

Nano Science, Technology and Industry Scoreboard

## **Vaccines Perfected from the Atoms Up**

2021-05-26 Forge Nano technology enables next-gen vaccine formulation platform using Atomic Layer Deposition.

The vaccine of the future is here. Designed from the atoms up, this disruptive technology platform enables; thermally stable, combined-dose, time released, single injection vaccines!

Forge Nano platform technology is being used to develop innovative vaccines that can withstand higher temperatures, combine multiple doses, and release over time, all in one injection. Using Atomic Layer Deposition, these vaccine formulations can be controlled at the atomic level.

<u>VitriVax, Inc.</u> a Colorado based formulation technology company, utilizes Forge Nano's Atomic Layer Deposition platform technology to engineer thermostable, single-shot vaccines across a broad range of indications.

Using the cGMP certified PANDORA ALD tool, developed and manufactured by Forge Nano, VitriVax uses its proprietary Atomic Layering Thermostable Antigen and Adjuvant (ALTA<sup>™</sup>) technology platform to enable thermostable, single-shot vaccines, that can be applied to a wide variety of antigens and adjuvants to project against thermal and chemical degradation, and enable controlled release, incorporating prime doses + additional booster doses in a single-shot administration.

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Forge Nano's Atomic Layer Deposition tool PANDORA.

"In light of the current global pandemic, vaccine storage, distribution, and efficacy has never

been more important. We are proud to see our platform being used to make vaccines that can be more easily transported, with more efficient and precisely controlled doses. Future technologies are being enabled by controlling things at the atomic level. Our platform is being used every day to enable precision and control at the atomic scale." Dr. Paul Lichty-CEO Forge Nano.

Forge Nano specializes in optimizing the way surfaces interact at the atomic level. Using proprietary technology, Forge Nano can apply nano coatings onto the surface of virtually anything. Forge Nano's platform technology unlocks a level of precision and control that is unrivaled by other surface engineering technologies.

Read the <u>original article</u> on Forge Nano.