Additive Manufacturing of High-Performance Ceramics course features Alfred University professor, alumnus 10/26/20

ALFRED, NY – The American Ceramic Society (ACerS) sponsored a four-day short course this week on additive manufacturing using ceramic materials, and how it can change conventional manufacturing method. Alfred University alumnus Shawn Allan '02 is moderator for the course, and Dr. Holly Shulman, professor of ceramic engineering in Alfred University's Inamori School of Engineering, is a course speaker.

Additive manufacturing refers to the technology of three-dimensional printing. Layers of a material are printed using computer-aided design technology, and are then combined to create a 3-D object.

The short course—"Additive Manufacturing of High Performance Ceramics"—was held virtually, Monday through Thursday, Oct. 26-29. It was moderated by Allan, vice president of Lithoz America LLC and a 2002 Alfred University graduate (B.S., materials science and engineering). Lithoz America, a subsidiary of Lithoz, is the system provider for additive manufacturing of high-performance ceramics.

Speakers for the course, with their topic of their presentation were:

- Dr. Holly Shulman, professor of ceramic engineering, Alfred University Inamori School of Engineering. Topic: ceramic additive manufacturing overview.
- Dr. Johannes Homa, CEO, Lithoz. Topic: ceramic advanced manufacturing market considerations.
- · Jesse Blacker, product development manager and principal investigator for ExOne. Topic: binder jetting additive manufacturing of ceramic materials.
- Shawn Allan, vice president Lithoz America, LLC. Topic: lithography-based ceramic manufacturing.
- Thomas Henriksen, president of Ceramco. Topic: applications and experiences as a manufacturer— LCM.
- · Cathleen Hoel, GE Global Research senior materials scientist. Topic: practical considerations for ceramic additive manufacturing from conception to production.
- · Dr. Martin Schwentenwein, head of materials development at Lithoz. Topic: new developments in ceramic additive manufacturing

The course concluded Thursday with a panel discussion and Q&A session among speakers and attendees.