



## Selected aspects of modern X-ray structural analysis

Lecturer: Chojnacki Jarosław (WCh PG); 15 h

### Course contents:

1. Structure of monocrystals
2. Basics of X-ray diffraction
3. The phase problem and its solutions
4. Apparatus and its modern improvements
5. Complications: disorder, twinning, modulations and quasicrystals
6. Isomorphism and polymorphism, illustration of their significance on examples taken from the pharmaceutical industry
7. Hydrogen bonds in the solid state
8. Non-covalent bondings: halogen bonds and ring stacking interactions
9. Analysis of crystal data
10. Polycrystalline samples
11. High-pressure crystallography
12. Cryocrystallography
13. Protein crystallography I
14. Protein crystallography II
15. Topic elected by the students

TERMINY WYKŁADÓW			
Data	Dzień tygodnia	Godzina	Sala
2013-03-06	środa	9.00-12.00	LUWR (Chemia A)
2013-03-13	środa	9.00-12.00	LUWR (Chemia A)
2013-03-20	środa	9.00-12.00	LUWR (Chemia A)
2013-03-27	środa	9.00-12.00	LUWR (Chemia A)
2013-04-03	środa	9.00-12.00	LUWR (Chemia A)