SMALL-ANGLE X-RAY DATA ANALYSIS OF LIPIDIC IN-MESO PHASES

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Lipidic *in-meso* phases have been recognized as efficient tool for membrane protein crystallization tasks. We used SAXS method to study the conditions where lipidic *in-meso* phases could form structures with maxima lattice parameters in order to solve the problem of crystallization of big membrane protein complexes.

Small-angle X-ray scattering (SAXS) data analysis of lipidic *in-meso* phases has been developing since 2011[1]. Software packages show significant progress in terms of accuracy of lipidic phase type classification and calculation of lattice parameters.

In this work, we develop smart algorithms that allow one to provide high-throughput semi-automatic SAXS data analysis of lipidic cubic phases in different solutions and show opportunities for the lipid research in general.

References.

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