

JBS Group of Companies are based in the USA and UK. We have a nanotechnology division specializing in the commercialization of a wide range of Nanoparticles and innovative 5<sup>th</sup> dimensional technologies.

One interesting element to materials on a Nano scale, contrary to popular belief, is that size really does matter.

When familiar materials are reduced to Nano proportion's they begin to develop odd properties. For example, plastics can conduct electricity, gold particles can appear red or green and solids can turn into liquids almost spontaneously at room temperature.

At the Nano scale, substances may behave differently or better compared to the same substances at macro sizes. Substances can become super-elastic, physically stronger or weaker, able to cope with vast changes in temperature and pressure and become more chemically reactive.



### **Nano Particles in Wallboard**

Product is Anti Fungal, Anti Bacterial, Hydrophobic, Oil & Chemical Resistant, Fire Rated for 2 Hour Duration, Moisture Resistant. Two-Sided Low Thermal Signature.

Nano particles are a green product and meet the specifications of UL 752 choke test.

### **Benefits**

10% to 20% increase in structural integrity.

50% reduction of manufacturing cost.

Allows use of one board rather than two boards for fire rating.

40% to 80% higher R Value – **First to Market.**

Wallboard insulated, anti bacterial with sound insulation – all in one.

Reduced screw attachment failure due to Hydrophobic Properties.

Reduced plaster bonding failure due to the new Nano Stranded structural qualities.

Reduced claims of paint and mould failure.

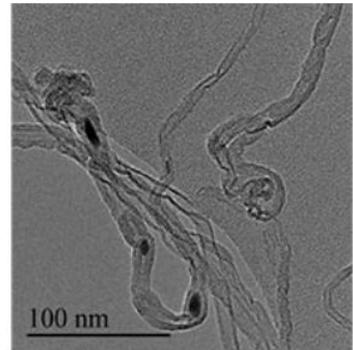
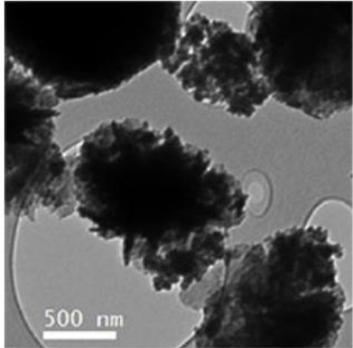
Delivering safe Nano solutions on a global scale with over two decades of R&D in the field of nano technologies.

Patented solutions.

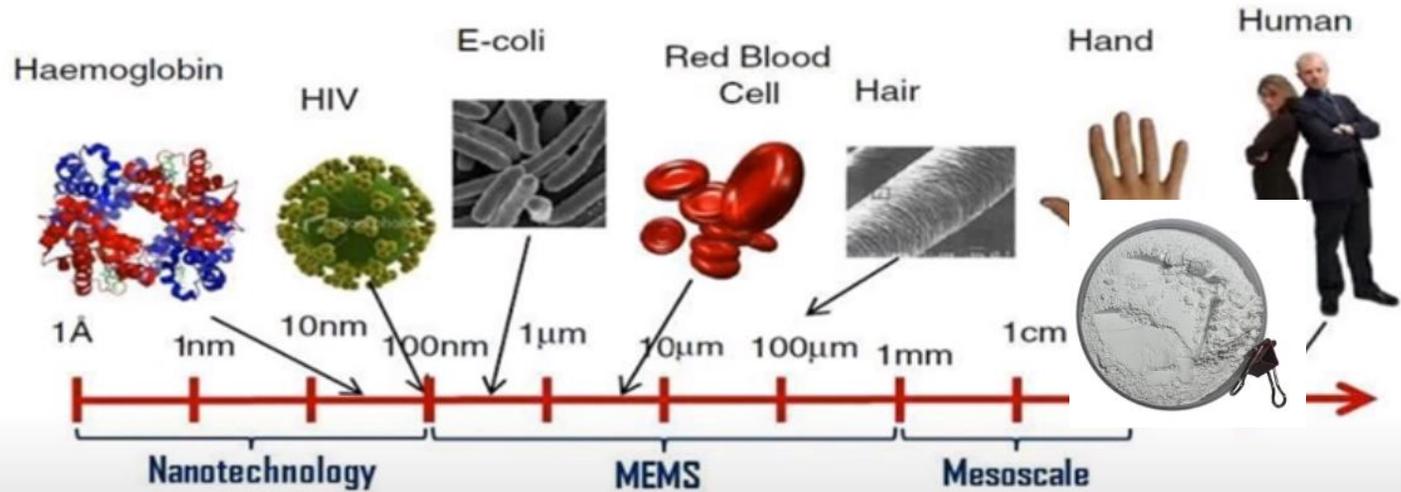
We also design customized solutions based on the individual need.

JBS patented processes make nano technologies economical, effective and accessible to a wide range of industries.





## What are nanomaterials?



- 1-100 nm in at least one dimension
- Comparable to molecular scale

Nano coatings are applied by spraying or dipping and adhere to various surfaces such as glass, metals and various alloys, copper and stainless steel, marble and stone slabs, ceramics and tiles, textiles and plastics.