

# The World of AM

The year is slowly drawing to a close, and once again in 2022, Formnext in Frankfurt am Main occupies the last place in the event calendar in November. In a sense, for many ceramists, it is the culminating finale before heading off for the Christmas vacation. Every year, the trade fair becomes a bit more colorful, more diverse and bigger – that's the impression as a visitor, which can also be confirmed by the organizer, who recently reported more than 730 exhibitors. As solutions for ceramic 3D printing are also once again part of the trade show program, the last issue of Interceram in the year has also established itself with a thematic focus on additive manufacturing.

In this issue, we report on a new material based on aluminum oxide that can be used to print components at a particularly high resolution. This

can also be used to produce finer structures such as webs or channels, for example. We will also be looking at the potential of stereolithography for the production of ceramic investment casting molds. The process can be used to successfully produce molds and cast them for small quantities or demanding geometries.

With the multitude of new additive manufacturing processes and materials entering the market every year, it is challenging to determine which combination will produce a part with the desired material properties. We therefore apply various material extrusion processes to show the influence of varying the printing process, printer and filament on parameters such as porosity, density, flexural strength and the microstructure of the printed ceramic. ◀



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