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The Center for Structural Molecular Biology at Oak Ridge National Laboratory. V.S. Urban¹, W.T. Heller^{1,2}, G.W. Lynn^{1,2}, G.D. Wignall², M.V. Buchanan¹ and D.A.A. Myles¹, ¹Chemical Sciences Div. and ²Condensed Matter Sciences Div., Oak Ridge National Laboratory, Oak Ridge, TN 37831.

The Center for Structural Molecular Biology (CSMB) is a new DOE OBER funded resource at Oak Ridge National Laboratory that will provide dedicated facilities and support for characterization and analysis of proteins and protein complexes. The cornerstone of the CSMB is a small-angle neutron scattering instrument (Bio-SANS) with neutron flux unprecedented in the US that will provide world-leading capabilities in the field as of 2006. The development of new computational methods for the analysis of biological scattering data and of facilities for the selective H/D labeling of complex macromolecular assemblies will provide the tools necessary to fully exploit these advantages in the application of SANS to complex problems in biology. The CSMB also provides capabilities for small angle x-ray scattering and static and dynamic light scattering. The CSMB will be a critical resource for the US structural biology community and provide a wide range of scientific and educational opportunities.

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