sized, smooth silver nano allotrope named EVQ-218 that has proven efficacy killing bacteria and fungi with no Antimicrobial Resistance (AMR). EVQ-218 is non-ionic, stable without capping agents or surfactants. This combination of unique attributes makes EVQ-218 antimicrobial in applications ranging from broad spectrum antimicrobial therapeutics to medical devices to textile and surface treatments.

Nano changes everything. With 39 patents awarded, 39 patents pending, 10 years of research and development, EVÖQ Nano is Limitless Discovery with Revolutionary Results.