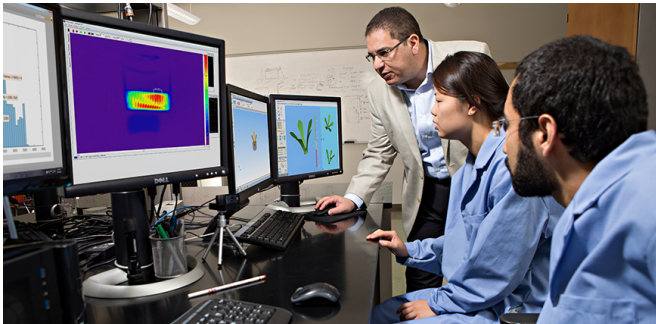


Scientist blazes the way for 3-D printing in Middle East

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Credit: Texas A&M University

Metal additive manufacturing service bureaus are located in many regions over the world, but the Middle East is not one of them. Dr. Alaa Elwany, assistant professor in the Department of Industrial and Systems Engineering at Texas A&M University, jumped at the opportunity of a lifetime to participate in founding the first metal 3-D printing service bureau in this region.

"There are many in the United States, a few in Europe, but there are none in the Middle East," Elwany said. "We are based in Dubai, United Arab Emirates, and are absolutely the first service bureau offering metal 3-D printing service in the Middle East."

Julian Callanan is the founder of the new company, Sinterex. Callanan has vast experience in consulting services in the Middle East. He worked on forming a strong multi-disciplinary management team for the new business, and reached out to Elwany and Dr. Paul Smith, a research fellow from the Glasgow School of Art Institute of Design Innovation in Scotland, to serve as technical directors.

"He wanted to build a team with expertise that spans design, manufacturing, optimization and

business development," Elwany said. "Dr. Smith and I go there every four to five months to hold a meeting for the directors, discuss business development activities, meet with potential clients and participate in technology events."

Sinterex will provide two main services to those interested in 3-D printed parts.

"First is the consulting services," Elwany said. "Basically, when there is a manufacturing or service company in the region that is not sure what metal 3-D printing has to offer, we help them understand the value proposition of metal 3-D printing and how it can contribute to time and cost saving compared to traditional manufacturing technologies such as CNC machining."

The second benefit Sinterex will provide is manufacturing services. With a newly acquired metal 3-D printer on site, the team will hire an engineer and a technician to operate the machine and provide [metal](#) 3-D printed parts for interested businesses in the region. They plan to begin production in November 2016.

In the beginning, the entrepreneurs are targeting a small biomedical sector in the Middle East to begin building their reputation and brand of services.

"We would like to be true leaders in additive manufacturing services for the biomedical sector with a focus on dental applications," Elwany said. "So, we will be manufacturing customized crowns for dental labs and focusing on establishing our names as leaders in the entire Middle East. That list includes 22 countries such as the United Arab Emirates, Egypt, Jordan, Saudi Arabia, Tunisia and Lebanon."

In the future, the trio plans to target the production of tooling for manufacturing companies with the purchase of a larger machine. Tooling is a major cost component for companies in the

manufacturing and oil and gas sectors, and Sinterex plans to offer additive manufacturing services that can help in significantly reducing cost and lead time.

"One big application for additive manufacturing is to not make the end-part itself, but to make the tool or mold that will be used to produce the part," Elwany said. "This is a big sector of the additive manufacturing market and we would like to target this sector moving forward."

Recently featured in major news outlets such as Metal Additive Manufacturing magazine and Al-Arabiya English, the leading 24-hour news station in the Arab world, the group is looking forward to what the future has in store for the new company.

"We are a relatively young business and were not even hopeful that we would be able to start production in the first year, but our business team secured funds from the region to begin production in November," Elwany said. "So, we are happy with our progress thus far."

Provided by Texas A&M University

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