

# 2015 PX Training Course Schedule

August 10 to August 15, 2015

(8/10) Day 1 Registration 13:00~14:00		(8/11) Day 2 Breakfast 08:00~09:00	(8/12) Day 3 Breakfast 08:00~09:00
		<ul style="list-style-type: none"> <li>• Basic of X-ray Diffraction: Wave and Interference Effect</li> <li>• Basic of X-ray Diffraction: Diffraction Pattern from One Unit Cell (One Molecule)-1</li> </ul>	<ul style="list-style-type: none"> <li>• Data Collection Strategy in Oscillation Geometry</li> </ul>
<b>Registration 13:00~14:00 M222</b>		<b>Lunch 12:00~13:00 E281</b>	
<ul style="list-style-type: none"> <li>• The Importance and Historical Review of PX</li> <li>• Introduction of Protein Crystallization</li> <li>• Introduction of Crystal Symmetry</li> </ul>		<ul style="list-style-type: none"> <li>• Basic of X-ray Diffraction: Diffraction Pattern from One Unit Cell (One Molecule)-2</li> <li>• Basic of X-ray Diffraction: Diffraction Pattern from Many Unit Cells (One Crystal); Model Building from Electron Density Map</li> </ul>	<ul style="list-style-type: none"> <li>• Step-by-Step Practice of Data Processing with the HKL2000</li> </ul>
<b>Dinner 18:00~19:00 E281</b>			
<ul style="list-style-type: none"> <li>• Crystallization of Czinc-free Insulin</li> </ul>			<ul style="list-style-type: none"> <li>• Phase Problem and Phasing Methods</li> </ul>
(8/13) Day 4 Breakfast 08:00~09:00		(8/14) Day 5 Breakfast 08:00~09:00	(8/15) Day 6 Breakfast 08:00~09:00
<ul style="list-style-type: none"> <li>• Comparison of MAD/SAD and MIR/SIR Phasing</li> </ul>		<ul style="list-style-type: none"> <li>• Optical Screening, Cryo-samples Preparation, Mounting and Centering</li> <li>• SAD-Data Collection and Structure determination of Real Sample</li> </ul>	<ul style="list-style-type: none"> <li>• Radiation Damage on Cryo-cooled Protein Crystals</li> <li>• Se-MAD/SAD and S-SAD Data Collection Strategy</li> </ul>
<b>Lunch 12:00~13:00 E281</b>			
<ul style="list-style-type: none"> <li>• Step-by-Step Practice of Structure Determination by SAD Phasing with CCP4</li> </ul>		<ul style="list-style-type: none"> <li>• SAD-Data Collection and Structure determination of Real Sample</li> </ul>	<ul style="list-style-type: none"> <li>• Cryo-Technique in Protein Crystallography</li> <li>• Group Photos and Farewell</li> </ul>
<b>Dinner 18:00~19:00 E281</b>			
<ul style="list-style-type: none"> <li>• Individual Practice of SAD Phasing</li> </ul>		<ul style="list-style-type: none"> <li>• SAD-Data Collection and Structure determination of Real Sample</li> </ul>	

Note: Gray section means hands-on session