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Press Release

1992 discovery establishes path to IF-WS2 success

Inorganic Fullerene-like Tungsten Disulphide particles boost performance of lubricants

There is proven science behind the Inorganic Fullerene-like Tungsten Disulphide (IF-WS₂) particles that add value to the total fluid management services provided by Techenomics.

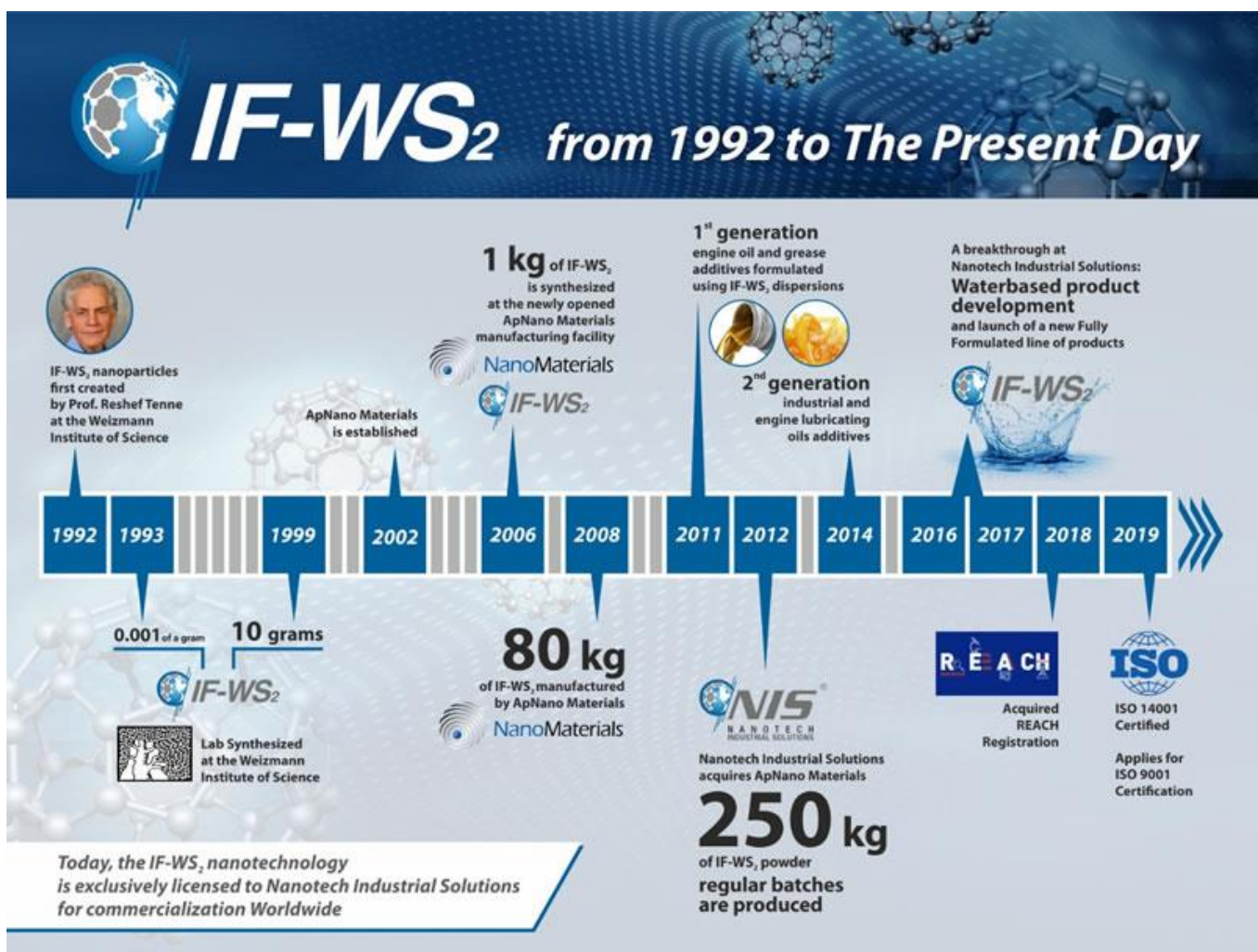
The nanotechnology science that has been proven by IF-WS₂ developer Nanotech Industrial Solutions (NIS) and Techenomics in ongoing tests, trials and case studies, is based on the 1992 discovery by Professor Reshef Tenne of inorganic multi-layered submicron fullerenes.

This discovery at the Weizmann Institute of Science, a world-leading science institute responsible for six Nobel Laureates, led to Professor Tenne receiving the Materials Research Society (MRS) Medal.

Techenomics distributes the IF-WS₂ products throughout its network and is also exclusive global mining distributor. As such, Techenomics customers benefit from Professor Tenne's discovery that has been enhanced by one of the world's most advanced nanotechnology companies in Nanotech Industrial Solutions Corp.



CHRISTOPHER HARRY ADSETT
CEO OF TECHENOMICS





In 2012 NIS acquired NanoMaterials Ltd (aka APNano). This private nanotechnology company has developed, manufactured and sold unique lubricant nanomaterials for automotive, mining, marine, aerospace and other industries since 2002.

Since 2012 NIS has attracted the best minds in the fields of nanotechnology, chemistry and various targeted industry applications like lubricating oils, metalworking fluids, polymers, and coatings.

This work has resulted in NIS having an exclusive licence to manufacture, commercialise and sell a new class of nanomaterials all based on the original inorganic multi-layered submicron fullerenes discovery. The tungsten disulphide based nanomaterials have opened up a world of new possibilities for developing extreme performance lubricants and polymer composites.

This nanotechnology was instrumental in the development of NIS' award-winning IF-WS2 Formulated family of Extreme Pressure (EP) Anti-Wear (AW) and Anti-Friction (AF) lubrication additives. Today, the NIS international team of scientists continue extensive research and testing for additional IF-WS2 based applications in the field of lubricants, coatings and polymer composites for the metalworking, mining, aerodynamics, space and defense industries.

Unlike many other additives, the science of IF-WS2 sees the particles interact with surfaces at the points of contact in a unique combination of mechanisms. They don't react with the surface, like most conventional EP or AW additives, and don't interact with the sliding surfaces in the same way as legacy solid lubricants.

The multiple mechanisms of sliding, rotation, exfoliation and compression make IFWS2 particles truly unique and important to all lubricants, enabling them to perform better for longer in various applications.

NIS has research & development facilities on different continents, including a full tribology laboratory, oil, and grease blending development techniques labs, coating labs and analytical support services. The production sites have bulk reactors for producing inorganic fullerene-like powders in large quantities and equipment for blending the powders into dry or wet formulations for commercial batches.



SOLVE YOUR LUBRICATION PROBLEMS
We will test your oil with an appropriate WS2 additive to provide you with the relevant information to reduce your fuel consumption and lower your engine wear! Click here for more...

The ongoing development of Professor Tenne's Nobel-winning discovery has seen NIS become the world's only commercial manufacturer of submicron spherical particles of Inorganic Fullerene-like Tungsten Disulphide (IF-WS2).

On the occasion of the seventh anniversary of NIS, Techenomics is proud to pass on this science to users of engines and mechanical equipment that rely on lubricants – science that increases oil life, lowers operating temperatures, reduces wear and tear and the associated maintenance, boosts fuel economy and cuts emissions.

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