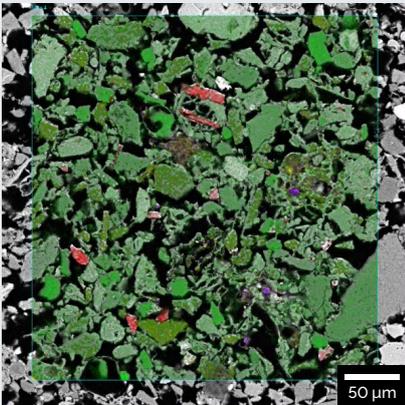




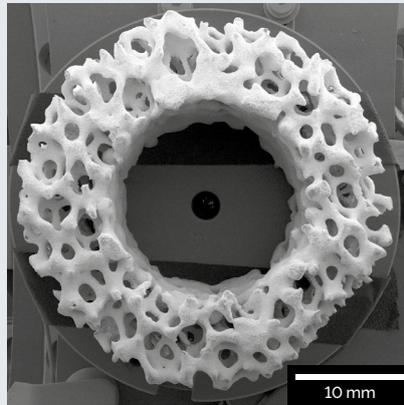
# TESCAN VEGA

## FOR MATERIALS SCIENCE

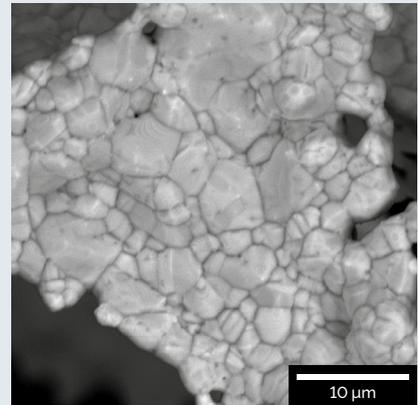
Analytical SEM for routine materials characterization, research and quality control applications at the micron scale



▲ Distribution of Si (green) and Ti (red) in ancient plaster identified by Essence™ EDS in the live scanning window of the VEGA SEM



▲ Ceramic foam overview image captured using the Wide-Field Mode™



▲ Image of grain structure in the metal foam captured using the BSE detector

### Key benefits:

- ✓ **Easily acquire compositional data and directly correlate it to the SEM image** with the overlay feature of TESCANA's optional, fully integrated Essence™ EDS
- ✓ **Set-up beam parameters quickly for optimal imaging and analytical conditions** using TESCANA's In-Flight Beam Tracing™
- ✓ **Navigate effortlessly and precisely – at magnifications as low as 2x** – with TESCANA's unique Wide Field Optics™ mode, which eliminates the need for an additional optical camera
- ✓ **Move samples confidently and avoid collisions** using TESCANA's unique live 3D collision model which replicates the size and geometry of samples and detectors within the chamber interior
- ✓ **Customize the GUI to match a user's experience level and application** for intuitive operation of TESCANA's Essence™ microscope control software
- ✓ **Explore beam sensitive and charging samples quickly and easily** with VEGA's standard SingleVac function
- ✓ **Reveal the finest topographic details from insulating, beam sensitive and outgassing samples in low vacuum** by taking advantage of optional MultiVac which features the gaseous secondary electron detector (GSD) and additional water vapor atmosphere
- ✓ **Save cost and reduce your ecological footprint** using TESCANA's optional vacuum buffer that significantly reduces vacuum rotary pump run-time
- ✓ **Expand your analytical potential by configuring VEGA** with your choice from a wide selection of optional, fully integrated detectors, such as CL, water-cooled BSE or RAMAN spectrometer
- ✓ **Free yourself from thinking about sample dimensions and number with VEGA's GM chamber** which features 130 × 130 mm stage movement and enough space to accommodate samples with dimensions of 300 × 300 × 100 mm<sup>3</sup>
- ✓ **Leverage TESCANA VEGA's analytical potential** by having a high number of empty chamber ports available for future detector upgrades