



Advanced methods in macromolecular crystallization IV

FEBS combined practical and lecture course PLC10 015

Academic and University Center, Nové Hradky, June 25 - July 2, 2010

Course Material

Topics

E.coli - a factory for recombinant proteins
The road from protein expression and purification to protein crystallization
Preparation of protein samples for crystallization experiments
Rational biochemical approaches to improve crystallogenesi
Nucleation of protein crystals
Additives in protein crystallization
Advanced light scattering methods
Standard crystallization methods
Conventional crystallization methods and their modifications
Crystallization under oil
Advanced crystallization techniques
Lipidic cubic phase crystallization
Microseeding with automatic systems
Interpretation of the crystallization drop results
Crystallization and crystallographic analysis in a microfluidic chip
Tips and tricks for protein crystal manipulation
Crystal mounting and freezing
Screening the diffraction quality of protein crystals
The growth of large crystals for neutron diffraction:
Thermal control
Illuminating the Screening Process with Fluorescence
Crystallogenesi methods for structural biology
Publishing your crystallization results

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