

Dynamic Light Scattering Helps Determine Best Ceramics for Implants

The BI-200SM research goniometer system

from TESTA Analytical Solutions e.K. provides unmatched performance and operational versatility for Static Light Scattering (SLS) and Dynamic Light Scattering (DLS) studies.

Researchers from Eötvös Loránd University,

the oldest and largest university in Hungary, have used a BI-200SM in Dynamic Light Scattering mode to determine the aggregate size of powders used in producing sintered bulk calcium silicate ceramics.



These sol-gel synthesized ceramic

powders were then studied to determine their properties in relation with biomedical applications. Using light scattering data obtained using the BI-200SM research goniometer system the researchers were able to identify the best bulk ceramics with good mechanical strength, low solubility and similar porosity to bone, allowing them to be used as long-term implants.



The BI-200SM goniometer system

is a precision research grade instrument designed for exacting light scattering measurements. Based upon a special turntable with precision ball bearings and stepping motor, the BI-200SM's modular, automated design and quality construction guarantee precise measurements due to the wobble-free movement of the detector. Designed and built for demanding research experiments the BI-200SM can measure light scattering over a wide angular range (8° to 155° with 25 mm cells) and offers fine adjustment of measurement angles to 0.01° directly using a large, fine-control knob or PC-driven Motor control. Fine-screw vertical adjustment makes center of rotation measurement easier when aligning cells. Precise repeatable data is ensured by automated heating and cooling of the sample cell using and standard external recirculating system. Field proven in hundreds of labs around the world the BI-200SM light scattering goniometer system is ideal for even the most demanding macromolecular studies and submicron particle sizing applications.

For further information

on the BI-200SM research goniometer system please visit <https://www.testa-analytical.com/research-light-scattering.html> or contact Testa Analytical Solutions on +49-30-864-24076 / info@testa-analytical.com.

Testa Analytical Solutions e.K.

is a company dedicated to supplying the best possible instrumental solutions for characterization of polymers, particles, nanomaterials and proteins. Drawing upon over 30 years' experience of technologies serving these markets, the staff at Testa Analytical are happy to share their knowledge with researchers worldwide to help provide them with a working solution for even the most demanding applications.

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