

Course in “**Macromolecular crystallization**”, November 8. – 14., 2006, Department of chemistry, University of Oslo

	Wednesday 8. November	Thursday 9. November	Friday 10. November	Monday 13. November	Tuesday 14. November
09.15 - 10.00	Welcome and Introduction Lecture 1: Crystallography – Why and how <i>Arne O. Smalås</i> <i>NorStruct</i>	Lecture 3: Factors influencing crystal formation and growth <i>Arne O. Smalås</i> <i>NorStruct</i>	Lecture 5: Sample preparation <i>Arne O. Smalås</i> <i>NorStruct</i>	Minisymposium - membrane proteins	Lecture 7: Crystallography in the postgenomic area. <i>Arne O. Smalås</i> <i>NorStruct</i>
10.15 - 11.00	Lecture 2: Crystallization methods – An Overview <i>Ute Krenzel</i> <i>UiO</i>	Lecture 4: Evaluation and optimization of results <i>Ronny Helland</i> <i>NorStruct</i>	Lecture 6: Crystal seeding techniques Handling, mounting and storage of protein crystals <i>Ute Krenzel</i> <i>UiO</i>		Practicals <i>Ronny Helland, NorStruct and Mats Ökvist, UiO</i> 1. Inspection of experiments 2. Handling the crystals Capillary mounting Storage Freeze protection Loop mounting Demo data collection 3. Demonstration of data collection
11.00	Lunch	Lunch	Lunch		
12.15 – 18.00	Practicals <i>Vibeke Os</i> <i>NorStruct</i> 1. Introduction 2. Buffer preparations 3. Screening by kits 4. Screening lysozym (batch) pH Precipitation agent cons. Precipitation agent type Protein concentration	Practicals <i>Vibeke Os</i> <i>NorStruct</i> 1. Inspection of experiments 2. Crystallization of protein complexes 3. Self-made screens Myoglobin Lysozym ConcanavalinA/ Trypsin	Practicals <i>Ronny Helland, NorStruct and Ute Krenzel, UiO</i> 1. Inspection of experiments 2. Seeding 3. Challenge Your own protein? Catalase Hemoglobin (cow, pig) Subtilisin Search the databases, pdb and literature for clues and starting points		