

Nano Science, Technology and Industry Scoreboard

## Nanotechnology Company Partners with ASU to Create Lab in Mesa

2021-05-03

MECHnano, a company specializing in enhancing 3D-printing technology, will provide opportunities to students and faculty through the new partnership.

ASU has partnered with nanotechnology company MECHnano to develop a lab at the Polytechnic campus. The partnership with MECHnano will provide students with educational and real-world opportunities to work with a leading research company.

MECHnano will also be the first to join the Polytechnic Innovation District. Innovation Zones are areas on and around campuses where University company partners use centers and workspaces.

MECHnano uses its nanotechnology to improve 3D printing, or additive manufacturing. Most notably, the company uses technology to work with materials called Carbon Nanotubes, or CNTs, which are about as thick as a single atom, much stronger than steel, harder than diamond and have great conductive capabilities.

MECHnano has developed a unique process for using CNTs, and it has put them at the forefront of 3D printing.

Aric Bopp, executive director of economic development at ASU Knowledge Enterprise, said MECHnano and ASU were originally connected by a faculty member who works with the company.

Bopp was involved in finding a fitting place for MECHnano within the Innovation Zones and said the company "is the exact type of project we want to build at the Poly Innovation District."

"Companies that want to work with our faculty, staff and students. Companies that are

working on cutting edge, world class technology are the type of companies we want working there," Bopp said.

Bopp said the process of finding the right space for MECHnano to work required a lot of searching and compromising at first. MECHnano wanted a location closer to their headquarters in Mesa, and they needed specific, scientific tools in their workplace.

Ultimately, Bopp said, "the stars aligned and fell into their lap," and they found the ideal place. The lab they will work out of is in a vacant building not geographically in the district, but is nearby and meets all of their research and development needs.

"Everything we had wanted and asked for was in the building as if it was built for us," said Steven Lowder, CEO and co-founder of MECHnano. "It just confirmed to us that with a little persistence and a great relationship, we would be able to do whatever we needed to with ASU."

Lowder said with this partnership, MECHnano wants to be able to advance their technology even further and commercialize it. This way, they can allow the other additive manufacturing companies to "reap the benefits" of their new technology.

The company also hopes to get students working alongside them and give them real-world experience, educational tools and opportunities.

"As part of our goal, we want to be using more and more of the ASU students to help in our processes," Lowder said. "Specifically students that have aligned curriculums with our needs."

MECHnano currently relies on a few graduate students to help them with their pilot testing and manufacturing. They want to keep bringing students onboard to create a sustainable model which can be utilized in their work.

With internships, external work and other job opportunities, students can also have the chance to continue working with them after graduation.

Lowder said MECHnano "considers ASU the most innovative university in the world" and with

the relationship and opportunities gained with this partnership, he hopes for mutual growth and development.

When searching for companies to partner with for the Polytechnic Innovation District, MECHnano was appealing because of the existing focus on nanotechnology at ASU.

Duane Roen, the vice provost of the Polytechnic campus, said the University wants companies that not only "mesh well with its mission" but also work well with what is already being done on campus.

The proximity of the lab is also a benefit — students have the opportunity to simply walk on site from campus.

"What's really unique and a great opportunity is that the Innovation Zone is right on the edge of campus," Roen said. "What we are envisioning is that during the workday, students and faculty are going back and forth from the classes on campus to the labs and other companies in the Innovation Zone."

Through the partnership with ASU, MECHnano hopes to grow the number of students and faculty they work with, expand the current workspace and prepare to commercialize their products.

Read the <u>original article</u> on The State Press.