

<p>N₂ adsorption – BET analysis</p>	<p>Category: C. Particle Characterisation in and ex-situ</p> <p>Institute: VITO</p> <p>Location: Boeretang 200, 2400 Mol, Belgium</p> <p>Contact Details of Technology Expert: Steven Mullens Phone: +32 (0)14 335668 Fax: +32 (0)14 321186 E-mail: steven.mullens@vito.be</p>
<p>Short technology description</p> <p>Nova3000 surface area analyzers offers a rapid characterization of the B.E.T. surface area and pore size distribution.</p> <p>By admitting small amounts of a gas (the adsorbate) to the evacuated sample, the gas molecules stick to the surface of the solid (adsorbent) and form a thin layer that covers the entire adsorbent surface. Based on the wellknown Brunauer, Emmett and Teller (B.E.T.) theory, one can estimate the number of molecules required to cover the adsorbent surface with a monolayer of adsorbed molecules, yielding the sample's surface area.</p> <p>Continued addition of gas molecules beyond monolayer formation leads to the gradual stacking of multiple layers (or multilayers). Methods such as the Barrett, Joyner and Halenda (B.J.H.) allow the computation of pore sizes from equilibrium gas pressures.</p>	
<p>Main Features (Equipment Capabilities):</p> <ul style="list-style-type: none"> ▪ Surface area measurements starting at 1 m²/g ▪ Small and large sample holders (up to 25 cm³) ▪ Pore size range from 0.4 to 400 nm 	
<p>Typical Samples & Images:</p>	
<p><i>Any further Information:</i></p>	