



L1	Principles of protein crystallization I: The nature of protein crystals and the physical chemistry of their formation	Bernhard Rupp	11
L2	Crystallization of Membrane Proteins in Lipidic Systems	Martin Caffrey	11
L3	Nucleation of protein crystals: novel insights	Peter G Vekilov	12
L4	An introduction to crystal morphology and crystal growth mechanisms	Jose A. Gavira	12
L5	Conventional Crystallization Methods and their Modifications	Jeroen R Mesters	13
L6	Interpretation of the crystallization drop results	Terese Bergfors	13
L7	Seeding Strategies for "Random" Crystal Screening and Crystal Optimization	Stefan Kolek	14
L8	Principles of protein crystallization II: Methods, evaluation, and properties of 'real' crystals	Bernhard Rupp	14
L9	Capillary counterdiffusion technique for protein crystallization and screening	José A. Gavira	15
L10	"What to do if everything has failed"	Terese Bergfors	15
L11	Tips and tricks for protein crystal manipulation and handling	Jose A. Gavira	16
L12	Preparation of protein samples for crystallization experiments	Pavlína Řezáčová	16
L13	Protein as the main variable in crystallization	Ľubica Urbániková	17
L14	Unconventional Crystallization Strategies and Techniques for Screening and Optimization	Naomi E. Chayen	17
L15	A historical perspective on protein crystallization from 1840 to the present day	Richard Giegé	18
L16	Crystallization and Crystallographic Analysis in Microfluidic Chips	Claude Sauter	19
L17	Optimization of Cryptic Leads Derived from Trace Fluorescent Labeling Screening	Marc Pusey	20
L18	Publication of scientific results with emphasis on crystallization communications	Howard Einspahr	20
L19	DLS Measurements prior to crystallization experiments	Karsten Dierks	21
L20	Receptor-ligand interactions can promote crystallization	Ivana Nemčovičová	22
L21	Optimisation of Crystal Growth for Neutron Crystallography	Monika Budayova-Spano	23
L22	Preparation of Micro- and Nano-Crystals for Free-Electron-Laser and Synchrotron Radiation Sources	Michael Duszenko	24
L23	Additives in macromolecular crystallization	Jan Dohnálek	25
L24	X-ray diffraction screening of crystals	Vernon Smith	25
L25	Alternative Crystallization Technique	Ivana Kutá Smatanová	26

E0	Introduction to lab exercises - macromolecular crystallization	Ivana Kutá Smatanová	27
E1	Conventional crystallization methods and their modifications: Exercises	Jeroen Mesters	29
E2	The secret life of your crystallization drop: Do you know what really happens in your drops?	Bernhard Rupp	30
E3	Crystallization of membrane proteins in lipidic mesophases	Martin Caffrey	30
E4	Manual Seeding Lab Exercises	Terese Bergfors	31
E5	Protein crystallization using the GCB	José A. Gavira	31
E6	Crystallization under oil - Unconventional Crystallization Techniques for Screening and Optimisation	Naomi E. Chayen and Lata Govada	32
E7	"Random" Microseeding	Stefan Kolek	32
E8	Dynamic light scattering	Karsten Dierks	33
E9	Trace Fluorescent Labeling for Protein Crystallization Screening	Marc Pusey	33
E10	Publication of Scientific Results With Emphasis On Crystallization Communications	Howard Einspahr	34
E11	Crystallization in Microfluidic Chips	Claude Sauter	34
E12	Conventional techniques and crystallization of own proteins	Ľubica Urbániková	34
E13	Crystal observation, testing, handling, mounting and cryocooling	Jiří Brynda, Petr Pachl	35