The New TESCAN CLARA SEM Pushes the Boundaries of Materials Characterization, unique detection system allowing advanced contrast for Materials.

Brno, Czech Republic - TESCAN CLARA, Ultra-High Resolution Scanning Electron Microscope (SEM) takes materials characterization to the next level. Building on the technological success of the S8000 platform, the CLARA is an extremely versatile SEM designed with the needs of materials scientists in mind providing uncompromising performance across a vast array of different material types.

Achieving sub-nanometer resolution, the TESCAN CLARA will reveal the finest details about the structure of your material. TESCAN's unique Wide Field Optics™ allow you to quickly locate areas of interest at magnifications as low as 2x before zooming in to understand their makeup.

TESCAN CLARA also offers excellent resolution at low beam energies making it ideal for imaging beam sensitive and non-conductive samples. Excellent low energy performance also makes it ideal for surface topography measurements. TESCAN CLARA is the ideal choice for central analytical facilities and materials research labs that value not only low kV resolution, but also the ability to select secondary and backscattered electron contrast methods to explore the information that the sample may contain.

While the system's optics have been designed specifically for imaging, the chamber has been optimized for microanalysis. It has been thoughtfully designed to integrate a large number of analytical detectors and spectrometers, allowing you to customize the configuration to suit your specific application and providing the flexibility to carry out more complex experiments.

Next generation hardware and precision optics make the CLARA an asset for any central imaging facility, materials characterization lab or industrial inspection operation. The intuitive and modular user interface can be tailored to the needs of each operator, helping accelerate their individual workflows. Setup routines and optimal imaging conditions enable novice users to easily capture high quality images and bring higher end functionalities well within their reach.

TESCAN CLARA is a field free SEM designed to meet the needs of multipurpose microscopy facilities interested in morphological and compositional analysis of a vast range of materials at the micro and nanoscale. Thanks to unique In-Beam detection TESCAN CLARA is a highly flexible SEM that offers advanced imaging capabilities which are valued across the field of sciences. "*We are convinced that TESCAN CLARA will be known not only for its high analytical throughput, but also for its reliability and ease of use, which makes this solution very cost effective to the customers*", said Petr Klímek, Product Manager at TESCAN.

Bruno Janssens, Chief Product Officer at TESCAN added, "*We look forward to introducing TESCAN's new analytical portfolio, headlined with the TESCAN CLARA, at Microscopy & Microanalysis 2019 in Portland. Capable of handling the most demanding scenarios and applications ranging from advanced materials, the CLARA is ideal for anything from high-end research to teaching*".

The CLARA continues TESCAN's proud history of providing cutting edge SEMs for even the most demanding requirements. *TESCAN is accepting orders for the CLARA immediately with delivery of the first systems in Q1 2020.*
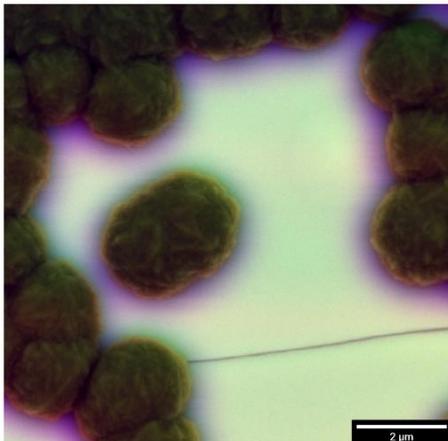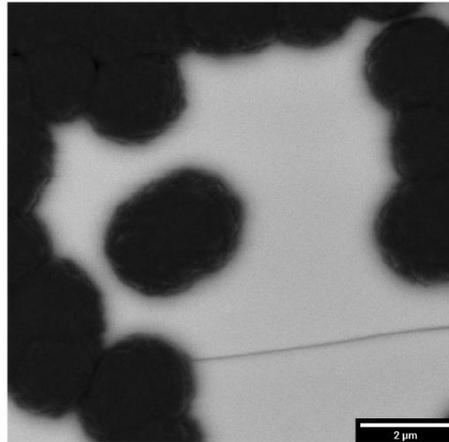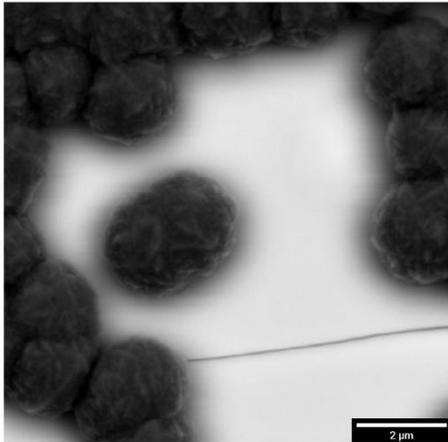
Nano diamond coating

▲◄ Chamber detector (BSE) – wide-ange BSE: high topography BSE

▲► Axial (BSE) detector – Narrow-angle BSE: maximum material contrast with low topography

◄ Image colored based on take-off angle of BSE signal

TESCAN CLARA - Field-Free analytical UHR SEM for materials characterization at nanoscale