

Nitride Solutions, Wichita State professor receive awards through innovation grant

Wichita Business Journal by Emily Behlmann, Web producer

Date: Tuesday, January 10, 2012, 2:40pm CST

A nearly \$2 million federal economic development grant **Wichita State University** [won in September](#) is bearing some of its first fruit.

The grant is funding a faculty fellowship for [Michael McCoy](#), a Wichita State associate professor conducting research that could benefit **Cessna Aircraft Co.** In addition, grant funding is supporting Nitride Solutions as it works with Wichita State faculty on analyzing the atomic makeup of a new product.

McCoy and Nitride Solutions were the winners of a competition run in November by the university's Center for Innovation and Enterprise Engagement.

Center director [Zulma Toro-Ramos](#), dean of WSU's College of Engineering, announced the awards Tuesday during a roundtable discussion about the opportunities the federal grant could create.

The funds are part of the Obama administration's \$37 million Jobs and Innovation Challenge, which is meant to support high-growth industry clusters around the country. [John Fernandez](#), U.S. assistant secretary of commerce, said at Tuesday's roundtable that WSU was one of 20 winners selected from about 120 applicants.

Wichita State says its grant is intended to focus on speeding the process of bringing innovative advanced manufacturing processes to the factory floor.

Fernandez said WSU received the funding partly because of its existing partnerships with industry in the realms of manufacturing and engineering.

"We believe in these bottom-up initiatives built on strengths that already exist, when organizations and institutions come together to innovate," he said.

The awards

McCoy says his grant-funded fellowship will support work he's doing with Cessna Aircraft Co. that could help planes become more fuel-efficient. McCoy is researching a process that would take waste energy produced on an aircraft and convert it to electricity that could be used on board. The goal is to reduce the size of a plane's emergency battery, because a lighter plane would burn less fuel, he says.

Nitride Solutions, meanwhile, has developed a process for more efficiently mass-producing aluminum nitride substrates, which are used in LED lights and other electronics.

The firm already has [completed much of its fundraising](#), but CEO [Jeremy Jones](#) says it needs to conduct further analysis of the atomic makeup of its product. Jones said that by working with Wichita State faculty at the WSU lab, Nitride Solutions can quickly and conveniently perform the necessary studies.

Both recipients were chosen in a competition judged by technical experts, Toro-Ramos said.

Toro-Ramos said the Center for Innovation and Enterprise Engagement plans to repeat the competition this spring to offer additional awards. Once the federal funds are used, she said, the center likely will try to secure other funding sources to carry out similar future competitions.

“We think it will be a main engine of innovation in the area,” she said.