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**Small Angle X-ray Scattering with the NanoSTAR on Biological Macromolecules.** Kurt Erlacher, Bruker AXS, 5465 E. Cheryl Parkway, Madison, WI 53711, USA.

Biological macromolecules can be analyzed using the SAXS technique to reveal their size, shape, and low resolution structure. The laboratory small-angle x-ray scattering camera NanoSTAR is specially equipped for studying these systems. For analyzing biological samples in solution they are filled into a capillary, which seals the specimen from the surrounding vacuum, which is necessary for optimal SAXS conditions. For most samples it is essential to control the sample temperature during data acquisition. This can be achieved with the instrument in a temperature range from  $-30^{\circ}\text{C}$  to  $300^{\circ}\text{C}$ .

The nanostructure analysis becomes possible by use of a strong collimated point beam and a high speed area detector. Several examples of the system configuration as well as applications on various biological macromolecules like the protein b-lactoglobulin, Lysozyme and the sweet tasting protein Thaumatin are discussed.