

Setex® – the world's first commercial dry adhesive that is inspired by setae – the microscopic hair on a gecko's feet.

Key features and benefits include:

- Glue-free, non-tacky adhesive
- Reusable
- No residue
- Customizable adhesive strength
- Directional control over adhesion (anisotropic material)
- Thin and flexible
- Silent
- Hermetic



About Us

Our expertise has been developed over the years. Encouraged by the results of over a decade of academic research in understanding and synthesizing biologically-inspired adhesives, **Dr. Metin Sitti**, a professor at Carnegie Mellon University, founded and spun out **nanoGripteck** from the university in 2009.

Since then, **nanoGripteck** has become the first mass-market manufacturer of dry adhesive technology. Volume production of custom solutions or off-the-shelf products that span the adhesives, gripping material and fastener markets are currently possible.

nanoGripteck has in-house development and engineering capabilities to design, prototype, and evaluate various micro fibrillar structures (setae) to deliver dry adhesive and gripping solutions.



The leading manufacturer of gecko-inspired dry adhesive & gripping solutions and products.



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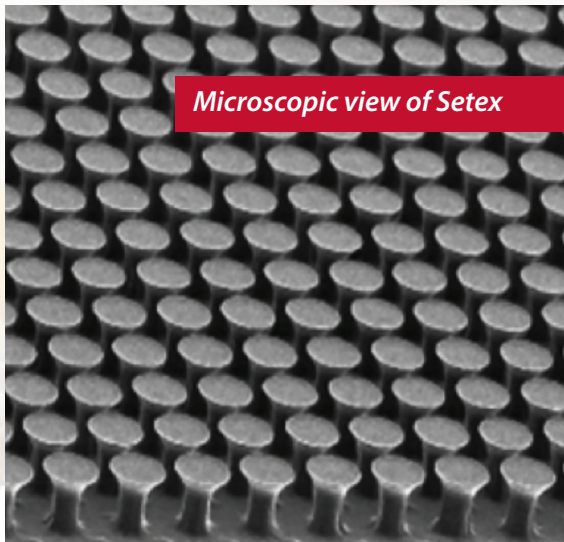
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The Science

Bio-inspired adhesive & gripping technology

The gecko's amazing ability to run across walls and stick to ceilings is not due to any sticky secretions. It has millions of nano-scale foothairs, called setae, which give it that ability. Each individual hair's flat, spatula shaped tip creates a small molecular-level bond with the surface. The cumulative effect of the millions of hairs results in a very significant force.

Like the setae on gecko's feet, nanoGripTech's Setex® is made up of millions of microscopic structures that attach and grip to surfaces securely through intermolecular forces.



Dry adhesive that is repeatable and residue free. This non-tacky, glue-free material adheres to smooth surfaces with directional control and tunable adhesive strengths.



High grip material that provides increased friction even in wet and oily conditions and feels pleasant to the touch. Setex GeckoGrip can be produced with a wide range of materials, and can even be integrated directly into end product via injection molding.



Two-part fastening system that is thin, flexible and conformable to curvatures. This closure system can even be hermetically sealed.

Customizable Performance

Changing the geometry of the fibers changes the adhesive properties of the material, allowing for fine tuning of shear, pull-off and peel strength. With a database of hundreds of nano- and micro-geometries, Setex® can be customized to suit many applications.

Applications

At nanoGripTech, we help customers meet unique adhesive, gripping and fastening challenges that current technologies and solutions can not address.

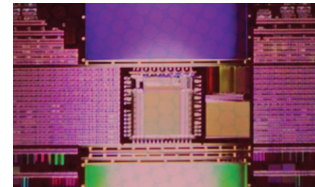
Some examples are:



Industrial High-Value Pick & Place
Handling of glass, lenses & other delicate parts

Semiconductor Wafer & Die Handling

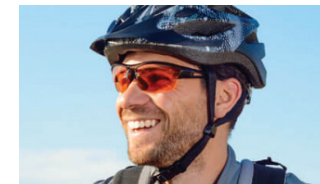
Polishing & surfacing
Wafer handling



Automotive
Seats & cabins

Sporting Goods & Apparel

High grip gloves
Racquet & golf club grips



Wearables
Eyewear and earbuds

Setex® can address so many product designs and manufacturing challenges, it's hard to list them all. If you think Setex is right for your product lines or manufacturing needs, we're ready to help.